Reliability Report – 54HC244

High Speed CMOS Logic - Octal 3-State Non-Inverting Buffer / Line Driver / Line Receiver

MIL-PRF-38534 CLASS K QUALIFICATION DATAPACK

Performed by Tandex Test Labs

TANDEX

15849 Business Center Drive, Irwindale, CA 91706, U.S.A.
Phone (626) 962-7166, Fax (626) 960-6896
www.tandexlabs.com

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- Scanning Electron Microscopy (SEM) analysis.

Certificate of Conformance

TANDEX TEST LABS, INC.
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e-mail: via web site

Certificate of Conformance

CUSTOMER:	**SILICON SUPPLIES LIMITED** **47 WHERRY ROAD** **NORWICH, NR1, 1WS** **UNITED KINGDOM VAT** **GB#114 3513 56**	DATE: November 1, 2018	
TEST REPORT:	***DDS-101-12-A***	QUANTITY RECEIVED:	***30 DIE***
P.O. NUMBER:	***SS139***	QUANTITY REQUIRED:	*10/5/8*
DESCRIPTION:	***CMOS LOGIC MICROCIRCUIT***	QUANTITY PROCESSED:	*17*
PART NUMBER(S):	***54HC244***	QUANTITY PASSED:	*17*
P/N: AS RECEIVED / MFG. PART NUMBER:	***54HC244***	QUANTITY FAILED:	*0*
LOT / DATE CODE:	***1810 LOT# 210144 WF15***		
MANUFACTURE: CAGE CODE:	***SILICON SUPPLIES***	***QUANTITY SHIPPING:***	***17****
		INCLUDES: 10 PROCESS ACCEPT *2 SPARES* *5 BOND PULL SAMPLES*	
TANDEX CAGE CODE:	***1FE65***	***8 DIE TRANSFERRED TO DDS-101-12-W FOR SEM.*	

METHOD OF TESTING: MIL-PRF-38534 CL. K, MIL-STD-883

I hereby certify that the subject components have been processed and inspected in accordance with instructions with specifications referenced in your purchase order. Physical records and/or data pertinent to applicable military, proprietary, and/or commercial specifications are on file and available upon request for inspection at this facility.

Linda S. Sepulveda
QUALITY ASSURANCE

QMF 30

Process Flow Chart + Mechanical Test Results

TANDEX TEST LABS INC.

QMF22B

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-12-A REV. 1

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC244
P/N AS RECEIVED: 54HC244
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-12-A
LDC AS RECEIVED: 1810 LOT# 210144 WF15
QUANTITY RECEIVED : 30 (DIE) *20 NEW DIE
QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES
QUANTITY REQUIRED : 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.
01	FLO	P-1015 P-1223	FLOW PREPARED BY: LSS . ON: 3/29/18 . CONTRACTUAL AGREEMENT REVIEW Y / N / NOT SPECIFIED ☑ ☐ ☐ Q-CLAUSES ☐ ☐ ☐ DPAS ☐ ☑ ☐ DFAR ☐ ☐ ☐ ITAR ☐ ☐ OTHER _____ SPECIFIED					QA TANDEX 5
02	QCI		TANDEX QUALITY CONTROL INSPECTION. FLOW APPROVED BY: JMI . ON: 3/29/18 .					
03	RCV	P-1070	VERIFY PART NUMBER. ENTER INTO INCOMING LOG. X CUSTOMER COUNT	30			3/29/18	QA TANDEX 5
04	VIS	P-1041	PERFORM 100% DIE VISUAL PER MIL-STD-883 METHOD 2010 AND MIL-PRF-38534 PARA C.3.3.2. * NEW DIE RECEIVED 7/16/18 EQUIPMENT USED: OLYMPUS . ASSET #: 20091 ESD MAT DUE DATE: 7/27/18	*20 30	0	20	7/16/18	TTL 4
05	ASSY	P-1029	PACKAGE SUFFICIENT DEVICES FOR CLASS K ELEMENT EVALUATION / ELECTRICAL AND BOND PULL PER MIL-PRF-38534 REFERENCE DIE GEOMETRY FOR ORIENTATION AND PIN – OUTS. DIE ATTACH: EUTETIC *CONNECT CHIP BACK TO V_{CC} OR FLOAT PER SCD PG. 2 SCREENING BOND PULL SEM TRANSFER TO DDS-101-12-W MIL-STD-883 METHOD 2018 Lot#: 149555 Exp. Date: N/A ESD MAT DUE DATE: 8/27/18.	10+2 5 8	0	10+2	8/01/18	TTL 30
		P-4010	* **Package Type: 20 PIN DIP** WIRE BOND: Utilize 1 Mil Au Wire (.001) 1 Mil Au bonder MECH-EL Asset #: 20097 Gold Wire: Lot#: 9003011960 Exp. Date: 3/16/2020	10+2 LA	0	10+2	8/01/18	TTL 30

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-12-A REV. 1

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC244
P/N AS RECEIVED: 54HC244
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-12-A
LDC AS RECEIVED: 1810 LOT# 210144 WF15
QUANTITY RECEIVED : 30 (DIE)
QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES
QUANTITY REQUIRED : 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.
06	VIS		PERFORM 100% INTERNAL VISUAL PER MIL-STD-883 METHOD 2010 & MIL-PRF-38534 C.3.3.3, C.3.3.4.2. ESD MAT DUE DATE: 8 27/18. EQUIPMENT USED: NIKON SMZ645 ASSET #: 30663	LA X 10+2	0	10+2	8/2/18	TTL 30
07	SEAL		SEAL DEVICES VACUUM BAKE: ESD MAT DUE DATE: 8 2718. Pre Seal Bake Time: Temp: 125°C Time: 24hrs Actual time in: 7:15am - 8-6-18 Actual time out: 8:30am - 8-7-18 FURNACE LDC STAMP Actual temp: 125°C 1831 TTL 30	10+2	0	10+2	8/7/18	TTL 30
08	ELEC		PERFORM 100% ELECTRICAL VERIFICATION TEST PER MFG DATA SHEET AND MIL-PRF-38534 @ AMBIENT OPERATING TEMPERATURE GO / NO GO ESD MAT DUE DATE: / / EQUIPMENT USED: Sony/Tek ASSET#: 1093 +25°C TEST FIXTURE: 1377/1208 SOFTWARE ID: 74HC244 REV N/A	10+2	0	10+2	8/7/18	
09	TEMP		PERFORM TEMPERATURE CYCLING PER MIL-STD-883 METHOD 1010 CONDITION C & MIL-PRF-38534 C.3.3.3. TEN (10) CYCLES TA = -65°C +0/-10 to +150°C +15/-0 10 MINUTES AT EXTREMES DATE IN TIME IN DATE OUT TIME OUT EQUIPMENT USED: DELTA DESIGN ASSET #: 30626 EQUIPMENT USED: OMEGA HH309A ASSET #: 31567	10+2 10+2	0 0	10+2 10+2	8/8/18 8:14A.M 8/8/18 12:58P.M	TTL 48 TTL 48
10	ACCE		PERFORM CONSTANT ACCELERATION PER MIL-PRF-38534 MIL-STD-883 METHOD 2001. ESD MAT DUE DATE: / / Y1 DIRECTION ONLY @ 3000 G's (min) EQUIPMENT USED: Trio Tech ASSET #: 30260	10+2	0	10+2	8/9/18	TTL 52
11	SER		SERIALIZE ESD MAT DUE DATE: 8/27/18 S/N: 01-10 12.	10+2	0	10+2	8/9/18	TTL 40

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-12-A REV. 1

CUSTOMER:	DIE DEVICES	P.O. NUMBER:	SS139
PART NUMBER:	54HC244	P/N AS RECEIVED:	54HC244
PART TYPE:	CMOS LOGIC MICROCIRCUIT	DRAWING:	MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE:	7/12/18	JOB NUMBER:	DDS-101-12-A
LDC AS RECEIVED:	1810 LOT# 210144 WF15	QUANTITY RECEIVED :	30 (DIE)
QUOTE NUMBER:	DDS14267-1 MFG: SILICON SUPPLIES	QUANTITY REQUIRED :	10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEP	DATE	INSP.
12	ELEC		PERFORM 100% ELECTRICAL VERIFICATION PER MFG DATA SHEET3 AND MIL-PRF-38534 C.3.3.4.3 @ AMBIENT , HIGH AND LOW OPERATING TEMPERATURES. READ AND RECORD. STATIC AND FUNCTIONAL TESTS +25°C - 55°C +125°C EQUIPMENT USED: Sentry ASSET#: 1093 TEST FIXTURE: 1377/1208 SOFTWARE ID: 44C244 REV N/A TEMPERATURE SOAK 10 SEC.	12 12 12	0 0 0	12 12 12	8/15/18 8/15/18 8/15/18	
	ESD MAT DUE DATE: / /							
13	BI		PERFORM BURN IN PER BURN IN CIRCUIT PER FIGURE 1 OF DWG# 1026-16668, AND MIL-STD 883 METHOD 1015. TA = 125°C (min) T = 240 HRS (min) DATE IN: TIME IN: BURN-IN BOARD # / DESC: 1512 5 BURN-IN OVEN #: 21 DATE OUT: TIME OUT:	12 12	0 0	12 12	8/16/18 5:30 AM 8/27/18 5:30AM	TTL 13 TTL 13
	ESD MAT DUE DATE: / /							
14	ELEC		PERFORM POST BURN IN ELECTRICAL VERIFICATION PER MFG DATA SHEET AND MIL-PRF-38534 C.3.3.4.3 @ AMBIENT, HIGH AND LOW OPERATING TEMPERATURES. READ AND RECORD. STATIC AND FUNCTIONAL TESTS +25°C - 55°C +125°C TEST +25°C WITHIN 96 HOURS EQUIPMENT USED: Sentry 1 ASSET#: 1093 TEST FIXTURE: 1377/1208 SOFTWARE ID: 44C244 REV — TEMPERATURE SOAK 10 SEC.	12 12 12	0 0 0	12 12 12	8/27/18 8/27/18 8/27/18	TTL 27 TTL 27 TTL 27
	ESD MAT DUE DATE: 9/27/18							
15	ER		PER PO REQUIREMENTS: REVIEW AT POST 240 HR. BURN-IN EMAIL: ben.white@diedevices.com POST 240 HR BURN-IN ELECTRICAL TEST DATA. HOLD FOR APPROVAL TO PROCEED DATE SENT: 8/29/18				8/29/18	QA TANDEX 5

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-12-A

PART NUMBER 54 HC 244

DATE CODE 1810 LOT # 210144 WF15

BURN-IN TIME 240 hrs Min

θJC= N/A

TEMPERATURE TA=+125°C Min

TEMP. METER # 31368

VOLTAGE Vcc=+5V

VOLT METER# 31223

POWER SUPPLY# 30721

BOARD# 15125

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
8/16/18	9:00AM	Vcc=+5V	ICC=.01A	126.3°C	CM	
8/17/18	9:35AM	Vcc=+5V	ICC=.01A	124.1°C	CM	
8/20/18	6:00AM	Vcc=+5V	ICC=.01A	125.4°C	CM	
8/21/18	7:05AM	Vcc=+5V	ICC=.01A	125.5°C	CM	
8/22/18	9:55AM	Vcc=+5V	ICC=.01A	125.9°C	CM	
8/23/18	7:00AM	Vcc=+5V	ICC=.01A	125.3°C	CM	
8/24/18	6:40AM	Vcc=+5V	ICC=.01A	125.6°C	CM	
8/27/18	5:30AM	Vcc=+5V	ICC=.01A	125.8°C	CM	

TANDEX TEST LABS INC.

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-12-A REV. 1

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC244
P/N AS RECEIVED: 54HC244
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-12-A
LDC AS RECEIVED: 1810 LOT# 210144 WF15
QUANTITY RECEIVED : 30 (DIE)
QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES
QUANTITY REQUIRED : 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.
16	SSL		PERFORM STEADY STATE LIFE TEST PER MIL-PRF-38534 AND MIL-STD 883 METHOD 1005. TA = 125°C (min) T = 1000 HRS (min) ESD MAT DUE DATE: 10/27/18. DATE IN: / TIME IN: DATE OUT: / TIME OUT: BURN-IN BOARD # / DESC: 15725. BURN-IN OVEN #: 21.	12 12	0 0	12 12	8/29/18 2:00PM 10/10/18 6:00AM	TTL 13 TTL 13
17	ELEC		PERFORM POST STEADY STATE LIFE ELECTRICAL VERIFICATION PER MFG DATA SHEET AND MIL-PRF-38534 C.3.3.4.3. @ AMBIENT, HIGH AND LOW OPERATING TEMPERATURE. READ AND RECORD. STATIC AND FUNCTIONAL TESTS TEST +25°C WITHIN 96 HOURS ESD MAT DUE DATE: 10/27/18. +25°C - 55°C +125°C EQUIPMENT USED: Sentry. ASSET#: 1093. TEST FIXTURE: 1377/1208. SOFTWARE ID: HC244 REV —.	12 12 12	0 0 0	12 12 12	10/10/18 10/10/18 10/10/18	TTL 6 TTL 6 TTL 6
18	DBP		PERFORM WIRE BOND PULL PER MIL-STD-883 METHOD 2011, & MIL-PRF-38534 C.3.3.3, C3.3.5. TEN (10) WIRES, ***DO NOT USE ELECTRICAL TEST SAMPLES*** EQUIPMENT USED: DAGE. ASSET #: 30075.	5	0	5	7/25/18	TTL 4
19	SEM		PULLED 8 DEVICES AT SEQ. 05 AND TRANSFERRED TO: DDS-101-12-W	8		8	11/2/18	QA TANDEX 5

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-12-A

PART NUMBER 54HC244

DATE CODE 1810 LOT # 210144 WF15

BURN-IN TIME 1000hrs Min

θJC= N/A

TEMPERATURE TA=+125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5VDC

VOLT METER# 32223

POWER SUPPLY# 30803

BOARD# 15125

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
8/29/18	2:00PM	VCC=+5mA	ICC=.01A	126.3°C	CM	
8/30/18	6:00AM	VCC=+5mA	ICC=.01A	125.8°C	CM	
8/31/18	5:30AM	VCC=+5mA	ICC=.01A	126.3°C	CM	
9/3/18	NO	DATA	TAKEN			
9/4/18	6:00AM	VCC=+5mA	ICC=.01A	126.8°C	CM	
9/5/18	7:30AM	VCC=+5mA	ICC=.01A	125.5°C	CM	
9/6/18	10:00AM	VCC=+5mA	ICC=.01A	126.0°C	CM	
9/7/18	5:50AM	VCC=+5mA	ICC=.01A	126.6°C	CM	
9/10/18	7:00AM	VCC=+5mA	ICC=.01A	126.2°C	CM	

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-12-A

PART NUMBER 54HC244

DATE CODE 1810 LOT # 210144 WF15

BURN-IN TIME 1000hrs Min

θJC= N/A

TEMPERATURE TA=+125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5VDC

VOLT METER# 32223

POWER SUPPLY# 30803

BOARD# 15125

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
9/11/18	6:00AM	VCC=+5VDC	ICC=.01A	126.0°C	CM	
9/12/18	NO	DATA	TAKEN			
9/13/18	9:05AM	VCC=+5VDC	ICC=.01A	125.8°C	CM	
9/14/18	8:55AM	VCC=+5VDC	ICC=.01A	126.5°C	CM	
9/17/18	8:00AM	VCC=+5VDC	ICC=.01A	126.4°C	CM	
9/18/18	5:50AM	VCC=+5VDC	ICC=.01A	126.6°C	CM	
9/19/18	5:30AM	VCC=+5VDC	ICC=.01A	126.2°C	CM	
9/20/18	7:30AM	VCC=+5VDC	ICC=.01A	126.3°C	CM	
9/21/18	NO	DATA	TAKEN			

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-12-A

PART NUMBER 54HC244

DATE CODE 1810 LOT # 210144 WF15

BURN-IN TIME 1000hrs Min

θJC= N/A

TEMPERATURE TA=+125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5VDC

VOLT METER# 32223

POWER SUPPLY# 30803

BOARD# 15125

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
9/24/18	NO	DATA	TAKEN			
9/25/18	5:30AM	VCC=+5mc	ICC=.01A	126.2°C	CM	
9/26/18	6:00AM	VCC=+5mc	ICC=.01A	126.3°C	CM	
9/27/18	6:30AM	VCC=+5mc	ICC=.01A	126.7°C	CM	
9/28/18	6:50AM	VCC=+5mc	ICC=.01A	127.2°C	CM	
10/1/18	6:00AM	VCC=+5mc	ICC=.01A	127.7°C	CM	
10/2/18	8:40AM	VCC=+5VDC	ICC=.01A	126.6°C	CM	
10/3/18	7:30AM	VCC=+5mc	ICC=.01A	127.4°C	CM	
10/4/18	7:00AM	VCC=+5mc	ICC=.01A	125.5°C	CM	
10/5/18	6:00AM	VCC=+5mc	ICC=.01A	127.6°C	CM	

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-12-A

PART NUMBER 54HC244

DATE CODE 1810 LOT # 210144 WF15

BURN-IN TIME 1000hrs Min

θJC= N/A

TEMPERATURE TA=+125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5VDC

VOLT METER# 32223

POWER SUPPLY# 30803

BOARD# 15125

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
10/8/18	5:30AM	VCC=+5VDC	ICC=.01A	127.1°C	CM	
10/9/18	NO	DATA	TAKEN			
10/10/18	6:00AM	VCC=+5VDC	ICC=.01A	126.8°C	CM	

TANDEX TEST LABS TTL# DDS-101-12-A
BOND PULL
BOND STRENGTH TESTING

TTL Job No.	Part Number	Part Type	Date
DDS-101-12-A	54HC244	CMOS LOGIC MICROCIRCUIT	July 25, 2018
Lot Date Code	**Sample Qty.**	**Serial Numbers**	**Test Specifications**
LOT# 210144 W# 15 1810	5	11-15	Mil-Std-883 Method 2011
Misc.	**Qty Accept**	**Qty Reject**	**Suspect**
	5	0	0

WIRE TYPE	PACKAGE/POST	BOND TYPE
Au	Au	BALL BOND
DIE METALIZATION	**WIRE SIZE**	**MINIMUM PULL STRENGTH**
Al	0.001	2.5gm

S/N 11			S/N 12			S/N 13			S/N 14			S/N 15			S/N		
WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE
1	5.0	G	1	4.5	G	1	7.0	G	1	4.5	G	1	4.0	G	1		
2	5.0	G	2	5.0	G	2	6.0	G	2	4.5	G	2	3.5	G	2		
3			3			3			3			3			3		
4			4			4			4			4			4		
5			5			5			5			5			5		

CODE INDEX

A. NO BREAKS UP TO _____gms.

B. BOND LIFTS FROM DIE.

C. BOND LIFTS FROM POST.

D. WIRE BREAKS AT SUBSTRATE/HEAL.

E. BOND REMOVES UNDERLYING METALLIZATION.

F. NO CONNECTION.

G. WIRE BREAKS AT DIE/HEAL.

H. WIRE BREAKS AT POST/HEAL.

J. WIRE BREAKS AT SPAN.

X. BOND DAMAGE PRIOR TO TESTING.

TECHNICIAN STAMP:

TANDEX TEST LABS INC.

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-12-A REV. 1

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC244
P/N AS RECEIVED: 54HC244
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-12-A
LDC AS RECEIVED: 1810 LOT# 210144 WF15
QUANTITY RECEIVED : 30 (DIE)
QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES
QUANTITY REQUIRED : 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.
20	QCI	P-1073	TANDEX QUALITY CONTROL INSPECTION. QCI TO VERIFY CAR IN SEQ. 01 IS COMPLIANT	17	Ø	17	11/1/18	QA TANDEX 5
21	PKG		USE ORIGINAL OR TANDEX PACKAGING.	17	Ø	17	11/1/18	QA TANDEX 5
22	QAR	P-1213	TANDEX QUALITY ASSURANCE REVIEW. SHIP VIA: SHIP / BILL TO: DIE DEVICES 47 WHERRY ROAD NORWICH, NR1, 1WS UNITED KINGDOM VAT GB#114 3513 56 * INCLUDES 10 ACCEPT 5 BOND PULL 2 SPARES ** 8 TRANSFERRED TO DDS-101-12-A FOR SEM	* 17			11/1/18	QA TANDEX 5

Pre Burn-In Test Results at -55°C

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       1

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -680.0MV     -1.500 V      -100.0MV
    58    2  -680.0MV     -1.500 V      -100.0MV
    58    4  -690.0MV     -1.500 V      -100.0MV
    58    6  -690.0MV     -1.500 V      -100.0MV
    58    8  -690.0MV     -1.500 V      -100.0MV
    58   11  -690.0MV     -1.500 V      -100.0MV
    58   13  -690.0MV     -1.500 V      -100.0MV
    58   15  -690.0MV     -1.500 V      -100.0MV
    58   17  -690.0MV     -1.500 V      -100.0MV
    58   19  -690.0MV     -1.500 V      -100.0MV
    68    3   500.0MV      100.0MV       1.500 V
    68    5   490.0MV      100.0MV       1.500 V
    68    7   490.0MV      100.0MV       1.500 V
    68    9   490.0MV      100.0MV       1.500 V
    68   12   500.0MV      100.0MV       1.500 V
    68   14   500.0MV      100.0MV       1.500 V
    68   16   500.0MV      100.0MV       1.500 V
    68   18   500.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.980 V      1.900 V
   228    9   1.980 V      1.900 V
   234   12   1.980 V      1.900 V
   240   14   1.980 V      1.900 V
   246   16   1.970 V      1.900 V
   252   18   1.970 V      1.900 V

 ----------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ------------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.830 V      2.480 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   100.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   104.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   104.0MV                   260.0MV
   439   16   108.0MV                   260.0MV
   445   18   158.0MV                   260.0MV

 ------------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   260.0MV
   409    5   118.0MV                   260.0MV
   415    7   124.0MV                   260.0MV
   421    9   124.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   126.0MV                   260.0MV
   439   16   128.0MV                   260.0MV
   445   18   150.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.840 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   142.0MV                   260.0MV
   409    5   138.0MV                   260.0MV
   415    7   146.0MV                   260.0MV
   421    9   142.0MV                   260.0MV
   427   12   142.0MV                   260.0MV
   433   14   148.0MV                   260.0MV
   439   16   150.0MV                   260.0MV
   445   18   172.0MV                   260.0MV

 ---------------------------------
            IIN  TEST
```

```
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -3.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -11.00NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       2

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -680.0MV     -1.500 V      -100.0MV
    58    2  -680.0MV     -1.500 V      -100.0MV
    58    4  -680.0MV     -1.500 V      -100.0MV
    58    6  -680.0MV     -1.500 V      -100.0MV
    58    8  -680.0MV     -1.500 V      -100.0MV
    58   11  -680.0MV     -1.500 V      -100.0MV
    58   13  -690.0MV     -1.500 V      -100.0MV
    58   15  -680.0MV     -1.500 V      -100.0MV
    58   17  -680.0MV     -1.500 V      -100.0MV
    58   19  -690.0MV     -1.500 V      -100.0MV
    68    3   490.0MV      100.0MV       1.500 V
    68    5   490.0MV      100.0MV       1.500 V
    68    7   490.0MV      100.0MV       1.500 V
    68    9   490.0MV      100.0MV       1.500 V
    68   12   490.0MV      100.0MV       1.500 V
    68   14   490.0MV      100.0MV       1.500 V
    68   16   490.0MV      100.0MV       1.500 V
    68   18   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.980 V      1.900 V
   222    7   1.980 V      1.900 V
   228    9   1.980 V      1.900 V
   234   12   1.970 V      1.900 V
   240   14   1.980 V      1.900 V
   246   16   1.980 V      1.900 V
   252   18   1.970 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   100.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   102.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   102.0MV                   260.0MV
   433   14   102.0MV                   260.0MV
   439   16   104.0MV                   260.0MV
   445   18   114.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.330 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   122.0MV                   260.0MV
   421    9   124.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   122.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   146.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.850 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   58.00MV                   100.0MV
   344    5   58.00MV                   100.0MV
   350    7   58.00MV                   100.0MV
   356    9   56.00MV                   100.0MV
   362   12   58.00MV                   100.0MV
   368   14   58.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   58.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   142.0MV                   260.0MV
   409    5   136.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   146.0MV                   260.0MV
   427   12   140.0MV                   260.0MV
   433   14   146.0MV                   260.0MV
   439   16   150.0MV                   260.0MV
   445   18   170.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -11.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 3

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-680.0MV	-1.500 V	-100.0MV
58	2	-690.0MV	-1.500 V	-100.0MV
58	4	-690.0MV	-1.500 V	-100.0MV
58	6	-690.0MV	-1.500 V	-100.0MV
58	8	-690.0MV	-1.500 V	-100.0MV
58	11	-690.0MV	-1.500 V	-100.0MV
58	13	-690.0MV	-1.500 V	-100.0MV
58	15	-690.0MV	-1.500 V	-100.0MV
58	17	-690.0MV	-1.500 V	-100.0MV
58	19	-690.0MV	-1.500 V	-100.0MV
68	3	500.0MV	100.0MV	1.500 V
68	5	500.0MV	100.0MV	1.500 V
68	7	500.0MV	100.0MV	1.500 V
68	9	500.0MV	100.0MV	1.500 V
68	12	500.0MV	100.0MV	1.500 V
68	14	500.0MV	100.0MV	1.500 V
68	16	500.0MV	100.0MV	1.500 V
68	18	490.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   108.0MV                   260.0MV
   409    5   104.0MV                   260.0MV
   415    7   122.0MV                   260.0MV
   421    9   110.0MV                   260.0MV
   427   12   108.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   114.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   128.0MV                   260.0MV
   409    5   124.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   132.0MV                   260.0MV
   427   12   130.0MV                   260.0MV
   433   14   134.0MV                   260.0MV
   439   16   138.0MV                   260.0MV
   445   18   150.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.980 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.840 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   60.00MV                   100.0MV
   344    5   58.00MV                   100.0MV
   350    7   60.00MV                   100.0MV
   356    9   56.00MV                   100.0MV
   362   12   58.00MV                   100.0MV
   368   14   58.00MV                   100.0MV
   374   16   60.00MV                   100.0MV
   380   18   60.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   260.0MV
   409    5   148.0MV                   260.0MV
   415    7   162.0MV                   260.0MV
   421    9   154.0MV                   260.0MV
   427   12   150.0MV                   260.0MV
   433   14   156.0MV                   260.0MV
   439   16   162.0MV                   260.0MV
   445   18   180.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   5.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
            IOZ  TEST
            VCC= 6
            IOZ LIMIT +- 0.5UA @25C/-55C
            IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   4.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   6.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
            ICC  TEST
            VCC= 6
            ICC LIMIT MAX. 4.0UA @25C/-55C
            ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   2.000NA                   4.000UA
   679   20  -11.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 4

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-690.0MV	-1.500 V	-100.0MV
58	2	-700.0MV	-1.500 V	-100.0MV
58	4	-690.0MV	-1.500 V	-100.0MV
58	6	-690.0MV	-1.500 V	-100.0MV
58	8	-700.0MV	-1.500 V	-100.0MV
58	11	-690.0MV	-1.500 V	-100.0MV
58	13	-700.0MV	-1.500 V	-100.0MV
58	15	-700.0MV	-1.500 V	-100.0MV
58	17	-700.0MV	-1.500 V	-100.0MV
58	19	-700.0MV	-1.500 V	-100.0MV
68	3	500.0MV	100.0MV	1.500 V
68	5	500.0MV	100.0MV	1.500 V
68	7	500.0MV	100.0MV	1.500 V
68	9	500.0MV	100.0MV	1.500 V
68	12	500.0MV	100.0MV	1.500 V
68	14	500.0MV	100.0MV	1.500 V
68	16	510.0MV	100.0MV	1.500 V
68	18	500.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   102.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   106.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   118.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   116.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.300 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   126.0MV                   260.0MV
   421    9   122.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   146.0MV                   260.0MV
   439   16   134.0MV                   260.0MV
   445   18   144.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.980 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   260.0MV
   409    5   134.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   138.0MV                   260.0MV
   433   14   158.0MV                   260.0MV
   439   16   152.0MV                   260.0MV
   445   18   168.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   4.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       5

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -690.0MV     -1.500 V      -100.0MV
    58    2  -690.0MV     -1.500 V      -100.0MV
    58    4  -690.0MV     -1.500 V      -100.0MV
    58    6  -690.0MV     -1.500 V      -100.0MV
    58    8  -690.0MV     -1.500 V      -100.0MV
    58   11  -690.0MV     -1.500 V      -100.0MV
    58   13  -690.0MV     -1.500 V      -100.0MV
    58   15  -690.0MV     -1.500 V      -100.0MV
    58   17  -690.0MV     -1.500 V      -100.0MV
    58   19  -690.0MV     -1.500 V      -100.0MV
    68    3   490.0MV      100.0MV       1.500 V
    68    5   490.0MV      100.0MV       1.500 V
    68    7   500.0MV      100.0MV       1.500 V
    68    9   490.0MV      100.0MV       1.500 V
    68   12   490.0MV      100.0MV       1.500 V
    68   14   500.0MV      100.0MV       1.500 V
    68   16   500.0MV      100.0MV       1.500 V
    68   18   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.980 V      1.900 V
   228    9   1.970 V      1.900 V
   234   12   1.980 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.970 V      1.900 V
   252   18   1.970 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   100.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   112.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   106.0MV                   260.0MV
   439   16   102.0MV                   260.0MV
   445   18   114.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.330 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   118.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   130.0MV                   260.0MV
   421    9   124.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   130.0MV                   260.0MV
   439   16   126.0MV                   260.0MV
   445   18   142.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   260.0MV
   409    5   134.0MV                   260.0MV
   415    7   148.0MV                   260.0MV
   421    9   144.0MV                   260.0MV
   427   12   142.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   168.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   7.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   4.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   9.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       6

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -680.0MV     -1.500 V      -100.0MV
    58    2  -680.0MV     -1.500 V      -100.0MV
    58    4  -680.0MV     -1.500 V      -100.0MV
    58    6  -680.0MV     -1.500 V      -100.0MV
    58    8  -680.0MV     -1.500 V      -100.0MV
    58   11  -680.0MV     -1.500 V      -100.0MV
    58   13  -680.0MV     -1.500 V      -100.0MV
    58   15  -680.0MV     -1.500 V      -100.0MV
    58   17  -680.0MV     -1.500 V      -100.0MV
    58   19  -680.0MV     -1.500 V      -100.0MV
    68    3   490.0MV      100.0MV       1.500 V
    68    5   480.0MV      100.0MV       1.500 V
    68    7   490.0MV      100.0MV       1.500 V
    68    9   480.0MV      100.0MV       1.500 V
    68   12   480.0MV      100.0MV       1.500 V
    68   14   480.0MV      100.0MV       1.500 V
    68   16   480.0MV      100.0MV       1.500 V
    68   18   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.980 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.980 V      1.900 V
   234   12   1.970 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.980 V      1.900 V
   252   18   1.970 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.870 V      2.480 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   106.0MV                   260.0MV
   409    5   102.0MV                   260.0MV
   415    7   112.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   102.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.310 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   260.0MV
   409    5   118.0MV                   260.0MV
   415    7   134.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   132.0MV                   260.0MV
   445   18   144.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   260.0MV
   409    5   132.0MV                   260.0MV
   415    7   144.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   168.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       7

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -690.0MV     -1.500 V      -100.0MV
    58    2  -690.0MV     -1.500 V      -100.0MV
    58    4  -690.0MV     -1.500 V      -100.0MV
    58    6  -690.0MV     -1.500 V      -100.0MV
    58    8  -690.0MV     -1.500 V      -100.0MV
    58   11  -690.0MV     -1.500 V      -100.0MV
    58   13  -690.0MV     -1.500 V      -100.0MV
    58   15  -690.0MV     -1.500 V      -100.0MV
    58   17  -690.0MV     -1.500 V      -100.0MV
    58   19  -690.0MV     -1.500 V      -100.0MV
    68    3   500.0MV      100.0MV       1.500 V
    68    5   500.0MV      100.0MV       1.500 V
    68    7   500.0MV      100.0MV       1.500 V
    68    9   500.0MV      100.0MV       1.500 V
    68   12   500.0MV      100.0MV       1.500 V
    68   14   500.0MV      100.0MV       1.500 V
    68   16   500.0MV      100.0MV       1.500 V
    68   18   500.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.980 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.970 V      1.900 V
   234   12   1.980 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.970 V      1.900 V
   252   18   1.970 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   32.00MV                   100.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.970 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   100.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   104.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   102.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   116.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   114.0MV                   260.0MV
   415    7   124.0MV                   260.0MV
   421    9   118.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   130.0MV                   260.0MV
   445   18   142.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.980 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   126.0MV                   260.0MV
   415    7   140.0MV                   260.0MV
   421    9   132.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   152.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   164.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   31.00NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -3.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   16.00NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   31.00NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       8

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -690.0MV     -1.500 V      -100.0MV
    58    2  -690.0MV     -1.500 V      -100.0MV
    58    4  -690.0MV     -1.500 V      -100.0MV
    58    6  -690.0MV     -1.500 V      -100.0MV
    58    8  -690.0MV     -1.500 V      -100.0MV
    58   11  -690.0MV     -1.500 V      -100.0MV
    58   13  -690.0MV     -1.500 V      -100.0MV
    58   15  -690.0MV     -1.500 V      -100.0MV
    58   17  -690.0MV     -1.500 V      -100.0MV
    58   19  -690.0MV     -1.500 V      -100.0MV
    68    3   490.0MV      100.0MV       1.500 V
    68    5   490.0MV      100.0MV       1.500 V
    68    7   480.0MV      100.0MV       1.500 V
    68    9   480.0MV      100.0MV       1.500 V
    68   12   490.0MV      100.0MV       1.500 V
    68   14   490.0MV      100.0MV       1.500 V
    68   16   490.0MV      100.0MV       1.500 V
    68   18   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.970 V      1.900 V
   234   12   1.980 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.970 V      1.900 V
   252   18   1.970 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   98.00MV                   260.0MV
   409    5   94.00MV                   260.0MV
   415    7   100.0MV                   260.0MV
   421    9   98.00MV                   260.0MV
   427   12   96.00MV                   260.0MV
   433   14   108.0MV                   260.0MV
   439   16   106.0MV                   260.0MV
   445   18   112.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.460 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.350 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   112.0MV                   260.0MV
   433   14   134.0MV                   260.0MV
   439   16   128.0MV                   260.0MV
   445   18   140.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.860 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   56.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   136.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   136.0MV                   260.0MV
   427   12   132.0MV                   260.0MV
   433   14   154.0MV                   260.0MV
   439   16   152.0MV                   260.0MV
   445   18   168.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       9

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -690.0MV     -1.500 V      -100.0MV
    58    2  -690.0MV     -1.500 V      -100.0MV
    58    4  -690.0MV     -1.500 V      -100.0MV
    58    6  -690.0MV     -1.500 V      -100.0MV
    58    8  -690.0MV     -1.500 V      -100.0MV
    58   11  -700.0MV     -1.500 V      -100.0MV
    58   13  -700.0MV     -1.500 V      -100.0MV
    58   15  -700.0MV     -1.500 V      -100.0MV
    58   17  -690.0MV     -1.500 V      -100.0MV
    58   19  -700.0MV     -1.500 V      -100.0MV
    68    3   500.0MV      100.0MV       1.500 V
    68    5   500.0MV      100.0MV       1.500 V
    68    7   500.0MV      100.0MV       1.500 V
    68    9   500.0MV      100.0MV       1.500 V
    68   12   500.0MV      100.0MV       1.500 V
    68   14   500.0MV      100.0MV       1.500 V
    68   16   500.0MV      100.0MV       1.500 V
    68   18   500.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.970 V      1.900 V
   234   12   1.970 V      1.900 V
   240   14   1.980 V      1.900 V
   246   16   1.970 V      1.900 V
   252   18   1.980 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   102.0MV                   260.0MV
   409    5   100.0MV                   260.0MV
   415    7   102.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   118.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   116.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   114.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   130.0MV                   260.0MV
   445   18   142.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.980 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   260.0MV
   409    5   128.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   132.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   156.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   166.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -3.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   4.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   1.000NA                  4.000UA
   679   20  -10.00NA                  4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT

STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N      10
```

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C

```
 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -670.0MV     -1.500 V      -100.0MV
    58    2  -670.0MV     -1.500 V      -100.0MV
    58    4  -680.0MV     -1.500 V      -100.0MV
    58    6  -670.0MV     -1.500 V      -100.0MV
    58    8  -680.0MV     -1.500 V      -100.0MV
    58   11  -680.0MV     -1.500 V      -100.0MV
    58   13  -680.0MV     -1.500 V      -100.0MV
    58   15  -680.0MV     -1.500 V      -100.0MV
    58   17  -680.0MV     -1.500 V      -100.0MV
    58   19  -680.0MV     -1.500 V      -100.0MV
    68    3   480.0MV      100.0MV       1.500 V
    68    5   490.0MV      100.0MV       1.500 V
    68    7   490.0MV      100.0MV       1.500 V
    68    9   490.0MV      100.0MV       1.500 V
    68   12   490.0MV      100.0MV       1.500 V
    68   14   490.0MV      100.0MV       1.500 V
    68   16   490.0MV      100.0MV       1.500 V
    68   18   490.0MV      100.0MV       1.500 V

 ----------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.980 V      1.900 V
   234   12   1.980 V      1.900 V
   240   14   1.980 V      1.900 V
   246   16   1.980 V      1.900 V
   252   18   1.980 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ----------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
```

```
 ------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.850 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.860 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   106.0MV                   260.0MV
   409    5   104.0MV                   260.0MV
   415    7   110.0MV                   260.0MV
   421    9   108.0MV                   260.0MV
   427   12   110.0MV                   260.0MV
   433   14   120.0MV                   260.0MV
   439   16   114.0MV                   260.0MV
   445   18   122.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
```

```
 ------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.460 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.460 V      4.400 V
   252   18   4.450 V      4.400 V

 ---------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.310 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   124.0MV                   260.0MV
   409    5   120.0MV                   260.0MV
   415    7   132.0MV                   260.0MV
   421    9   128.0MV                   260.0MV
   427   12   126.0MV                   260.0MV
   433   14   146.0MV                   260.0MV
   439   16   136.0MV                   260.0MV
   445   18   152.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
```

```
 ------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.810 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.810 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   260.0MV
   409    5   134.0MV                   260.0MV
   415    7   148.0MV                   260.0MV
   421    9   144.0MV                   260.0MV
   427   12   142.0MV                   260.0MV
   433   14   164.0MV                   260.0MV
   439   16   156.0MV                   260.0MV
   445   18   174.0MV                   260.0MV

 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
```

```
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT


STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N      11

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C
```

```
 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -700.0MV     -1.500 V      -100.0MV
    58    2  -700.0MV     -1.500 V      -100.0MV
    58    4  -700.0MV     -1.500 V      -100.0MV
    58    6  -700.0MV     -1.500 V      -100.0MV
    58    8  -700.0MV     -1.500 V      -100.0MV
    58   11  -700.0MV     -1.500 V      -100.0MV
    58   13  -710.0MV     -1.500 V      -100.0MV
    58   15  -700.0MV     -1.500 V      -100.0MV
    58   17  -710.0MV     -1.500 V      -100.0MV
    58   19  -710.0MV     -1.500 V      -100.0MV
    68    3   510.0MV      100.0MV       1.500 V
    68    5   510.0MV      100.0MV       1.500 V
    68    7   510.0MV      100.0MV       1.500 V
    68    9   510.0MV      100.0MV       1.500 V
    68   12   510.0MV      100.0MV       1.500 V
    68   14   510.0MV      100.0MV       1.500 V
    68   16   510.0MV      100.0MV       1.500 V
    68   18   510.0MV      100.0MV       1.500 V

 ----------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.980 V      1.900 V
   228    9   1.970 V      1.900 V
   234   12   1.970 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.980 V      1.900 V
   252   18   1.970 V      1.900 V

 ---------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                    100.0MV
   344    5   34.00MV                    100.0MV
   350    7   34.00MV                    100.0MV
   356    9   32.00MV                    100.0MV
   362   12   34.00MV                    100.0MV
   368   14   34.00MV                    100.0MV
   374   16   34.00MV                    100.0MV
   380   18   34.00MV                    100.0MV

 ----------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ----------------------------------------------
```

```
 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT           GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT           GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.870 V      2.480 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT           GT
   338    3   32.00MV                  100.0MV
   344    5   34.00MV                  100.0MV
   350    7   32.00MV                  100.0MV
   356    9   32.00MV                  100.0MV
   362   12   32.00MV                  100.0MV
   368   14   32.00MV                  100.0MV
   374   16   34.00MV                  100.0MV
   380   18   34.00MV                  100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT           GT
   403    3   106.0MV                  260.0MV
   409    5   102.0MV                  260.0MV
   415    7   106.0MV                  260.0MV
   421    9   106.0MV                  260.0MV
   427   12   102.0MV                  260.0MV
   433   14   116.0MV                  260.0MV
   439   16   108.0MV                  260.0MV
   445   18   118.0MV                  260.0MV

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ------------------------------------------------
```

```
 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.460 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   122.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   130.0MV                   260.0MV
   445   18   144.0MV                   260.0MV

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT           GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT           GT
   275    3   5.850 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.820 V      5.480 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT           GT
   338    3   50.00MV                  100.0MV
   344    5   50.00MV                  100.0MV
   350    7   48.00MV                  100.0MV
   356    9   48.00MV                  100.0MV
   362   12   48.00MV                  100.0MV
   368   14   48.00MV                  100.0MV
   374   16   50.00MV                  100.0MV
   380   18   50.00MV                  100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT           GT
   403    3   136.0MV                  260.0MV
   409    5   130.0MV                  260.0MV
   415    7   138.0MV                  260.0MV
   421    9   136.0MV                  260.0MV
   427   12   134.0MV                  260.0MV
   433   14   156.0MV                  260.0MV
   439   16   148.0MV                  260.0MV
   445   18   166.0MV                  260.0MV

 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------
```

```
INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -11.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT

STAT1               05/29/11  07:07
TEST PROGRAM   HC244          S/N      12

DDS-101-12-A PN 54HC244 TEST SEQ 12 -55C


 ----------------------------------------
             CONTINUITY TEST
 ----------------------------------------
```

INST #	PIN	MEASURED	LT	GT
58	1	-700.0MV	-1.500 V	-100.0MV
58	2	-700.0MV	-1.500 V	-100.0MV
58	4	-700.0MV	-1.500 V	-100.0MV
58	6	-700.0MV	-1.500 V	-100.0MV
58	8	-700.0MV	-1.500 V	-100.0MV
58	11	-700.0MV	-1.500 V	-100.0MV
58	13	-700.0MV	-1.500 V	-100.0MV
58	15	-700.0MV	-1.500 V	-100.0MV
58	17	-700.0MV	-1.500 V	-100.0MV
58	19	-700.0MV	-1.500 V	-100.0MV
68	3	500.0MV	100.0MV	1.500 V
68	5	510.0MV	100.0MV	1.500 V
68	7	500.0MV	100.0MV	1.500 V
68	9	500.0MV	100.0MV	1.500 V
68	12	500.0MV	100.0MV	1.500 V
68	14	500.0MV	100.0MV	1.500 V
68	16	510.0MV	100.0MV	1.500 V
68	18	500.0MV	100.0MV	1.500 V

```
 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------
```

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

```
 ----------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ----------------------------------------
```

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
```

```
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   104.0MV                   260.0MV
   409    5   102.0MV                   260.0MV
   415    7   106.0MV                   260.0MV
   421    9   108.0MV                   260.0MV
   427   12   106.0MV                   260.0MV
   433   14   116.0MV                   260.0MV
   439   16   112.0MV                   260.0MV
   445   18   116.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
```

```
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   126.0MV                   260.0MV
   421    9   124.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   132.0MV                   260.0MV
   445   18   138.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
```

```
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   48.00MV                   100.0MV
   344    5   48.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   46.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   48.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   140.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   156.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   154.0MV                   260.0MV

 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
```

```
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   12.00NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   10.00NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   10.00NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -11.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

Pre Burn-In Test Results at 25°C

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 1

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-650.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	460.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	460.0MV	100.0MV	1.500 V
68	9	460.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

FUNCTIONAL TEST

```
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   146.0MV                   260.0MV
   409    5   144.0MV                   260.0MV
   415    7   152.0MV                   260.0MV
   421    9   148.0MV                   260.0MV
   427   12   146.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   150.0MV                   260.0MV
   445   18   152.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.310 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   72.00MV                   100.0MV
   344    5   70.00MV                   100.0MV
   350    7   72.00MV                   100.0MV
   356    9   72.00MV                   100.0MV
   362   12   72.00MV                   100.0MV
   368   14   72.00MV                   100.0MV
   374   16   70.00MV                   100.0MV
   380   18   72.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   204.0MV                   260.0MV
   409    5   202.0MV                   260.0MV
   415    7   218.0MV                   260.0MV
   421    9   208.0MV                   260.0MV
   427   12   208.0MV                   260.0MV
   433   14   212.0MV                   260.0MV
   439   16   212.0MV                   260.0MV
   445   18   216.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   94.00MV                   100.0MV
   344    5   94.00MV                   100.0MV
   350    7   92.00MV                   100.0MV
   356    9   90.00MV                   100.0MV
   362   12   90.00MV                   100.0MV
   368   14   90.00MV                   100.0MV
   374   16   90.00MV                   100.0MV
   380   18   92.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   216.0MV                   260.0MV
   409    5   212.0MV                   260.0MV
   415    7   224.0MV                   260.0MV
   421    9   218.0MV                   260.0MV
   427   12   216.0MV                   260.0MV
   433   14   224.0MV                   260.0MV
   439   16   224.0MV                   260.0MV
   445   18   232.0MV                   260.0MV

 ---------------------------------
            IIN  TEST
```

```
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -8.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 2

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-670.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   260.0MV
   409    5   118.0MV                   260.0MV
   415    7   124.0MV                   260.0MV
   421    9   126.0MV                   260.0MV
   427   12   122.0MV                   260.0MV
   433   14   120.0MV                   260.0MV
   439   16   122.0MV                   260.0MV
   445   18   128.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.330 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   56.00MV                   100.0MV
   362   12   56.00MV                   100.0MV
   368   14   56.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   166.0MV                   260.0MV
   409    5   162.0MV                   260.0MV
   415    7   172.0MV                   260.0MV
   421    9   172.0MV                   260.0MV
   427   12   166.0MV                   260.0MV
   433   14   170.0MV                   260.0MV
   439   16   170.0MV                   260.0MV
   445   18   176.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   94.00MV                   100.0MV
   344    5   92.00MV                   100.0MV
   350    7   92.00MV                   100.0MV
   356    9   92.00MV                   100.0MV
   362   12   90.00MV                   100.0MV
   368   14   92.00MV                   100.0MV
   374   16   92.00MV                   100.0MV
   380   18   92.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   214.0MV                   260.0MV
   409    5   206.0MV                   260.0MV
   415    7   220.0MV                   260.0MV
   421    9   216.0MV                   260.0MV
   427   12   212.0MV                   260.0MV
   433   14   214.0MV                   260.0MV
   439   16   216.0MV                   260.0MV
   445   18   222.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   4.000NA                  4.000UA
   679   20  -8.000NA                  4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 3

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-670.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	480.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   124.0MV                   260.0MV
   409    5   124.0MV                   260.0MV
   415    7   130.0MV                   260.0MV
   421    9   130.0MV                   260.0MV
   427   12   124.0MV                   260.0MV
   433   14   128.0MV                   260.0MV
   439   16   128.0MV                   260.0MV
   445   18   132.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.310 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   166.0MV                   260.0MV
   409    5   164.0MV                   260.0MV
   415    7   174.0MV                   260.0MV
   421    9   172.0MV                   260.0MV
   427   12   168.0MV                   260.0MV
   433   14   172.0MV                   260.0MV
   439   16   172.0MV                   260.0MV
   445   18   178.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.980 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.820 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   88.00MV                   100.0MV
   344    5   86.00MV                   100.0MV
   350    7   88.00MV                   100.0MV
   356    9   84.00MV                   100.0MV
   362   12   86.00MV                   100.0MV
   368   14   86.00MV                   100.0MV
   374   16   86.00MV                   100.0MV
   380   18   86.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   208.0MV                   260.0MV
   409    5   204.0MV                   260.0MV
   415    7   216.0MV                   260.0MV
   421    9   210.0MV                   260.0MV
   427   12   206.0MV                   260.0MV
   433   14   212.0MV                   260.0MV
   439   16   214.0MV                   260.0MV
   445   18   220.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   3.000NA                   4.000UA
   679   20  -8.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 4

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-670.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-670.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-670.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	480.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	480.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   118.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   122.0MV                   260.0MV
   421    9   122.0MV                   260.0MV
   427   12   122.0MV                   260.0MV
   433   14   122.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   128.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   158.0MV                   260.0MV
   409    5   154.0MV                   260.0MV
   415    7   164.0MV                   260.0MV
   421    9   162.0MV                   260.0MV
   427   12   158.0MV                   260.0MV
   433   14   164.0MV                   260.0MV
   439   16   166.0MV                   260.0MV
   445   18   170.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   86.00MV                   100.0MV
   344    5   86.00MV                   100.0MV
   350    7   86.00MV                   100.0MV
   356    9   84.00MV                   100.0MV
   362   12   84.00MV                   100.0MV
   368   14   84.00MV                   100.0MV
   374   16   86.00MV                   100.0MV
   380   18   86.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   202.0MV                   260.0MV
   409    5   198.0MV                   260.0MV
   415    7   210.0MV                   260.0MV
   421    9   206.0MV                   260.0MV
   427   12   202.0MV                   260.0MV
   433   14   210.0MV                   260.0MV
   439   16   212.0MV                   260.0MV
   445   18   216.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   3.000NA                  4.000UA
   679   20  -8.000NA                  4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 5

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-670.0MV	-1.500 V	-100.0MV
58	19	-670.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	460.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   114.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   118.0MV                   260.0MV
   439   16   116.0MV                   260.0MV
   445   18   122.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.460 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.330 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   154.0MV                   260.0MV
   409    5   152.0MV                   260.0MV
   415    7   162.0MV                   260.0MV
   421    9   160.0MV                   260.0MV
   427   12   158.0MV                   260.0MV
   433   14   156.0MV                   260.0MV
   439   16   156.0MV                   260.0MV
   445   18   164.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.980 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   90.00MV                   100.0MV
   344    5   90.00MV                   100.0MV
   350    7   88.00MV                   100.0MV
   356    9   86.00MV                   100.0MV
   362   12   86.00MV                   100.0MV
   368   14   86.00MV                   100.0MV
   374   16   88.00MV                   100.0MV
   380   18   88.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   200.0MV                   260.0MV
   409    5   198.0MV                   260.0MV
   415    7   212.0MV                   260.0MV
   421    9   208.0MV                   260.0MV
   427   12   204.0MV                   260.0MV
   433   14   206.0MV                   260.0MV
   439   16   206.0MV                   260.0MV
   445   18   214.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   4.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 6

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-670.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-670.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	460.0MV	100.0MV	1.500 V
68	14	460.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   124.0MV                   260.0MV
   409    5   120.0MV                   260.0MV
   415    7   124.0MV                   260.0MV
   421    9   122.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   120.0MV                   260.0MV
   439   16   122.0MV                   260.0MV
   445   18   130.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.460 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.320 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.310 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   164.0MV                   260.0MV
   409    5   158.0MV                   260.0MV
   415    7   166.0MV                   260.0MV
   421    9   162.0MV                   260.0MV
   427   12   158.0MV                   260.0MV
   433   14   162.0MV                   260.0MV
   439   16   166.0MV                   260.0MV
   445   18   172.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.980 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.980 V      5.900 V
   228    9   5.980 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   96.00MV                   100.0MV
   344    5   94.00MV                   100.0MV
   350    7   94.00MV                   100.0MV
   356    9   92.00MV                   100.0MV
   362   12   92.00MV                   100.0MV
   368   14   92.00MV                   100.0MV
   374   16   94.00MV                   100.0MV
   380   18   94.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   218.0MV                   260.0MV
   409    5   212.0MV                   260.0MV
   415    7   222.0MV                   260.0MV
   421    9   218.0MV                   260.0MV
   427   12   210.0MV                   260.0MV
   433   14   216.0MV                   260.0MV
   439   16   220.0MV                   260.0MV
   445   18   230.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -8.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 7

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.860 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   260.0MV
   409    5   120.0MV                   260.0MV
   415    7   128.0MV                   260.0MV
   421    9   126.0MV                   260.0MV
   427   12   128.0MV                   260.0MV
   433   14   128.0MV                   260.0MV
   439   16   132.0MV                   260.0MV
   445   18   134.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.310 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   62.00MV                   100.0MV
   344    5   60.00MV                   100.0MV
   350    7   60.00MV                   100.0MV
   356    9   58.00MV                   100.0MV
   362   12   60.00MV                   100.0MV
   368   14   58.00MV                   100.0MV
   374   16   60.00MV                   100.0MV
   380   18   60.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   176.0MV                   260.0MV
   409    5   172.0MV                   260.0MV
   415    7   182.0MV                   260.0MV
   421    9   182.0MV                   260.0MV
   427   12   178.0MV                   260.0MV
   433   14   184.0MV                   260.0MV
   439   16   186.0MV                   260.0MV
   445   18   196.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   58.00MV                   100.0MV
   344    5   58.00MV                   100.0MV
   350    7   58.00MV                   100.0MV
   356    9   56.00MV                   100.0MV
   362   12   56.00MV                   100.0MV
   368   14   56.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   58.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   158.0MV                   260.0MV
   409    5   154.0MV                   260.0MV
   415    7   166.0MV                   260.0MV
   421    9   162.0MV                   260.0MV
   427   12   158.0MV                   260.0MV
   433   14   166.0MV                   260.0MV
   439   16   168.0MV                   260.0MV
   445   18   176.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   4.000NA                  4.000UA
   679   20  -8.000NA                  4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 8

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	450.0MV	100.0MV	1.500 V
68	5	450.0MV	100.0MV	1.500 V
68	7	450.0MV	100.0MV	1.500 V
68	9	450.0MV	100.0MV	1.500 V
68	12	450.0MV	100.0MV	1.500 V
68	14	460.0MV	100.0MV	1.500 V
68	16	460.0MV	100.0MV	1.500 V
68	18	450.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.970 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   106.0MV                   260.0MV
   409    5   102.0MV                   260.0MV
   415    7   104.0MV                   260.0MV
   421    9   108.0MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   106.0MV                   260.0MV
   439   16   112.0MV                   260.0MV
   445   18   114.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   44.00MV                   100.0MV
   344    5   44.00MV                   100.0MV
   350    7   44.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   44.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   126.0MV                   260.0MV
   415    7   134.0MV                   260.0MV
   421    9   134.0MV                   260.0MV
   427   12   128.0MV                   260.0MV
   433   14   134.0MV                   260.0MV
   439   16   138.0MV                   260.0MV
   445   18   144.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   64.00MV                   100.0MV
   344    5   62.00MV                   100.0MV
   350    7   62.00MV                   100.0MV
   356    9   58.00MV                   100.0MV
   362   12   60.00MV                   100.0MV
   368   14   60.00MV                   100.0MV
   374   16   60.00MV                   100.0MV
   380   18   62.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   260.0MV
   409    5   152.0MV                   260.0MV
   415    7   158.0MV                   260.0MV
   421    9   158.0MV                   260.0MV
   427   12   152.0MV                   260.0MV
   433   14   160.0MV                   260.0MV
   439   16   164.0MV                   260.0MV
   445   18   170.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
            IOZ  TEST
            VCC= 6
            IOZ LIMIT +- 0.5UA @25C/-55C
            IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
            ICC  TEST
            VCC= 6
            ICC LIMIT MAX. 4.0UA @25C/-55C
            ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   12.00NA                   4.000UA
   679   20   4.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 9

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	480.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   112.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   114.0MV                   260.0MV
   433   14   118.0MV                   260.0MV
   439   16   116.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   260.0MV
   409    5   134.0MV                   260.0MV
   415    7   140.0MV                   260.0MV
   421    9   140.0MV                   260.0MV
   427   12   136.0MV                   260.0MV
   433   14   142.0MV                   260.0MV
   439   16   140.0MV                   260.0MV
   445   18   150.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.980 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   260.0MV
   409    5   152.0MV                   260.0MV
   415    7   162.0MV                   260.0MV
   421    9   160.0MV                   260.0MV
   427   12   156.0MV                   260.0MV
   433   14   162.0MV                   260.0MV
   439   16   164.0MV                   260.0MV
   445   18   170.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   3.000NA                   4.000UA
   679   20  -9.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 10

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   112.0MV                   260.0MV
   409    5   108.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   114.0MV                   260.0MV
   433   14   116.0MV                   260.0MV
   439   16   116.0MV                   260.0MV
   445   18   122.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.460 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.310 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   136.0MV                   260.0MV
   409    5   132.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   136.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   140.0MV                   260.0MV
   445   18   150.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.980 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.830 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   260.0MV
   409    5   152.0MV                   260.0MV
   415    7   164.0MV                   260.0MV
   421    9   158.0MV                   260.0MV
   427   12   156.0MV                   260.0MV
   433   14   162.0MV                   260.0MV
   439   16   164.0MV                   260.0MV
   445   18   168.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   3.000NA                  4.000UA
   679   20  -9.000NA                  4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 11

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.860 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.860 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   114.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   116.0MV                   260.0MV
   433   14   116.0MV                   260.0MV
   439   16   118.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.320 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.310 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   260.0MV
   409    5   136.0MV                   260.0MV
   415    7   144.0MV                   260.0MV
   421    9   140.0MV                   260.0MV
   427   12   136.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   142.0MV                   260.0MV
   445   18   148.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.980 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.830 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.820 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   160.0MV                   260.0MV
   409    5   156.0MV                   260.0MV
   415    7   166.0MV                   260.0MV
   421    9   162.0MV                   260.0MV
   427   12   156.0MV                   260.0MV
   433   14   162.0MV                   260.0MV
   439   16   164.0MV                   260.0MV
   445   18   170.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20   3.000NA                  4.000UA
   679   20  -8.000NA                  4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 12

DDS-101-12-A PN 54HC244 TEST SEQ 12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.860 V      2.480 V
   299   12   2.860 V      2.480 V
   305   14   2.860 V      2.480 V
   311   16   2.860 V      2.480 V
   317   18   2.870 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   114.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   118.0MV                   260.0MV
   427   12   116.0MV                   260.0MV
   433   14   116.0MV                   260.0MV
   439   16   118.0MV                   260.0MV
   445   18   122.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.320 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.310 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.310 V      3.980 V
   311   16   4.310 V      3.980 V
   317   18   4.320 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   260.0MV
   409    5   136.0MV                   260.0MV
   415    7   144.0MV                   260.0MV
   421    9   142.0MV                   260.0MV
   427   12   138.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   142.0MV                   260.0MV
   445   18   146.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.830 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.820 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.820 V      5.480 V
   311   16   5.820 V      5.480 V
   317   18   5.820 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   158.0MV                   260.0MV
   409    5   156.0MV                   260.0MV
   415    7   168.0MV                   260.0MV
   421    9   162.0MV                   260.0MV
   427   12   158.0MV                   260.0MV
   433   14   162.0MV                   260.0MV
   439   16   166.0MV                   260.0MV
   445   18   170.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -4.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -4.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -4.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -4.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -4.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -4.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -4.000NA     -100.0NA       100.0NA
   551   19   1.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   2.000NA     -100.0NA       100.0NA
   586    5  -4.000NA     -100.0NA       100.0NA
   589    5   2.000NA     -100.0NA       100.0NA
   594    7  -4.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -4.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -4.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   3.000NA                   4.000UA
   679   20  -8.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

MIL-PRF-38534 CLASS K DATAPACK

Pre Burn-In Test Results at +125°C

```
STAT1               05/29/11  07:07
TEST PROGRAM   HC244         S/N       1

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -620.0MV     -1.500 V      -100.0MV
    58    2  -620.0MV     -1.500 V      -100.0MV
    58    4  -620.0MV     -1.500 V      -100.0MV
    58    6  -620.0MV     -1.500 V      -100.0MV
    58    8  -620.0MV     -1.500 V      -100.0MV
    58   11  -620.0MV     -1.500 V      -100.0MV
    58   13  -620.0MV     -1.500 V      -100.0MV
    58   15  -620.0MV     -1.500 V      -100.0MV
    58   17  -620.0MV     -1.500 V      -100.0MV
    58   19  -620.0MV     -1.500 V      -100.0MV
    68    3   430.0MV      100.0MV       1.500 V
    68    5   430.0MV      100.0MV       1.500 V
    68    7   430.0MV      100.0MV       1.500 V
    68    9   430.0MV      100.0MV       1.500 V
    68   12   430.0MV      100.0MV       1.500 V
    68   14   440.0MV      100.0MV       1.500 V
    68   16   440.0MV      100.0MV       1.500 V
    68   18   430.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.970 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.980 V      1.900 V
   234   12   1.970 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.970 V      1.900 V
   252   18   1.970 V      1.900 V

 ----------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                    100.0MV
   344    5   34.00MV                    100.0MV
   350    7   32.00MV                    100.0MV
   356    9   34.00MV                    100.0MV
   362   12   34.00MV                    100.0MV
   368   14   34.00MV                    100.0MV
   374   16   32.00MV                    100.0MV
   380   18   32.00MV                    100.0MV

 ------------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.860 V      2.200 V
   287    7   2.860 V      2.200 V
   293    9   2.860 V      2.200 V
   299   12   2.860 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   400.0MV
   409    5   136.0MV                   400.0MV
   415    7   138.0MV                   400.0MV
   421    9   140.0MV                   400.0MV
   427   12   144.0MV                   400.0MV
   433   14   144.0MV                   400.0MV
   439   16   142.0MV                   400.0MV
   445   18   144.0MV                   400.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.310 V      3.700 V
   287    7   4.310 V      3.700 V
   293    9   4.310 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.300 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   172.0MV                   400.0MV
   409    5   168.0MV                   400.0MV
   415    7   170.0MV                   400.0MV
   421    9   176.0MV                   400.0MV
   427   12   176.0MV                   400.0MV
   433   14   180.0MV                   400.0MV
   439   16   176.0MV                   400.0MV
   445   18   180.0MV                   400.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.820 V      5.200 V
   287    7   5.820 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.810 V      5.200 V
   311   16   5.810 V      5.200 V
   317   18   5.820 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   66.00MV                   100.0MV
   344    5   68.00MV                   100.0MV
   350    7   66.00MV                   100.0MV
   356    9   64.00MV                   100.0MV
   362   12   64.00MV                   100.0MV
   368   14   64.00MV                   100.0MV
   374   16   66.00MV                   100.0MV
   380   18   66.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   188.0MV                   400.0MV
   409    5   182.0MV                   400.0MV
   415    7   184.0MV                   400.0MV
   421    9   190.0MV                   400.0MV
   427   12   190.0MV                   400.0MV
   433   14   194.0MV                   400.0MV
   439   16   190.0MV                   400.0MV
   445   18   194.0MV                   400.0MV

 ---------------------------------
            IIN  TEST
```

```
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -6.000NA     -1.000UA       1.000UA
   581    3   2.000NA     -1.000UA       1.000UA
   586    5  -8.000NA     -1.000UA       1.000UA
   589    5   2.000NA     -1.000UA       1.000UA
   594    7  -8.000NA     -1.000UA       1.000UA
   597    7   3.000NA     -1.000UA       1.000UA
   602    9  -8.000NA     -1.000UA       1.000UA
   605    9   2.000NA     -1.000UA       1.000UA
   613   12  -7.000NA     -1.000UA       1.000UA
   616   12   2.000NA     -1.000UA       1.000UA
   621   14  -7.000NA     -1.000UA       1.000UA
   624   14   2.000NA     -1.000UA       1.000UA
   629   16  -7.000NA     -1.000UA       1.000UA
   632   16   2.000NA     -1.000UA       1.000UA
   637   18  -7.000NA     -1.000UA       1.000UA
   640   18   2.000NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 2

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-600.0MV	-1.500 V	-100.0MV
58	2	-600.0MV	-1.500 V	-100.0MV
58	4	-600.0MV	-1.500 V	-100.0MV
58	6	-600.0MV	-1.500 V	-100.0MV
58	8	-600.0MV	-1.500 V	-100.0MV
58	11	-600.0MV	-1.500 V	-100.0MV
58	13	-600.0MV	-1.500 V	-100.0MV
58	15	-600.0MV	-1.500 V	-100.0MV
58	17	-600.0MV	-1.500 V	-100.0MV
58	19	-600.0MV	-1.500 V	-100.0MV
68	3	410.0MV	100.0MV	1.500 V
68	5	410.0MV	100.0MV	1.500 V
68	7	410.0MV	100.0MV	1.500 V
68	9	410.0MV	100.0MV	1.500 V
68	12	410.0MV	100.0MV	1.500 V
68	14	410.0MV	100.0MV	1.500 V
68	16	410.0MV	100.0MV	1.500 V
68	18	400.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.970 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.200 V
   281    5   2.860 V      2.200 V
   287    7   2.860 V      2.200 V
   293    9   2.860 V      2.200 V
   299   12   2.860 V      2.200 V
   305   14   2.860 V      2.200 V
   311   16   2.860 V      2.200 V
   317   18   2.870 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   400.0MV
   409    5   116.0MV                   400.0MV
   415    7   116.0MV                   400.0MV
   421    9   124.0MV                   400.0MV
   427   12   122.0MV                   400.0MV
   433   14   120.0MV                   400.0MV
   439   16   118.0MV                   400.0MV
   445   18   120.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.320 V      3.700 V
   281    5   4.310 V      3.700 V
   287    7   4.310 V      3.700 V
   293    9   4.310 V      3.700 V
   299   12   4.310 V      3.700 V
   305   14   4.300 V      3.700 V
   311   16   4.310 V      3.700 V
   317   18   4.320 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   144.0MV                   400.0MV
   409    5   140.0MV                   400.0MV
   415    7   142.0MV                   400.0MV
   421    9   150.0MV                   400.0MV
   427   12   146.0MV                   400.0MV
   433   14   146.0MV                   400.0MV
   439   16   142.0MV                   400.0MV
   445   18   146.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.820 V      5.200 V
   287    7   5.820 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.810 V      5.200 V
   311   16   5.820 V      5.200 V
   317   18   5.830 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   164.0MV                   400.0MV
   409    5   160.0MV                   400.0MV
   415    7   160.0MV                   400.0MV
   421    9   168.0MV                   400.0MV
   427   12   164.0MV                   400.0MV
   433   14   166.0MV                   400.0MV
   439   16   162.0MV                   400.0MV
   445   18   166.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -20.00NA     -1.000UA       1.000UA
   581    3   5.000NA     -1.000UA       1.000UA
   586    5  -21.00NA     -1.000UA       1.000UA
   589    5   5.000NA     -1.000UA       1.000UA
   594    7  -20.00NA     -1.000UA       1.000UA
   597    7   5.000NA     -1.000UA       1.000UA
   602    9  -21.00NA     -1.000UA       1.000UA
   605    9   5.000NA     -1.000UA       1.000UA
   613   12  -24.00NA     -1.000UA       1.000UA
   616   12   5.000NA     -1.000UA       1.000UA
   621   14  -22.00NA     -1.000UA       1.000UA
   624   14   5.000NA     -1.000UA       1.000UA
   629   16  -24.00NA     -1.000UA       1.000UA
   632   16   5.000NA     -1.000UA       1.000UA
   637   18  -25.00NA     -1.000UA       1.000UA
   640   18   4.000NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 3

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-620.0MV	-1.500 V	-100.0MV
58	2	-610.0MV	-1.500 V	-100.0MV
58	4	-620.0MV	-1.500 V	-100.0MV
58	6	-610.0MV	-1.500 V	-100.0MV
58	8	-610.0MV	-1.500 V	-100.0MV
58	11	-610.0MV	-1.500 V	-100.0MV
58	13	-610.0MV	-1.500 V	-100.0MV
58	15	-610.0MV	-1.500 V	-100.0MV
58	17	-610.0MV	-1.500 V	-100.0MV
58	19	-610.0MV	-1.500 V	-100.0MV
68	3	430.0MV	100.0MV	1.500 V
68	5	430.0MV	100.0MV	1.500 V
68	7	430.0MV	100.0MV	1.500 V
68	9	420.0MV	100.0MV	1.500 V
68	12	420.0MV	100.0MV	1.500 V
68	14	430.0MV	100.0MV	1.500 V
68	16	420.0MV	100.0MV	1.500 V
68	18	420.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.860 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.850 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   400.0MV
   409    5   120.0MV                   400.0MV
   415    7   122.0MV                   400.0MV
   421    9   128.0MV                   400.0MV
   427   12   124.0MV                   400.0MV
   433   14   124.0MV                   400.0MV
   439   16   120.0MV                   400.0MV
   445   18   122.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.460 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.300 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   146.0MV                   400.0MV
   409    5   144.0MV                   400.0MV
   415    7   146.0MV                   400.0MV
   421    9   154.0MV                   400.0MV
   427   12   148.0MV                   400.0MV
   433   14   150.0MV                   400.0MV
   439   16   146.0MV                   400.0MV
   445   18   148.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.800 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.810 V      5.200 V
   317   18   5.820 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   48.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   166.0MV                   400.0MV
   409    5   162.0MV                   400.0MV
   415    7   164.0MV                   400.0MV
   421    9   170.0MV                   400.0MV
   427   12   166.0MV                   400.0MV
   433   14   170.0MV                   400.0MV
   439   16   164.0MV                   400.0MV
   445   18   166.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -8.000NA     -1.000UA       1.000UA
   581    3   3.000NA     -1.000UA       1.000UA
   586    5  -9.000NA     -1.000UA       1.000UA
   589    5   3.000NA     -1.000UA       1.000UA
   594    7  -10.00NA     -1.000UA       1.000UA
   597    7   4.000NA     -1.000UA       1.000UA
   602    9  -11.00NA     -1.000UA       1.000UA
   605    9   3.000NA     -1.000UA       1.000UA
   613   12  -10.00NA     -1.000UA       1.000UA
   616   12   3.000NA     -1.000UA       1.000UA
   621   14  -10.00NA     -1.000UA       1.000UA
   624   14   3.000NA     -1.000UA       1.000UA
   629   16  -10.00NA     -1.000UA       1.000UA
   632   16   3.000NA     -1.000UA       1.000UA
   637   18  -11.00NA     -1.000UA       1.000UA
   640   18   3.000NA     -1.000UA       1.000UA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20  -10.00UA                  160.0UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 4

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-600.0MV	-1.500 V	-100.0MV
58	2	-600.0MV	-1.500 V	-100.0MV
58	4	-600.0MV	-1.500 V	-100.0MV
58	6	-600.0MV	-1.500 V	-100.0MV
58	8	-600.0MV	-1.500 V	-100.0MV
58	11	-600.0MV	-1.500 V	-100.0MV
58	13	-600.0MV	-1.500 V	-100.0MV
58	15	-600.0MV	-1.500 V	-100.0MV
58	17	-600.0MV	-1.500 V	-100.0MV
58	19	-600.0MV	-1.500 V	-100.0MV
68	3	410.0MV	100.0MV	1.500 V
68	5	420.0MV	100.0MV	1.500 V
68	7	410.0MV	100.0MV	1.500 V
68	9	410.0MV	100.0MV	1.500 V
68	12	420.0MV	100.0MV	1.500 V
68	14	420.0MV	100.0MV	1.500 V
68	16	420.0MV	100.0MV	1.500 V
68	18	410.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.860 V      2.200 V
   287    7   2.860 V      2.200 V
   293    9   2.860 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   120.0MV                   400.0MV
   409    5   118.0MV                   400.0MV
   415    7   118.0MV                   400.0MV
   421    9   124.0MV                   400.0MV
   427   12   124.0MV                   400.0MV
   433   14   124.0MV                   400.0MV
   439   16   124.0MV                   400.0MV
   445   18   124.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.310 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.300 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   144.0MV                   400.0MV
   409    5   140.0MV                   400.0MV
   415    7   144.0MV                   400.0MV
   421    9   150.0MV                   400.0MV
   427   12   148.0MV                   400.0MV
   433   14   150.0MV                   400.0MV
   439   16   146.0MV                   400.0MV
   445   18   148.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.800 V      5.200 V
   317   18   5.820 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   164.0MV                   400.0MV
   409    5   158.0MV                   400.0MV
   415    7   158.0MV                   400.0MV
   421    9   168.0MV                   400.0MV
   427   12   166.0MV                   400.0MV
   433   14   170.0MV                   400.0MV
   439   16   164.0MV                   400.0MV
   445   18   166.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -13.00NA     -1.000UA       1.000UA
   581    3   4.000NA     -1.000UA       1.000UA
   586    5  -12.00NA     -1.000UA       1.000UA
   589    5   4.000NA     -1.000UA       1.000UA
   594    7  -14.00NA     -1.000UA       1.000UA
   597    7   4.000NA     -1.000UA       1.000UA
   602    9  -14.00NA     -1.000UA       1.000UA
   605    9   4.000NA     -1.000UA       1.000UA
   613   12  -12.00NA     -1.000UA       1.000UA
   616   12   4.000NA     -1.000UA       1.000UA
   621   14  -12.00NA     -1.000UA       1.000UA
   624   14   4.000NA     -1.000UA       1.000UA
   629   16  -12.00NA     -1.000UA       1.000UA
   632   16   3.000NA     -1.000UA       1.000UA
   637   18  -13.00NA     -1.000UA       1.000UA
   640   18   3.000NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 5

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-620.0MV	-1.500 V	-100.0MV
58	2	-610.0MV	-1.500 V	-100.0MV
58	4	-610.0MV	-1.500 V	-100.0MV
58	6	-610.0MV	-1.500 V	-100.0MV
58	8	-610.0MV	-1.500 V	-100.0MV
58	11	-610.0MV	-1.500 V	-100.0MV
58	13	-610.0MV	-1.500 V	-100.0MV
58	15	-610.0MV	-1.500 V	-100.0MV
58	17	-610.0MV	-1.500 V	-100.0MV
58	19	-610.0MV	-1.500 V	-100.0MV
68	3	420.0MV	100.0MV	1.500 V
68	5	420.0MV	100.0MV	1.500 V
68	7	430.0MV	100.0MV	1.500 V
68	9	420.0MV	100.0MV	1.500 V
68	12	420.0MV	100.0MV	1.500 V
68	14	420.0MV	100.0MV	1.500 V
68	16	420.0MV	100.0MV	1.500 V
68	18	410.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.860 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.860 V      2.200 V
   299   12   2.860 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.860 V      2.200 V
   317   18   2.870 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   114.0MV                   400.0MV
   409    5   112.0MV                   400.0MV
   415    7   114.0MV                   400.0MV
   421    9   120.0MV                   400.0MV
   427   12   120.0MV                   400.0MV
   433   14   114.0MV                   400.0MV
   439   16   110.0MV                   400.0MV
   445   18   118.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.310 V      3.700 V
   287    7   4.310 V      3.700 V
   293    9   4.310 V      3.700 V
   299   12   4.310 V      3.700 V
   305   14   4.300 V      3.700 V
   311   16   4.310 V      3.700 V
   317   18   4.320 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   136.0MV                   400.0MV
   409    5   134.0MV                   400.0MV
   415    7   136.0MV                   400.0MV
   421    9   144.0MV                   400.0MV
   427   12   142.0MV                   400.0MV
   433   14   140.0MV                   400.0MV
   439   16   134.0MV                   400.0MV
   445   18   140.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.820 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.810 V      5.200 V
   311   16   5.810 V      5.200 V
   317   18   5.830 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   48.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   400.0MV
   409    5   152.0MV                   400.0MV
   415    7   154.0MV                   400.0MV
   421    9   162.0MV                   400.0MV
   427   12   162.0MV                   400.0MV
   433   14   160.0MV                   400.0MV
   439   16   152.0MV                   400.0MV
   445   18   160.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -12.00NA     -1.000UA       1.000UA
   581    3   4.000NA     -1.000UA       1.000UA
   586    5  -11.00NA     -1.000UA       1.000UA
   589    5   4.000NA     -1.000UA       1.000UA
   594    7  -11.00NA     -1.000UA       1.000UA
   597    7   4.000NA     -1.000UA       1.000UA
   602    9  -14.00NA     -1.000UA       1.000UA
   605    9   3.000NA     -1.000UA       1.000UA
   613   12  -13.00NA     -1.000UA       1.000UA
   616   12   3.000NA     -1.000UA       1.000UA
   621   14  -12.00NA     -1.000UA       1.000UA
   624   14   3.000NA     -1.000UA       1.000UA
   629   16  -12.00NA     -1.000UA       1.000UA
   632   16   3.000NA     -1.000UA       1.000UA
   637   18  -20.00NA     -1.000UA       1.000UA
   640   18   3.000NA     -1.000UA       1.000UA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 6

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-600.0MV	-1.500 V	-100.0MV
58	2	-600.0MV	-1.500 V	-100.0MV
58	4	-600.0MV	-1.500 V	-100.0MV
58	6	-600.0MV	-1.500 V	-100.0MV
58	8	-600.0MV	-1.500 V	-100.0MV
58	11	-600.0MV	-1.500 V	-100.0MV
58	13	-600.0MV	-1.500 V	-100.0MV
58	15	-600.0MV	-1.500 V	-100.0MV
58	17	-590.0MV	-1.500 V	-100.0MV
58	19	-600.0MV	-1.500 V	-100.0MV
68	3	400.0MV	100.0MV	1.500 V
68	5	400.0MV	100.0MV	1.500 V
68	7	400.0MV	100.0MV	1.500 V
68	9	390.0MV	100.0MV	1.500 V
68	12	390.0MV	100.0MV	1.500 V
68	14	390.0MV	100.0MV	1.500 V
68	16	390.0MV	100.0MV	1.500 V
68	18	390.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.860 V      2.200 V
   299   12   2.860 V      2.200 V
   305   14   2.860 V      2.200 V
   311   16   2.860 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   128.0MV                   400.0MV
   409    5   122.0MV                   400.0MV
   415    7   120.0MV                   400.0MV
   421    9   126.0MV                   400.0MV
   427   12   122.0MV                   400.0MV
   433   14   122.0MV                   400.0MV
   439   16   124.0MV                   400.0MV
   445   18   128.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.300 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.300 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.300 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.300 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   154.0MV                   400.0MV
   409    5   148.0MV                   400.0MV
   415    7   146.0MV                   400.0MV
   421    9   152.0MV                   400.0MV
   427   12   146.0MV                   400.0MV
   433   14   148.0MV                   400.0MV
   439   16   150.0MV                   400.0MV
   445   18   156.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.980 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.810 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.800 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.810 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   174.0MV                   400.0MV
   409    5   168.0MV                   400.0MV
   415    7   164.0MV                   400.0MV
   421    9   174.0MV                   400.0MV
   427   12   168.0MV                   400.0MV
   433   14   170.0MV                   400.0MV
   439   16   168.0MV                   400.0MV
   445   18   176.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -12.00NA     -1.000UA       1.000UA
   581    3   4.000NA     -1.000UA       1.000UA
   586    5  -16.00NA     -1.000UA       1.000UA
   589    5   5.000NA     -1.000UA       1.000UA
   594    7  -18.00NA     -1.000UA       1.000UA
   597    7   5.000NA     -1.000UA       1.000UA
   602    9  -22.00NA     -1.000UA       1.000UA
   605    9   5.000NA     -1.000UA       1.000UA
   613   12  -23.00NA     -1.000UA       1.000UA
   616   12   5.000NA     -1.000UA       1.000UA
   621   14  -22.00NA     -1.000UA       1.000UA
   624   14   5.000NA     -1.000UA       1.000UA
   629   16  -20.00NA     -1.000UA       1.000UA
   632   16   5.000NA     -1.000UA       1.000UA
   637   18  -16.00NA     -1.000UA       1.000UA
   640   18   4.000NA     -1.000UA       1.000UA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20  -10.00UA                  160.0UA
   679   20  -10.00UA                  160.0UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 7

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-590.0MV	-1.500 V	-100.0MV
58	2	-590.0MV	-1.500 V	-100.0MV
58	4	-580.0MV	-1.500 V	-100.0MV
58	6	-580.0MV	-1.500 V	-100.0MV
58	8	-580.0MV	-1.500 V	-100.0MV
58	11	-580.0MV	-1.500 V	-100.0MV
58	13	-580.0MV	-1.500 V	-100.0MV
58	15	-580.0MV	-1.500 V	-100.0MV
58	17	-580.0MV	-1.500 V	-100.0MV
58	19	-580.0MV	-1.500 V	-100.0MV
68	3	390.0MV	100.0MV	1.500 V
68	5	400.0MV	100.0MV	1.500 V
68	7	390.0MV	100.0MV	1.500 V
68	9	390.0MV	100.0MV	1.500 V
68	12	390.0MV	100.0MV	1.500 V
68	14	390.0MV	100.0MV	1.500 V
68	16	390.0MV	100.0MV	1.500 V
68	18	390.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.970 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.850 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.850 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   126.0MV                   400.0MV
   409    5   124.0MV                   400.0MV
   415    7   122.0MV                   400.0MV
   421    9   130.0MV                   400.0MV
   427   12   130.0MV                   400.0MV
   433   14   130.0MV                   400.0MV
   439   16   128.0MV                   400.0MV
   445   18   132.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.300 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.290 V      3.700 V
   299   12   4.290 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   400.0MV
   409    5   150.0MV                   400.0MV
   415    7   150.0MV                   400.0MV
   421    9   156.0MV                   400.0MV
   427   12   158.0MV                   400.0MV
   433   14   158.0MV                   400.0MV
   439   16   156.0MV                   400.0MV
   445   18   160.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.980 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.810 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.800 V      5.200 V
   299   12   5.800 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.800 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   176.0MV                   400.0MV
   409    5   170.0MV                   400.0MV
   415    7   170.0MV                   400.0MV
   421    9   178.0MV                   400.0MV
   427   12   178.0MV                   400.0MV
   433   14   180.0MV                   400.0MV
   439   16   176.0MV                   400.0MV
   445   18   182.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   2.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -34.00NA     -1.000UA       1.000UA
   581    3   10.00NA     -1.000UA       1.000UA
   586    5  -36.00NA     -1.000UA       1.000UA
   589    5   10.00NA     -1.000UA       1.000UA
   594    7  -40.00NA     -1.000UA       1.000UA
   597    7   10.00NA     -1.000UA       1.000UA
   602    9  -47.00NA     -1.000UA       1.000UA
   605    9   10.00NA     -1.000UA       1.000UA
   613   12  -35.00NA     -1.000UA       1.000UA
   616   12   9.000NA     -1.000UA       1.000UA
   621   14  -36.00NA     -1.000UA       1.000UA
   624   14   9.000NA     -1.000UA       1.000UA
   629   16  -34.00NA     -1.000UA       1.000UA
   632   16   9.000NA     -1.000UA       1.000UA
   637   18  -34.00NA     -1.000UA       1.000UA
   640   18   8.000NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 8

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-570.0MV	-1.500 V	-100.0MV
58	2	-570.0MV	-1.500 V	-100.0MV
58	4	-570.0MV	-1.500 V	-100.0MV
58	6	-570.0MV	-1.500 V	-100.0MV
58	8	-570.0MV	-1.500 V	-100.0MV
58	11	-560.0MV	-1.500 V	-100.0MV
58	13	-560.0MV	-1.500 V	-100.0MV
58	15	-570.0MV	-1.500 V	-100.0MV
58	17	-560.0MV	-1.500 V	-100.0MV
58	19	-570.0MV	-1.500 V	-100.0MV
68	3	340.0MV	100.0MV	1.500 V
68	5	340.0MV	100.0MV	1.500 V
68	7	340.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	330.0MV	100.0MV	1.500 V
68	14	340.0MV	100.0MV	1.500 V
68	16	340.0MV	100.0MV	1.500 V
68	18	340.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.860 V      2.200 V
   287    7   2.860 V      2.200 V
   293    9   2.860 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.860 V      2.200 V
   311   16   2.860 V      2.200 V
   317   18   2.860 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   400.0MV
   409    5   118.0MV                   400.0MV
   415    7   114.0MV                   400.0MV
   421    9   124.0MV                   400.0MV
   427   12   120.0MV                   400.0MV
   433   14   122.0MV                   400.0MV
   439   16   124.0MV                   400.0MV
   445   18   124.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.310 V      3.700 V
   293    9   4.310 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   44.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   150.0MV                   400.0MV
   409    5   144.0MV                   400.0MV
   415    7   140.0MV                   400.0MV
   421    9   154.0MV                   400.0MV
   427   12   150.0MV                   400.0MV
   433   14   150.0MV                   400.0MV
   439   16   152.0MV                   400.0MV
   445   18   154.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.810 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.800 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.800 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   58.00MV                   100.0MV
   344    5   58.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   56.00MV                   100.0MV
   362   12   56.00MV                   100.0MV
   368   14   56.00MV                   100.0MV
   374   16   58.00MV                   100.0MV
   380   18   58.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   176.0MV                   400.0MV
   409    5   170.0MV                   400.0MV
   415    7   166.0MV                   400.0MV
   421    9   176.0MV                   400.0MV
   427   12   174.0MV                   400.0MV
   433   14   176.0MV                   400.0MV
   439   16   176.0MV                   400.0MV
   445   18   180.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   3.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -66.00NA     -1.000UA       1.000UA
   581    3   14.00NA     -1.000UA       1.000UA
   586    5  -82.00NA     -1.000UA       1.000UA
   589    5   15.00NA     -1.000UA       1.000UA
   594    7  -99.00NA     -1.000UA       1.000UA
   597    7   19.00NA     -1.000UA       1.000UA
   602    9  -139.0NA     -1.000UA       1.000UA
   605    9   16.00NA     -1.000UA       1.000UA
   613   12  -96.00NA     -1.000UA       1.000UA
   616   12   15.00NA     -1.000UA       1.000UA
   621   14  -88.00NA     -1.000UA       1.000UA
   624   14   14.00NA     -1.000UA       1.000UA
   629   16  -77.00NA     -1.000UA       1.000UA
   632   16   13.00NA     -1.000UA       1.000UA
   637   18  -72.00NA     -1.000UA       1.000UA
   640   18   12.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20       0 A                   160.0UA
   679   20       0 A                   160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 9

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-600.0MV	-1.500 V	-100.0MV
58	2	-590.0MV	-1.500 V	-100.0MV
58	4	-590.0MV	-1.500 V	-100.0MV
58	6	-590.0MV	-1.500 V	-100.0MV
58	8	-590.0MV	-1.500 V	-100.0MV
58	11	-590.0MV	-1.500 V	-100.0MV
58	13	-590.0MV	-1.500 V	-100.0MV
58	15	-590.0MV	-1.500 V	-100.0MV
58	17	-590.0MV	-1.500 V	-100.0MV
58	19	-590.0MV	-1.500 V	-100.0MV
68	3	410.0MV	100.0MV	1.500 V
68	5	410.0MV	100.0MV	1.500 V
68	7	410.0MV	100.0MV	1.500 V
68	9	410.0MV	100.0MV	1.500 V
68	12	410.0MV	100.0MV	1.500 V
68	14	410.0MV	100.0MV	1.500 V
68	16	410.0MV	100.0MV	1.500 V
68	18	410.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.860 V      2.200 V
   293    9   2.850 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   126.0MV                   400.0MV
   409    5   124.0MV                   400.0MV
   415    7   122.0MV                   400.0MV
   421    9   128.0MV                   400.0MV
   427   12   130.0MV                   400.0MV
   433   14   130.0MV                   400.0MV
   439   16   128.0MV                   400.0MV
   445   18   128.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.300 V      3.700 V
   299   12   4.290 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   38.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   150.0MV                   400.0MV
   409    5   146.0MV                   400.0MV
   415    7   148.0MV                   400.0MV
   421    9   154.0MV                   400.0MV
   427   12   154.0MV                   400.0MV
   433   14   156.0MV                   400.0MV
   439   16   152.0MV                   400.0MV
   445   18   154.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.800 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.800 V      5.200 V
   317   18   5.810 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   48.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   170.0MV                   400.0MV
   409    5   164.0MV                   400.0MV
   415    7   164.0MV                   400.0MV
   421    9   172.0MV                   400.0MV
   427   12   172.0MV                   400.0MV
   433   14   176.0MV                   400.0MV
   439   16   170.0MV                   400.0MV
   445   18   172.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -3.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   3.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -14.00NA     -1.000UA       1.000UA
   581    3   6.000NA     -1.000UA       1.000UA
   586    5  -14.00NA     -1.000UA       1.000UA
   589    5   5.000NA     -1.000UA       1.000UA
   594    7  -15.00NA     -1.000UA       1.000UA
   597    7   5.000NA     -1.000UA       1.000UA
   602    9  -16.00NA     -1.000UA       1.000UA
   605    9   4.000NA     -1.000UA       1.000UA
   613   12  -13.00NA     -1.000UA       1.000UA
   616   12   4.000NA     -1.000UA       1.000UA
   621   14  -14.00NA     -1.000UA       1.000UA
   624   14   4.000NA     -1.000UA       1.000UA
   629   16  -14.00NA     -1.000UA       1.000UA
   632   16   4.000NA     -1.000UA       1.000UA
   637   18  -14.00NA     -1.000UA       1.000UA
   640   18   4.000NA     -1.000UA       1.000UA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20  -10.00UA                  160.0UA
   679   20  -10.00UA                  160.0UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 10

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-580.0MV	-1.500 V	-100.0MV
58	2	-570.0MV	-1.500 V	-100.0MV
58	4	-570.0MV	-1.500 V	-100.0MV
58	6	-570.0MV	-1.500 V	-100.0MV
58	8	-570.0MV	-1.500 V	-100.0MV
58	11	-570.0MV	-1.500 V	-100.0MV
58	13	-570.0MV	-1.500 V	-100.0MV
58	15	-570.0MV	-1.500 V	-100.0MV
58	17	-570.0MV	-1.500 V	-100.0MV
58	19	-570.0MV	-1.500 V	-100.0MV
68	3	380.0MV	100.0MV	1.500 V
68	5	390.0MV	100.0MV	1.500 V
68	7	390.0MV	100.0MV	1.500 V
68	9	390.0MV	100.0MV	1.500 V
68	12	380.0MV	100.0MV	1.500 V
68	14	390.0MV	100.0MV	1.500 V
68	16	390.0MV	100.0MV	1.500 V
68	18	380.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.850 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.850 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   130.0MV                   400.0MV
   409    5   128.0MV                   400.0MV
   415    7   128.0MV                   400.0MV
   421    9   134.0MV                   400.0MV
   427   12   136.0MV                   400.0MV
   433   14   134.0MV                   400.0MV
   439   16   132.0MV                   400.0MV
   445   18   134.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.300 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.290 V      3.700 V
   299   12   4.290 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   158.0MV                   400.0MV
   409    5   152.0MV                   400.0MV
   415    7   154.0MV                   400.0MV
   421    9   162.0MV                   400.0MV
   427   12   160.0MV                   400.0MV
   433   14   162.0MV                   400.0MV
   439   16   158.0MV                   400.0MV
   445   18   162.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.810 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.800 V      5.200 V
   293    9   5.800 V      5.200 V
   299   12   5.790 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   180.0MV                   400.0MV
   409    5   174.0MV                   400.0MV
   415    7   174.0MV                   400.0MV
   421    9   182.0MV                   400.0MV
   427   12   182.0MV                   400.0MV
   433   14   182.0MV                   400.0MV
   439   16   178.0MV                   400.0MV
   445   18   180.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   2.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   3.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -35.00NA     -1.000UA       1.000UA
   581    3   11.00NA     -1.000UA       1.000UA
   586    5  -36.00NA     -1.000UA       1.000UA
   589    5   10.00NA     -1.000UA       1.000UA
   594    7  -39.00NA     -1.000UA       1.000UA
   597    7   10.00NA     -1.000UA       1.000UA
   602    9  -40.00NA     -1.000UA       1.000UA
   605    9   10.00NA     -1.000UA       1.000UA
   613   12  -35.00NA     -1.000UA       1.000UA
   616   12   10.00NA     -1.000UA       1.000UA
   621   14  -33.00NA     -1.000UA       1.000UA
   624   14   9.000NA     -1.000UA       1.000UA
   629   16  -35.00NA     -1.000UA       1.000UA
   632   16   9.000NA     -1.000UA       1.000UA
   637   18  -42.00NA     -1.000UA       1.000UA
   640   18   10.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20  -10.00UA                  160.0UA
   679   20  -10.00UA                  160.0UA


 EIR 1........10    FCT     DCT
     0000000000     PASS    PASS    EOT
SN
              F.P.    OCTAL   LITERAL
SN          11      21130000   1+
```

STAT1 05/29/11 07:07

TEST PROGRAM HC244 S/N 11

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-620.0MV	-1.500 V	-100.0MV
58	2	-620.0MV	-1.500 V	-100.0MV
58	4	-630.0MV	-1.500 V	-100.0MV
58	6	-620.0MV	-1.500 V	-100.0MV
58	8	-620.0MV	-1.500 V	-100.0MV
58	11	-620.0MV	-1.500 V	-100.0MV
58	13	-620.0MV	-1.500 V	-100.0MV
58	15	-620.0MV	-1.500 V	-100.0MV
58	17	-620.0MV	-1.500 V	-100.0MV
58	19	-620.0MV	-1.500 V	-100.0MV
68	3	430.0MV	100.0MV	1.500 V
68	5	430.0MV	100.0MV	1.500 V
68	7	430.0MV	100.0MV	1.500 V
68	9	430.0MV	100.0MV	1.500 V
68	12	430.0MV	100.0MV	1.500 V
68	14	430.0MV	100.0MV	1.500 V
68	16	430.0MV	100.0MV	1.500 V
68	18	430.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.860 V      2.200 V
   293    9   2.850 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   32.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   400.0MV
   409    5   120.0MV                   400.0MV
   415    7   118.0MV                   400.0MV
   421    9   124.0MV                   400.0MV
   427   12   120.0MV                   400.0MV
   433   14   120.0MV                   400.0MV
   439   16   120.0MV                   400.0MV
   445   18   122.0MV                   400.0MV

 ---------------------------------------------
```

```
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.310 V      3.700 V
   293    9   4.310 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.300 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   144.0MV                   400.0MV
   409    5   142.0MV                   400.0MV
   415    7   142.0MV                   400.0MV
   421    9   148.0MV                   400.0MV
   427   12   144.0MV                   400.0MV
   433   14   146.0MV                   400.0MV
   439   16   144.0MV                   400.0MV
   445   18   146.0MV                   400.0MV

 ---------------------------------------------
```

```
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.810 V      5.200 V
   311   16   5.810 V      5.200 V
   317   18   5.820 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   168.0MV                   400.0MV
   409    5   164.0MV                   400.0MV
   415    7   162.0MV                   400.0MV
   421    9   170.0MV                   400.0MV
   427   12   166.0MV                   400.0MV
   433   14   170.0MV                   400.0MV
   439   16   166.0MV                   400.0MV
   445   18   170.0MV                   400.0MV

 --------------------------------
```

```
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   3.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   3.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
            IOZ  TEST
            VCC= 6
            IOZ LIMIT +- 0.5UA @25C/-55C
            IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -5.000NA     -1.000UA       1.000UA
   581    3   4.000NA     -1.000UA       1.000UA
   586    5  -5.000NA     -1.000UA       1.000UA
   589    5   3.000NA     -1.000UA       1.000UA
   594    7  -6.000NA     -1.000UA       1.000UA
   597    7   2.000NA     -1.000UA       1.000UA
   602    9  -6.000NA     -1.000UA       1.000UA
   605    9   2.000NA     -1.000UA       1.000UA
   613   12  -5.000NA     -1.000UA       1.000UA
   616   12   2.000NA     -1.000UA       1.000UA
   621   14  -6.000NA     -1.000UA       1.000UA
   624   14   2.000NA     -1.000UA       1.000UA
   629   16  -6.000NA     -1.000UA       1.000UA
   632   16   2.000NA     -1.000UA       1.000UA
   637   18  -6.000NA     -1.000UA       1.000UA
   640   18   2.000NA     -1.000UA       1.000UA

 -------------------------------------
            ICC  TEST
            VCC= 6
            ICC LIMIT MAX. 4.0UA @25C/-55C
            ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 05/29/11 07:07
TEST PROGRAM HC244 S/N 12

DDS-101-12-A PN 54HC244 TEST SEQ 12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-630.0MV	-1.500 V	-100.0MV
58	2	-630.0MV	-1.500 V	-100.0MV
58	4	-620.0MV	-1.500 V	-100.0MV
58	6	-620.0MV	-1.500 V	-100.0MV
58	8	-620.0MV	-1.500 V	-100.0MV
58	11	-620.0MV	-1.500 V	-100.0MV
58	13	-630.0MV	-1.500 V	-100.0MV
58	15	-620.0MV	-1.500 V	-100.0MV
58	17	-620.0MV	-1.500 V	-100.0MV
58	19	-630.0MV	-1.500 V	-100.0MV
68	3	440.0MV	100.0MV	1.500 V
68	5	440.0MV	100.0MV	1.500 V
68	7	440.0MV	100.0MV	1.500 V
68	9	440.0MV	100.0MV	1.500 V
68	12	440.0MV	100.0MV	1.500 V
68	14	430.0MV	100.0MV	1.500 V
68	16	440.0MV	100.0MV	1.500 V
68	18	430.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.850 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   400.0MV
   409    5   150.0MV                   400.0MV
   415    7   152.0MV                   400.0MV
   421    9   158.0MV                   400.0MV
   427   12   156.0MV                   400.0MV
   433   14   158.0MV                   400.0MV
   439   16   156.0MV                   400.0MV
   445   18   158.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.460 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.310 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.300 V      3.700 V
   293    9   4.300 V      3.700 V
   299   12   4.300 V      3.700 V
   305   14   4.300 V      3.700 V
   311   16   4.300 V      3.700 V
   317   18   4.310 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   180.0MV                   400.0MV
   409    5   178.0MV                   400.0MV
   415    7   180.0MV                   400.0MV
   421    9   186.0MV                   400.0MV
   427   12   184.0MV                   400.0MV
   433   14   186.0MV                   400.0MV
   439   16   182.0MV                   400.0MV
   445   18   186.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.820 V      5.200 V
   281    5   5.810 V      5.200 V
   287    7   5.810 V      5.200 V
   293    9   5.810 V      5.200 V
   299   12   5.810 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.810 V      5.200 V
   317   18   5.820 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   74.00MV                   100.0MV
   344    5   74.00MV                   100.0MV
   350    7   72.00MV                   100.0MV
   356    9   70.00MV                   100.0MV
   362   12   70.00MV                   100.0MV
   368   14   72.00MV                   100.0MV
   374   16   72.00MV                   100.0MV
   380   18   74.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   200.0MV                   400.0MV
   409    5   198.0MV                   400.0MV
   415    7   202.0MV                   400.0MV
   421    9   206.0MV                   400.0MV
   427   12   206.0MV                   400.0MV
   433   14   212.0MV                   400.0MV
   439   16   210.0MV                   400.0MV
   445   18   214.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   2.000NA     -1.000UA       1.000UA
   484    2  -4.000NA     -1.000UA       1.000UA
   487    2   4.000NA     -1.000UA       1.000UA
   492    4  -4.000NA     -1.000UA       1.000UA
   495    4   3.000NA     -1.000UA       1.000UA
   500    6  -4.000NA     -1.000UA       1.000UA
   503    6   2.000NA     -1.000UA       1.000UA
   508    8  -4.000NA     -1.000UA       1.000UA
   511    8   2.000NA     -1.000UA       1.000UA
   516   11  -4.000NA     -1.000UA       1.000UA
   519   11   2.000NA     -1.000UA       1.000UA
   524   13  -4.000NA     -1.000UA       1.000UA
   527   13   2.000NA     -1.000UA       1.000UA
   532   15  -4.000NA     -1.000UA       1.000UA
   535   15   2.000NA     -1.000UA       1.000UA
   540   17  -4.000NA     -1.000UA       1.000UA
   543   17   1.000NA     -1.000UA       1.000UA
   548   19  -4.000NA     -1.000UA       1.000UA
   551   19   1.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -5.000NA     -1.000UA       1.000UA
   581    3   5.000NA     -1.000UA       1.000UA
   586    5  -5.000NA     -1.000UA       1.000UA
   589    5   3.000NA     -1.000UA       1.000UA
   594    7  -6.000NA     -1.000UA       1.000UA
   597    7   3.000NA     -1.000UA       1.000UA
   602    9  -6.000NA     -1.000UA       1.000UA
   605    9   2.000NA     -1.000UA       1.000UA
   613   12  -5.000NA     -1.000UA       1.000UA
   616   12   2.000NA     -1.000UA       1.000UA
   621   14  -6.000NA     -1.000UA       1.000UA
   624   14   2.000NA     -1.000UA       1.000UA
   629   16  -6.000NA     -1.000UA       1.000UA
   632   16   2.000NA     -1.000UA       1.000UA
   637   18  -6.000NA     -1.000UA       1.000UA
   640   18   2.000NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20  -10.00UA                   160.0UA
   679   20  -10.00UA                   160.0UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

Post Burn-In Test Results at -55°C

```
STAT1               08/27/11  06:41
TEST PROGRAM   HC244         S/N       1

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C


 ----------------------------------------
            CONTINUITY TEST
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
    58    1  -740.0MV     -1.500 V      -100.0MV
    58    2  -740.0MV     -1.500 V      -100.0MV
    58    4  -740.0MV     -1.500 V      -100.0MV
    58    6  -740.0MV     -1.500 V      -100.0MV
    58    8  -740.0MV     -1.500 V      -100.0MV
    58   11  -740.0MV     -1.500 V      -100.0MV
    58   13  -750.0MV     -1.500 V      -100.0MV
    58   15  -740.0MV     -1.500 V      -100.0MV
    58   17  -740.0MV     -1.500 V      -100.0MV
    58   19  -740.0MV     -1.500 V      -100.0MV
    68    3   470.0MV      100.0MV       1.500 V
    68    5   500.0MV      100.0MV       1.500 V
    68    7   530.0MV      100.0MV       1.500 V
    68    9   530.0MV      100.0MV       1.500 V
    68   12   530.0MV      100.0MV       1.500 V
    68   14   530.0MV      100.0MV       1.500 V
    68   16   530.0MV      100.0MV       1.500 V
    68   18   530.0MV      100.0MV       1.500 V

 ------------------------------------------------
            FUNCTIONAL  TEST
            VCC=        2
            VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        2
            VOH LIMIT   1.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   1.970 V      1.900 V
   216    5   1.980 V      1.900 V
   222    7   1.970 V      1.900 V
   228    9   1.970 V      1.900 V
   234   12   1.980 V      1.900 V
   240   14   1.970 V      1.900 V
   246   16   1.980 V      1.900 V
   252   18   1.980 V      1.900 V

 ----------------------------------------
            VOL1  TEST
            VCC=        2
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ------------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   96.00MV                   260.0MV
   409    5   94.00MV                   260.0MV
   415    7   100.0MV                   260.0MV
   421    9   100.0MV                   260.0MV
   427   12   106.0MV                   260.0MV
   433   14   92.00MV                   260.0MV
   439   16   90.00MV                   260.0MV
   445   18   96.00MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.460 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.350 V      3.980 V
   317   18   4.350 V      3.980 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   114.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   130.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   108.0MV                   260.0MV
   445   18   112.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.860 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.860 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   136.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   152.0MV                   260.0MV
   433   14   130.0MV                   260.0MV
   439   16   126.0MV                   260.0MV
   445   18   134.0MV                   260.0MV

 ---------------------------------
            IIN  TEST
```

```
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
           ICC  TEST
           VCC= 6
           ICC LIMIT MAX. 4.0UA @25C/-55C
           ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 2

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-730.0MV	-1.500 V	-100.0MV
58	2	-730.0MV	-1.500 V	-100.0MV
58	4	-730.0MV	-1.500 V	-100.0MV
58	6	-730.0MV	-1.500 V	-100.0MV
58	8	-730.0MV	-1.500 V	-100.0MV
58	11	-730.0MV	-1.500 V	-100.0MV
58	13	-740.0MV	-1.500 V	-100.0MV
58	15	-740.0MV	-1.500 V	-100.0MV
58	17	-740.0MV	-1.500 V	-100.0MV
58	19	-740.0MV	-1.500 V	-100.0MV
68	3	480.0MV	100.0MV	1.500 V
68	5	530.0MV	100.0MV	1.500 V
68	7	530.0MV	100.0MV	1.500 V
68	9	530.0MV	100.0MV	1.500 V
68	12	530.0MV	100.0MV	1.500 V
68	14	530.0MV	100.0MV	1.500 V
68	16	530.0MV	100.0MV	1.500 V
68	18	530.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.900 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   32.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   98.00MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   104.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   112.0MV                   260.0MV
   433   14   96.00MV                   260.0MV
   439   16   94.00MV                   260.0MV
   445   18   100.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.460 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.350 V      3.980 V
   311   16   4.350 V      3.980 V
   317   18   4.360 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   114.0MV                   260.0MV
   409    5   112.0MV                   260.0MV
   415    7   122.0MV                   260.0MV
   421    9   122.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   112.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   114.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.860 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.860 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   136.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   144.0MV                   260.0MV
   421    9   140.0MV                   260.0MV
   427   12   152.0MV                   260.0MV
   433   14   134.0MV                   260.0MV
   439   16   128.0MV                   260.0MV
   445   18   134.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   5.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   6.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -10.00NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 3

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-710.0MV	-1.500 V	-100.0MV
58	2	-710.0MV	-1.500 V	-100.0MV
58	4	-710.0MV	-1.500 V	-100.0MV
58	6	-710.0MV	-1.500 V	-100.0MV
58	8	-710.0MV	-1.500 V	-100.0MV
58	11	-710.0MV	-1.500 V	-100.0MV
58	13	-710.0MV	-1.500 V	-100.0MV
58	15	-710.0MV	-1.500 V	-100.0MV
58	17	-710.0MV	-1.500 V	-100.0MV
58	19	-710.0MV	-1.500 V	-100.0MV
68	3	450.0MV	100.0MV	1.500 V
68	5	510.0MV	100.0MV	1.500 V
68	7	500.0MV	100.0MV	1.500 V
68	9	500.0MV	100.0MV	1.500 V
68	12	500.0MV	100.0MV	1.500 V
68	14	500.0MV	100.0MV	1.500 V
68	16	510.0MV	100.0MV	1.500 V
68	18	500.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.890 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   104.0MV                   260.0MV
   409    5   100.0MV                   260.0MV
   415    7   108.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   112.0MV                   260.0MV
   433   14   98.00MV                   260.0MV
   439   16   96.00MV                   260.0MV
   445   18   104.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.460 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   126.0MV                   260.0MV
   409    5   120.0MV                   260.0MV
   415    7   134.0MV                   260.0MV
   421    9   126.0MV                   260.0MV
   427   12   138.0MV                   260.0MV
   433   14   120.0MV                   260.0MV
   439   16   116.0MV                   260.0MV
   445   18   124.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.850 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   58.00MV                   100.0MV
   344    5   58.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   56.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   148.0MV                   260.0MV
   409    5   142.0MV                   260.0MV
   415    7   156.0MV                   260.0MV
   421    9   146.0MV                   260.0MV
   427   12   160.0MV                   260.0MV
   433   14   140.0MV                   260.0MV
   439   16   138.0MV                   260.0MV
   445   18   146.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   4.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   17.00NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   24.00NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   11.00NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   25.00NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   4.000NA     -100.0NA       100.0NA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -8.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 4

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-730.0MV	-1.500 V	-100.0MV
58	2	-730.0MV	-1.500 V	-100.0MV
58	4	-730.0MV	-1.500 V	-100.0MV
58	6	-730.0MV	-1.500 V	-100.0MV
58	8	-730.0MV	-1.500 V	-100.0MV
58	11	-730.0MV	-1.500 V	-100.0MV
58	13	-730.0MV	-1.500 V	-100.0MV
58	15	-730.0MV	-1.500 V	-100.0MV
58	17	-730.0MV	-1.500 V	-100.0MV
58	19	-730.0MV	-1.500 V	-100.0MV
68	3	520.0MV	100.0MV	1.500 V
68	5	520.0MV	100.0MV	1.500 V
68	7	520.0MV	100.0MV	1.500 V
68	9	520.0MV	100.0MV	1.500 V
68	12	520.0MV	100.0MV	1.500 V
68	14	520.0MV	100.0MV	1.500 V
68	16	530.0MV	100.0MV	1.500 V
68	18	520.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	36.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.890 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   104.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   110.0MV                   260.0MV
   421    9   104.0MV                   260.0MV
   427   12   108.0MV                   260.0MV
   433   14   100.0MV                   260.0MV
   439   16   98.00MV                   260.0MV
   445   18   102.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.460 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.350 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   124.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   132.0MV                   260.0MV
   421    9   124.0MV                   260.0MV
   427   12   132.0MV                   260.0MV
   433   14   118.0MV                   260.0MV
   439   16   114.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.860 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   146.0MV                   260.0MV
   409    5   134.0MV                   260.0MV
   415    7   152.0MV                   260.0MV
   421    9   144.0MV                   260.0MV
   427   12   156.0MV                   260.0MV
   433   14   138.0MV                   260.0MV
   439   16   134.0MV                   260.0MV
   445   18   140.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   6.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   11.00NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   4.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   10.00NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   60.00NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   65.00NA     -100.0NA       100.0NA
   548   19  -15.00NA     -100.0NA       100.0NA
   551   19   17.00NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -5.000NA     -100.0NA       100.0NA
   581    3   11.00NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -7.000NA     -100.0NA       100.0NA
   597    7   5.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   28.00NA     -100.0NA       100.0NA
   629   16  -4.000NA     -100.0NA       100.0NA
   632   16   54.00NA     -100.0NA       100.0NA
   637   18  -4.000NA     -100.0NA       100.0NA
   640   18   80.00NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   12.00NA                   4.000UA
   679   20   23.00NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 6

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-720.0MV	-1.500 V	-100.0MV
58	2	-730.0MV	-1.500 V	-100.0MV
58	4	-720.0MV	-1.500 V	-100.0MV
58	6	-720.0MV	-1.500 V	-100.0MV
58	8	-730.0MV	-1.500 V	-100.0MV
58	11	-730.0MV	-1.500 V	-100.0MV
58	13	-730.0MV	-1.500 V	-100.0MV
58	15	-730.0MV	-1.500 V	-100.0MV
58	17	-730.0MV	-1.500 V	-100.0MV
58	19	-730.0MV	-1.500 V	-100.0MV
68	3	500.0MV	100.0MV	1.500 V
68	5	520.0MV	100.0MV	1.500 V
68	7	520.0MV	100.0MV	1.500 V
68	9	520.0MV	100.0MV	1.500 V
68	12	520.0MV	100.0MV	1.500 V
68	14	530.0MV	100.0MV	1.500 V
68	16	530.0MV	100.0MV	1.500 V
68	18	520.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	36.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   98.00MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   100.0MV                   260.0MV
   421    9   102.0MV                   260.0MV
   427   12   106.0MV                   260.0MV
   433   14   96.00MV                   260.0MV
   439   16   94.00MV                   260.0MV
   445   18   100.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.460 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.350 V      3.980 V
   311   16   4.350 V      3.980 V
   317   18   4.350 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   116.0MV                   260.0MV
   409    5   114.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   124.0MV                   260.0MV
   433   14   114.0MV                   260.0MV
   439   16   112.0MV                   260.0MV
   445   18   116.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.860 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.860 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   260.0MV
   409    5   136.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   140.0MV                   260.0MV
   427   12   148.0MV                   260.0MV
   433   14   134.0MV                   260.0MV
   439   16   132.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -8.000NA     -100.0NA       100.0NA
   479    1   13.00NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   12.00NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -5.000NA     -100.0NA       100.0NA
   581    3   5.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -4.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 7

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-730.0MV	-1.500 V	-100.0MV
58	2	-730.0MV	-1.500 V	-100.0MV
58	4	-730.0MV	-1.500 V	-100.0MV
58	6	-730.0MV	-1.500 V	-100.0MV
58	8	-730.0MV	-1.500 V	-100.0MV
58	11	-730.0MV	-1.500 V	-100.0MV
58	13	-740.0MV	-1.500 V	-100.0MV
58	15	-740.0MV	-1.500 V	-100.0MV
58	17	-730.0MV	-1.500 V	-100.0MV
58	19	-740.0MV	-1.500 V	-100.0MV
68	3	490.0MV	100.0MV	1.500 V
68	5	530.0MV	100.0MV	1.500 V
68	7	530.0MV	100.0MV	1.500 V
68	9	530.0MV	100.0MV	1.500 V
68	12	530.0MV	100.0MV	1.500 V
68	14	530.0MV	100.0MV	1.500 V
68	16	530.0MV	100.0MV	1.500 V
68	18	530.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.890 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   32.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   96.00MV                   260.0MV
   409    5   94.00MV                   260.0MV
   415    7   96.00MV                   260.0MV
   421    9   96.00MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   92.00MV                   260.0MV
   439   16   92.00MV                   260.0MV
   445   18   98.00MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.460 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.350 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.350 V      3.980 V
   311   16   4.350 V      3.980 V
   317   18   4.360 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   118.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   120.0MV                   260.0MV
   427   12   126.0MV                   260.0MV
   433   14   114.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   118.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.860 V      5.480 V
   293    9   5.870 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.860 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   62.00MV                   100.0MV
   344    5   62.00MV                   100.0MV
   350    7   62.00MV                   100.0MV
   356    9   60.00MV                   100.0MV
   362   12   60.00MV                   100.0MV
   368   14   60.00MV                   100.0MV
   374   16   60.00MV                   100.0MV
   380   18   62.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   142.0MV                   260.0MV
   409    5   140.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   142.0MV                   260.0MV
   427   12   154.0MV                   260.0MV
   433   14   136.0MV                   260.0MV
   439   16   136.0MV                   260.0MV
   445   18   142.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   4.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   4.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   2.000NA                   4.000UA
   679   20  -8.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 10

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-700.0MV	-1.500 V	-100.0MV
58	2	-700.0MV	-1.500 V	-100.0MV
58	4	-710.0MV	-1.500 V	-100.0MV
58	6	-710.0MV	-1.500 V	-100.0MV
58	8	-710.0MV	-1.500 V	-100.0MV
58	11	-710.0MV	-1.500 V	-100.0MV
58	13	-710.0MV	-1.500 V	-100.0MV
58	15	-710.0MV	-1.500 V	-100.0MV
58	17	-710.0MV	-1.500 V	-100.0MV
58	19	-710.0MV	-1.500 V	-100.0MV
68	3	440.0MV	100.0MV	1.500 V
68	5	500.0MV	100.0MV	1.500 V
68	7	500.0MV	100.0MV	1.500 V
68	9	500.0MV	100.0MV	1.500 V
68	12	510.0MV	100.0MV	1.500 V
68	14	510.0MV	100.0MV	1.500 V
68	16	510.0MV	100.0MV	1.500 V
68	18	500.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   106.0MV                   260.0MV
   409    5   102.0MV                   260.0MV
   415    7   106.0MV                   260.0MV
   421    9   108.0MV                   260.0MV
   427   12   116.0MV                   260.0MV
   433   14   102.0MV                   260.0MV
   439   16   100.0MV                   260.0MV
   445   18   104.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.330 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.350 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   48.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   48.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   260.0MV
   409    5   128.0MV                   260.0MV
   415    7   136.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   150.0MV                   260.0MV
   433   14   130.0MV                   260.0MV
   439   16   128.0MV                   260.0MV
   445   18   132.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.980 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.860 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   76.00MV                   100.0MV
   344    5   76.00MV                   100.0MV
   350    7   74.00MV                   100.0MV
   356    9   72.00MV                   100.0MV
   362   12   74.00MV                   100.0MV
   368   14   74.00MV                   100.0MV
   374   16   74.00MV                   100.0MV
   380   18   74.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   174.0MV                   260.0MV
   409    5   160.0MV                   260.0MV
   415    7   166.0MV                   260.0MV
   421    9   170.0MV                   260.0MV
   427   12   182.0MV                   260.0MV
   433   14   162.0MV                   260.0MV
   439   16   156.0MV                   260.0MV
   445   18   162.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   4.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   4.000NA     -100.0NA       100.0NA
   492    4  -6.000NA     -100.0NA       100.0NA
   495    4   11.00NA     -100.0NA       100.0NA
   500    6  -10.00NA     -100.0NA       100.0NA
   503    6   54.00NA     -100.0NA       100.0NA
   508    8  -6.000NA     -100.0NA       100.0NA
   511    8   41.00NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   3.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   6.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   19.00NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   84.00NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   39.00NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
           ICC  TEST
           VCC= 6
           ICC LIMIT MAX. 4.0UA @25C/-55C
           ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   11.00NA                   4.000UA
   679   20  -4.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 11

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-710.0MV	-1.500 V	-100.0MV
58	2	-710.0MV	-1.500 V	-100.0MV
58	4	-710.0MV	-1.500 V	-100.0MV
58	6	-710.0MV	-1.500 V	-100.0MV
58	8	-710.0MV	-1.500 V	-100.0MV
58	11	-710.0MV	-1.500 V	-100.0MV
58	13	-720.0MV	-1.500 V	-100.0MV
58	15	-710.0MV	-1.500 V	-100.0MV
58	17	-720.0MV	-1.500 V	-100.0MV
58	19	-720.0MV	-1.500 V	-100.0MV
68	3	500.0MV	100.0MV	1.500 V
68	5	520.0MV	100.0MV	1.500 V
68	7	520.0MV	100.0MV	1.500 V
68	9	520.0MV	100.0MV	1.500 V
68	12	520.0MV	100.0MV	1.500 V
68	14	520.0MV	100.0MV	1.500 V
68	16	520.0MV	100.0MV	1.500 V
68	18	520.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	36.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   102.0MV                   260.0MV
   409    5   102.0MV                   260.0MV
   415    7   106.0MV                   260.0MV
   421    9   110.0MV                   260.0MV
   427   12   114.0MV                   260.0MV
   433   14   102.0MV                   260.0MV
   439   16   100.0MV                   260.0MV
   445   18   106.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.360 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   46.00MV                   100.0MV
   344    5   46.00MV                   100.0MV
   350    7   44.00MV                   100.0MV
   356    9   44.00MV                   100.0MV
   362   12   44.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   44.00MV                   100.0MV
   380   18   44.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   130.0MV                   260.0MV
   409    5   128.0MV                   260.0MV
   415    7   132.0MV                   260.0MV
   421    9   136.0MV                   260.0MV
   427   12   144.0MV                   260.0MV
   433   14   126.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   130.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.830 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.850 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   70.00MV                   100.0MV
   344    5   70.00MV                   100.0MV
   350    7   68.00MV                   100.0MV
   356    9   68.00MV                   100.0MV
   362   12   66.00MV                   100.0MV
   368   14   66.00MV                   100.0MV
   374   16   66.00MV                   100.0MV
   380   18   68.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   260.0MV
   409    5   150.0MV                   260.0MV
   415    7   156.0MV                   260.0MV
   421    9   160.0MV                   260.0MV
   427   12   170.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   146.0MV                   260.0MV
   445   18   152.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   54.00NA     -100.0NA       100.0NA
   484    2  -6.000NA     -100.0NA       100.0NA
   487    2   76.00NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -6.000NA     -100.0NA       100.0NA
   581    3   32.00NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   4.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   5.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -3.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 12

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-720.0MV	-1.500 V	-100.0MV
58	2	-720.0MV	-1.500 V	-100.0MV
58	4	-720.0MV	-1.500 V	-100.0MV
58	6	-720.0MV	-1.500 V	-100.0MV
58	8	-720.0MV	-1.500 V	-100.0MV
58	11	-720.0MV	-1.500 V	-100.0MV
58	13	-720.0MV	-1.500 V	-100.0MV
58	15	-720.0MV	-1.500 V	-100.0MV
58	17	-720.0MV	-1.500 V	-100.0MV
58	19	-720.0MV	-1.500 V	-100.0MV
68	3	500.0MV	100.0MV	1.500 V
68	5	520.0MV	100.0MV	1.500 V
68	7	520.0MV	100.0MV	1.500 V
68	9	520.0MV	100.0MV	1.500 V
68	12	520.0MV	100.0MV	1.500 V
68	14	520.0MV	100.0MV	1.500 V
68	16	520.0MV	100.0MV	1.500 V
68	18	520.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.890 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   32.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   100.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   98.00MV                   260.0MV
   421    9   102.0MV                   260.0MV
   427   12   104.0MV                   260.0MV
   433   14   96.00MV                   260.0MV
   439   16   94.00MV                   260.0MV
   445   18   100.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.350 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.350 V      3.980 V
   311   16   4.350 V      3.980 V
   317   18   4.360 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   124.0MV                   260.0MV
   427   12   130.0MV                   260.0MV
   433   14   114.0MV                   260.0MV
   439   16   114.0MV                   260.0MV
   445   18   118.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.860 V      5.480 V
   293    9   5.860 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.860 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   58.00MV                   100.0MV
   344    5   58.00MV                   100.0MV
   350    7   58.00MV                   100.0MV
   356    9   58.00MV                   100.0MV
   362   12   56.00MV                   100.0MV
   368   14   58.00MV                   100.0MV
   374   16   58.00MV                   100.0MV
   380   18   58.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   144.0MV                   260.0MV
   409    5   138.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   146.0MV                   260.0MV
   427   12   158.0MV                   260.0MV
   433   14   136.0MV                   260.0MV
   439   16   136.0MV                   260.0MV
   445   18   142.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   6.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   4.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   10.00NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -9.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 5

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-720.0MV	-1.500 V	-100.0MV
58	2	-720.0MV	-1.500 V	-100.0MV
58	4	-720.0MV	-1.500 V	-100.0MV
58	6	-720.0MV	-1.500 V	-100.0MV
58	8	-720.0MV	-1.500 V	-100.0MV
58	11	-720.0MV	-1.500 V	-100.0MV
58	13	-720.0MV	-1.500 V	-100.0MV
58	15	-730.0MV	-1.500 V	-100.0MV
58	17	-720.0MV	-1.500 V	-100.0MV
58	19	-720.0MV	-1.500 V	-100.0MV
68	3	510.0MV	100.0MV	1.500 V
68	5	530.0MV	100.0MV	1.500 V
68	7	520.0MV	100.0MV	1.500 V
68	9	520.0MV	100.0MV	1.500 V
68	12	520.0MV	100.0MV	1.500 V
68	14	520.0MV	100.0MV	1.500 V
68	16	530.0MV	100.0MV	1.500 V
68	18	520.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   104.0MV                   260.0MV
   409    5   102.0MV                   260.0MV
   415    7   102.0MV                   260.0MV
   421    9   106.0MV                   260.0MV
   427   12   110.0MV                   260.0MV
   433   14   100.0MV                   260.0MV
   439   16   98.00MV                   260.0MV
   445   18   102.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.330 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.360 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   122.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   120.0MV                   260.0MV
   421    9   126.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   116.0MV                   260.0MV
   439   16   114.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.980 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.850 V      5.480 V
   293    9   5.860 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.850 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   260.0MV
   409    5   132.0MV                   260.0MV
   415    7   136.0MV                   260.0MV
   421    9   140.0MV                   260.0MV
   427   12   152.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   130.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   50.00NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   51.00NA     -100.0NA       100.0NA
   492    4  -6.000NA     -100.0NA       100.0NA
   495    4   4.000NA     -100.0NA       100.0NA
   500    6  -6.000NA     -100.0NA       100.0NA
   503    6   43.00NA     -100.0NA       100.0NA
   508    8  -6.000NA     -100.0NA       100.0NA
   511    8   29.00NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   10.00NA     -100.0NA       100.0NA
   524   13  -6.000NA     -100.0NA       100.0NA
   527   13   12.00NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   4.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -7.000NA     -100.0NA       100.0NA
   551   19   3.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   8.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   8.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   72.00NA     -100.0NA       100.0NA
   602    9  -5.000NA     -100.0NA       100.0NA
   605    9   26.00NA     -100.0NA       100.0NA
   613   12  -4.000NA     -100.0NA       100.0NA
   616   12   8.000NA     -100.0NA       100.0NA
   621   14  -5.000NA     -100.0NA       100.0NA
   624   14   13.00NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   3.000NA                   4.000UA
   679   20  -3.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 8

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-710.0MV	-1.500 V	-100.0MV
58	2	-710.0MV	-1.500 V	-100.0MV
58	4	-710.0MV	-1.500 V	-100.0MV
58	6	-710.0MV	-1.500 V	-100.0MV
58	8	-710.0MV	-1.500 V	-100.0MV
58	11	-710.0MV	-1.500 V	-100.0MV
58	13	-710.0MV	-1.500 V	-100.0MV
58	15	-710.0MV	-1.500 V	-100.0MV
58	17	-710.0MV	-1.500 V	-100.0MV
58	19	-710.0MV	-1.500 V	-100.0MV
68	3	490.0MV	100.0MV	1.500 V
68	5	510.0MV	100.0MV	1.500 V
68	7	500.0MV	100.0MV	1.500 V
68	9	510.0MV	100.0MV	1.500 V
68	12	510.0MV	100.0MV	1.500 V
68	14	510.0MV	100.0MV	1.500 V
68	16	510.0MV	100.0MV	1.500 V
68	18	500.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.890 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.890 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.890 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   128.0MV                   260.0MV
   409    5   126.0MV                   260.0MV
   415    7   128.0MV                   260.0MV
   421    9   134.0MV                   260.0MV
   427   12   132.0MV                   260.0MV
   433   14   122.0MV                   260.0MV
   439   16   118.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.460 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.350 V      3.980 V
   281    5   4.350 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.350 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.350 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   44.00MV                   100.0MV
   344    5   44.00MV                   100.0MV
   350    7   44.00MV                   100.0MV
   356    9   44.00MV                   100.0MV
   362   12   44.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   44.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   124.0MV                   260.0MV
   409    5   116.0MV                   260.0MV
   415    7   122.0MV                   260.0MV
   421    9   128.0MV                   260.0MV
   427   12   134.0MV                   260.0MV
   433   14   120.0MV                   260.0MV
   439   16   116.0MV                   260.0MV
   445   18   120.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.860 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.860 V      5.480 V
   293    9   5.860 V      5.480 V
   299   12   5.850 V      5.480 V
   305   14   5.860 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   56.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   260.0MV
   409    5   132.0MV                   260.0MV
   415    7   136.0MV                   260.0MV
   421    9   142.0MV                   260.0MV
   427   12   150.0MV                   260.0MV
   433   14   136.0MV                   260.0MV
   439   16   132.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -6.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   21.00NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   5.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -6.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   4.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   3.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   4.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   5.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   33.00NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   6.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   2.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 9

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-720.0MV	-1.500 V	-100.0MV
58	2	-720.0MV	-1.500 V	-100.0MV
58	4	-730.0MV	-1.500 V	-100.0MV
58	6	-730.0MV	-1.500 V	-100.0MV
58	8	-730.0MV	-1.500 V	-100.0MV
58	11	-730.0MV	-1.500 V	-100.0MV
58	13	-730.0MV	-1.500 V	-100.0MV
58	15	-730.0MV	-1.500 V	-100.0MV
58	17	-730.0MV	-1.500 V	-100.0MV
58	19	-730.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	520.0MV	100.0MV	1.500 V
68	7	530.0MV	100.0MV	1.500 V
68	9	520.0MV	100.0MV	1.500 V
68	12	520.0MV	100.0MV	1.500 V
68	14	530.0MV	100.0MV	1.500 V
68	16	530.0MV	100.0MV	1.500 V
68	18	520.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.890 V      2.480 V
   287    7   2.880 V      2.480 V
   293    9   2.890 V      2.480 V
   299   12   2.880 V      2.480 V
   305   14   2.890 V      2.480 V
   311   16   2.890 V      2.480 V
   317   18   2.900 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   102.0MV                   260.0MV
   409    5   98.00MV                   260.0MV
   415    7   104.0MV                   260.0MV
   421    9   106.0MV                   260.0MV
   427   12   108.0MV                   260.0MV
   433   14   98.00MV                   260.0MV
   439   16   96.00MV                   260.0MV
   445   18   102.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.340 V      3.980 V
   287    7   4.340 V      3.980 V
   293    9   4.340 V      3.980 V
   299   12   4.340 V      3.980 V
   305   14   4.340 V      3.980 V
   311   16   4.340 V      3.980 V
   317   18   4.350 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   46.00MV                   100.0MV
   344    5   44.00MV                   100.0MV
   350    7   44.00MV                   100.0MV
   356    9   44.00MV                   100.0MV
   362   12   44.00MV                   100.0MV
   368   14   44.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   44.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   128.0MV                   260.0MV
   409    5   122.0MV                   260.0MV
   415    7   132.0MV                   260.0MV
   421    9   130.0MV                   260.0MV
   427   12   136.0MV                   260.0MV
   433   14   124.0MV                   260.0MV
   439   16   120.0MV                   260.0MV
   445   18   124.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.860 V      5.480 V
   287    7   5.840 V      5.480 V
   293    9   5.850 V      5.480 V
   299   12   5.840 V      5.480 V
   305   14   5.850 V      5.480 V
   311   16   5.860 V      5.480 V
   317   18   5.870 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   70.00MV                   100.0MV
   344    5   70.00MV                   100.0MV
   350    7   70.00MV                   100.0MV
   356    9   68.00MV                   100.0MV
   362   12   68.00MV                   100.0MV
   368   14   68.00MV                   100.0MV
   374   16   68.00MV                   100.0MV
   380   18   68.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   162.0MV                   260.0MV
   409    5   154.0MV                   260.0MV
   415    7   162.0MV                   260.0MV
   421    9   162.0MV                   260.0MV
   427   12   168.0MV                   260.0MV
   433   14   154.0MV                   260.0MV
   439   16   152.0MV                   260.0MV
   445   18   156.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   5.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   9.000NA     -100.0NA       100.0NA
   492    4  -6.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -6.000NA     -100.0NA       100.0NA
   503    6   14.00NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   4.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -6.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   10.00NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   3.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   6.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   4.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   12.00NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -6.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -5.000NA     -100.0NA       100.0NA
   632   16   18.00NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   1.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

Post Burn-In Test Results at 25°C

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 1

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-650.0MV	-1.500 V	-100.0MV
58	2	-650.0MV	-1.500 V	-100.0MV
58	4	-650.0MV	-1.500 V	-100.0MV
58	6	-650.0MV	-1.500 V	-100.0MV
58	8	-650.0MV	-1.500 V	-100.0MV
58	11	-650.0MV	-1.500 V	-100.0MV
58	13	-650.0MV	-1.500 V	-100.0MV
58	15	-650.0MV	-1.500 V	-100.0MV
58	17	-650.0MV	-1.500 V	-100.0MV
58	19	-650.0MV	-1.500 V	-100.0MV
68	3	450.0MV	100.0MV	1.500 V
68	5	460.0MV	100.0MV	1.500 V
68	7	460.0MV	100.0MV	1.500 V
68	9	460.0MV	100.0MV	1.500 V
68	12	450.0MV	100.0MV	1.500 V
68	14	460.0MV	100.0MV	1.500 V
68	16	460.0MV	100.0MV	1.500 V
68	18	450.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	32.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	34.00MV		100.0MV

FUNCTIONAL TEST

```
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.860 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   32.00MV                   100.0MV
   374   16   32.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   108.0MV                   260.0MV
   409    5   108.0MV                   260.0MV
   415    7   112.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   108.0MV                   260.0MV
   439   16   104.0MV                   260.0MV
   445   18   112.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.460 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.340 V      3.980 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   38.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   136.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   144.0MV                   260.0MV
   433   14   128.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   132.0MV                   260.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   260.0MV
   409    5   146.0MV                   260.0MV
   415    7   154.0MV                   260.0MV
   421    9   158.0MV                   260.0MV
   427   12   166.0MV                   260.0MV
   433   14   148.0MV                   260.0MV
   439   16   142.0MV                   260.0MV
   445   18   152.0MV                   260.0MV

 ---------------------------------
            IIN  TEST
```

```
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   2.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   2.000NA     -100.0NA       100.0NA
   492    4  -6.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -6.000NA     -100.0NA       100.0NA
   503    6   2.000NA     -100.0NA       100.0NA
   508    8  -6.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -6.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -6.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -6.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -6.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -6.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -5.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   2.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -6.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -6.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   6.000NA                   4.000UA
   679   20  -2.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 2

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-670.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-670.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-670.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-670.0MV	-1.500 V	-100.0MV
58	17	-670.0MV	-1.500 V	-100.0MV
58	19	-670.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	480.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	480.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	480.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.860 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   32.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   110.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   114.0MV                   260.0MV
   421    9   118.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   108.0MV                   260.0MV
   445   18   116.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.460 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   142.0MV                   260.0MV
   427   12   148.0MV                   260.0MV
   433   14   134.0MV                   260.0MV
   439   16   130.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.980 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   260.0MV
   409    5   148.0MV                   260.0MV
   415    7   160.0MV                   260.0MV
   421    9   160.0MV                   260.0MV
   427   12   170.0MV                   260.0MV
   433   14   152.0MV                   260.0MV
   439   16   146.0MV                   260.0MV
   445   18   154.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1       0 A     -100.0NA       100.0NA
   479    1   4.000NA     -100.0NA       100.0NA
   484    2  -4.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -6.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 3

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-670.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-670.0MV	-1.500 V	-100.0MV
58	6	-670.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-670.0MV	-1.500 V	-100.0MV
58	17	-670.0MV	-1.500 V	-100.0MV
58	19	-670.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	460.0MV	100.0MV	1.500 V
68	12	460.0MV	100.0MV	1.500 V
68	14	460.0MV	100.0MV	1.500 V
68	16	460.0MV	100.0MV	1.500 V
68	18	460.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   110.0MV                   260.0MV
   409    5   108.0MV                   260.0MV
   415    7   114.0MV                   260.0MV
   421    9   112.0MV                   260.0MV
   427   12   116.0MV                   260.0MV
   433   14   104.0MV                   260.0MV
   439   16   104.0MV                   260.0MV
   445   18   112.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.330 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   134.0MV                   260.0MV
   427   12   142.0MV                   260.0MV
   433   14   128.0MV                   260.0MV
   439   16   126.0MV                   260.0MV
   445   18   134.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.830 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.840 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   58.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   56.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   56.00MV                   100.0MV
   368   14   56.00MV                   100.0MV
   374   16   56.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   260.0MV
   409    5   150.0MV                   260.0MV
   415    7   160.0MV                   260.0MV
   421    9   156.0MV                   260.0MV
   427   12   166.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   146.0MV                   260.0MV
   445   18   156.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
            IOZ  TEST
            VCC= 6
            IOZ LIMIT +- 0.5UA @25C/-55C
            IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -6.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -6.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
            ICC  TEST
            VCC= 6
            ICC LIMIT MAX. 4.0UA @25C/-55C
            ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   6.000NA                   4.000UA
   679   20  -5.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 4

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	480.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.860 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   112.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   126.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   110.0MV                   260.0MV
   445   18   116.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.460 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   152.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   130.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.980 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.840 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   154.0MV                   260.0MV
   409    5   148.0MV                   260.0MV
   415    7   162.0MV                   260.0MV
   421    9   158.0MV                   260.0MV
   427   12   168.0MV                   260.0MV
   433   14   152.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   156.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -6.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
           ICC  TEST
           VCC= 6
           ICC LIMIT MAX. 4.0UA @25C/-55C
           ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 5

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-670.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-670.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	480.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	480.0MV	100.0MV	1.500 V
68	9	480.0MV	100.0MV	1.500 V
68	12	480.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	480.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   110.0MV                   260.0MV
   409    5   108.0MV                   260.0MV
   415    7   114.0MV                   260.0MV
   421    9   114.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   108.0MV                   260.0MV
   439   16   106.0MV                   260.0MV
   445   18   114.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.460 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   128.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   136.0MV                   260.0MV
   427   12   146.0MV                   260.0MV
   433   14   130.0MV                   260.0MV
   439   16   126.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.840 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   260.0MV
   409    5   146.0MV                   260.0MV
   415    7   160.0MV                   260.0MV
   421    9   156.0MV                   260.0MV
   427   12   170.0MV                   260.0MV
   433   14   148.0MV                   260.0MV
   439   16   146.0MV                   260.0MV
   445   18   154.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -5.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 6

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	480.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   110.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   114.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   122.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   108.0MV                   260.0MV
   445   18   112.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.460 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   140.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   150.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   126.0MV                   260.0MV
   445   18   136.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.810 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   260.0MV
   409    5   148.0MV                   260.0MV
   415    7   160.0MV                   260.0MV
   421    9   156.0MV                   260.0MV
   427   12   170.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   144.0MV                   260.0MV
   445   18   154.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   2.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -6.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
           ICC  TEST
           VCC= 6
           ICC LIMIT MAX. 4.0UA @25C/-55C
           ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   3.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 7

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	460.0MV	100.0MV	1.500 V
68	16	460.0MV	100.0MV	1.500 V
68	18	460.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	32.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   110.0MV                   260.0MV
   409    5   106.0MV                   260.0MV
   415    7   112.0MV                   260.0MV
   421    9   112.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   104.0MV                   260.0MV
   439   16   104.0MV                   260.0MV
   445   18   112.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.320 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.330 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   128.0MV                   260.0MV
   415    7   136.0MV                   260.0MV
   421    9   134.0MV                   260.0MV
   427   12   146.0MV                   260.0MV
   433   14   128.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   134.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   152.0MV                   260.0MV
   409    5   146.0MV                   260.0MV
   415    7   158.0MV                   260.0MV
   421    9   154.0MV                   260.0MV
   427   12   170.0MV                   260.0MV
   433   14   148.0MV                   260.0MV
   439   16   144.0MV                   260.0MV
   445   18   154.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   4.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -6.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -6.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   6.000NA                   4.000UA
   679   20  -5.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 8

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	460.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.890 V      2.480 V
   281    5   2.880 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   106.0MV                   260.0MV
   409    5   106.0MV                   260.0MV
   415    7   114.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   104.0MV                   260.0MV
   445   18   110.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.460 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.340 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   38.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   130.0MV                   260.0MV
   409    5   126.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   138.0MV                   260.0MV
   427   12   146.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   132.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.980 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.850 V      5.480 V
   281    5   5.850 V      5.480 V
   287    7   5.830 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   148.0MV                   260.0MV
   409    5   144.0MV                   260.0MV
   415    7   158.0MV                   260.0MV
   421    9   156.0MV                   260.0MV
   427   12   170.0MV                   260.0MV
   433   14   150.0MV                   260.0MV
   439   16   144.0MV                   260.0MV
   445   18   152.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -4.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   4.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -6.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   5.000NA                   4.000UA
   679   20  -6.000NA                   4.000UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 9

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	32.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	32.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.870 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.870 V      2.480 V
   299   12   2.860 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   110.0MV                   260.0MV
   409    5   110.0MV                   260.0MV
   415    7   116.0MV                   260.0MV
   421    9   116.0MV                   260.0MV
   427   12   122.0MV                   260.0MV
   433   14   110.0MV                   260.0MV
   439   16   106.0MV                   260.0MV
   445   18   112.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.320 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.320 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   260.0MV
   409    5   130.0MV                   260.0MV
   415    7   142.0MV                   260.0MV
   421    9   140.0MV                   260.0MV
   427   12   150.0MV                   260.0MV
   433   14   132.0MV                   260.0MV
   439   16   128.0MV                   260.0MV
   445   18   134.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.810 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   56.00MV                   100.0MV
   344    5   56.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   54.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   56.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   156.0MV                   260.0MV
   409    5   150.0MV                   260.0MV
   415    7   164.0MV                   260.0MV
   421    9   158.0MV                   260.0MV
   427   12   174.0MV                   260.0MV
   433   14   152.0MV                   260.0MV
   439   16   148.0MV                   260.0MV
   445   18   156.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   2.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
            IOZ  TEST
            VCC= 6
            IOZ LIMIT +- 0.5UA @25C/-55C
            IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
            ICC  TEST
            VCC= 6
            ICC LIMIT MAX. 4.0UA @25C/-55C
            ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -6.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 10

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	460.0MV	100.0MV	1.500 V
68	5	460.0MV	100.0MV	1.500 V
68	7	460.0MV	100.0MV	1.500 V
68	9	460.0MV	100.0MV	1.500 V
68	12	460.0MV	100.0MV	1.500 V
68	14	460.0MV	100.0MV	1.500 V
68	16	460.0MV	100.0MV	1.500 V
68	18	450.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	32.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   108.0MV                   260.0MV
   409    5   106.0MV                   260.0MV
   415    7   114.0MV                   260.0MV
   421    9   114.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   106.0MV                   260.0MV
   439   16   102.0MV                   260.0MV
   445   18   108.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.460 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.320 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   130.0MV                   260.0MV
   409    5   126.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   134.0MV                   260.0MV
   427   12   146.0MV                   260.0MV
   433   14   126.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   128.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.830 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   54.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   54.00MV                   100.0MV
   368   14   54.00MV                   100.0MV
   374   16   54.00MV                   100.0MV
   380   18   54.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   150.0MV                   260.0MV
   409    5   144.0MV                   260.0MV
   415    7   158.0MV                   260.0MV
   421    9   154.0MV                   260.0MV
   427   12   168.0MV                   260.0MV
   433   14   146.0MV                   260.0MV
   439   16   142.0MV                   260.0MV
   445   18   150.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   2.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -6.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   3.000NA     -100.0NA       100.0NA
   637   18  -6.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   8.000NA                   4.000UA
   679   20  -3.000NA                   4.000UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 11

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-670.0MV	-1.500 V	-100.0MV
58	4	-670.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-670.0MV	-1.500 V	-100.0MV
58	11	-670.0MV	-1.500 V	-100.0MV
58	13	-670.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	480.0MV	100.0MV	1.500 V
68	5	480.0MV	100.0MV	1.500 V
68	7	480.0MV	100.0MV	1.500 V
68	9	480.0MV	100.0MV	1.500 V
68	12	480.0MV	100.0MV	1.500 V
68	14	480.0MV	100.0MV	1.500 V
68	16	480.0MV	100.0MV	1.500 V
68	18	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	32.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.860 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.870 V      2.480 V
   311   16   2.870 V      2.480 V
   317   18   2.890 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   108.0MV                   260.0MV
   409    5   108.0MV                   260.0MV
   415    7   112.0MV                   260.0MV
   421    9   114.0MV                   260.0MV
   427   12   120.0MV                   260.0MV
   433   14   106.0MV                   260.0MV
   439   16   104.0MV                   260.0MV
   445   18   110.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.460 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.320 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   128.0MV                   260.0MV
   409    5   126.0MV                   260.0MV
   415    7   138.0MV                   260.0MV
   421    9   136.0MV                   260.0MV
   427   12   148.0MV                   260.0MV
   433   14   126.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   130.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.830 V      5.480 V
   311   16   5.830 V      5.480 V
   317   18   5.850 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   148.0MV                   260.0MV
   409    5   144.0MV                   260.0MV
   415    7   156.0MV                   260.0MV
   421    9   152.0MV                   260.0MV
   427   12   168.0MV                   260.0MV
   433   14   144.0MV                   260.0MV
   439   16   140.0MV                   260.0MV
   445   18   150.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -3.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   3.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   2.000NA     -100.0NA       100.0NA
   532   15  -5.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -5.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   2.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   3.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   2.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -7.000NA                   4.000UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 12

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-660.0MV	-1.500 V	-100.0MV
58	2	-660.0MV	-1.500 V	-100.0MV
58	4	-660.0MV	-1.500 V	-100.0MV
58	6	-660.0MV	-1.500 V	-100.0MV
58	8	-660.0MV	-1.500 V	-100.0MV
58	11	-660.0MV	-1.500 V	-100.0MV
58	13	-660.0MV	-1.500 V	-100.0MV
58	15	-660.0MV	-1.500 V	-100.0MV
58	17	-660.0MV	-1.500 V	-100.0MV
58	19	-660.0MV	-1.500 V	-100.0MV
68	3	470.0MV	100.0MV	1.500 V
68	5	470.0MV	100.0MV	1.500 V
68	7	470.0MV	100.0MV	1.500 V
68	9	470.0MV	100.0MV	1.500 V
68	12	470.0MV	100.0MV	1.500 V
68	14	470.0MV	100.0MV	1.500 V
68	16	470.0MV	100.0MV	1.500 V
68	18	460.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	36.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.880 V      2.480 V
   281    5   2.870 V      2.480 V
   287    7   2.870 V      2.480 V
   293    9   2.880 V      2.480 V
   299   12   2.870 V      2.480 V
   305   14   2.880 V      2.480 V
   311   16   2.880 V      2.480 V
   317   18   2.880 V      2.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   112.0MV                   260.0MV
   409    5   108.0MV                   260.0MV
   415    7   112.0MV                   260.0MV
   421    9   112.0MV                   260.0MV
   427   12   118.0MV                   260.0MV
   433   14   106.0MV                   260.0MV
   439   16   106.0MV                   260.0MV
   445   18   114.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.460 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.460 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.980
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.330 V      3.980 V
   281    5   4.330 V      3.980 V
   287    7   4.320 V      3.980 V
   293    9   4.330 V      3.980 V
   299   12   4.310 V      3.980 V
   305   14   4.330 V      3.980 V
   311   16   4.330 V      3.980 V
   317   18   4.340 V      3.980 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   260.0MV
   409    5   128.0MV                   260.0MV
   415    7   136.0MV                   260.0MV
   421    9   134.0MV                   260.0MV
   427   12   144.0MV                   260.0MV
   433   14   126.0MV                   260.0MV
   439   16   124.0MV                   260.0MV
   445   18   134.0MV                   260.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.480
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.840 V      5.480 V
   281    5   5.830 V      5.480 V
   287    7   5.820 V      5.480 V
   293    9   5.840 V      5.480 V
   299   12   5.820 V      5.480 V
   305   14   5.840 V      5.480 V
   311   16   5.840 V      5.480 V
   317   18   5.840 V      5.480 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  260.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   150.0MV                   260.0MV
   409    5   144.0MV                   260.0MV
   415    7   156.0MV                   260.0MV
   421    9   150.0MV                   260.0MV
   427   12   166.0MV                   260.0MV
   433   14   144.0MV                   260.0MV
   439   16   140.0MV                   260.0MV
   445   18   152.0MV                   260.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -100.0NA       100.0NA
   479    1   3.000NA     -100.0NA       100.0NA
   484    2  -5.000NA     -100.0NA       100.0NA
   487    2   3.000NA     -100.0NA       100.0NA
   492    4  -5.000NA     -100.0NA       100.0NA
   495    4   3.000NA     -100.0NA       100.0NA
   500    6  -5.000NA     -100.0NA       100.0NA
   503    6   3.000NA     -100.0NA       100.0NA
   508    8  -5.000NA     -100.0NA       100.0NA
   511    8   3.000NA     -100.0NA       100.0NA
   516   11  -5.000NA     -100.0NA       100.0NA
   519   11   2.000NA     -100.0NA       100.0NA
   524   13  -5.000NA     -100.0NA       100.0NA
   527   13   3.000NA     -100.0NA       100.0NA
   532   15  -6.000NA     -100.0NA       100.0NA
   535   15   3.000NA     -100.0NA       100.0NA
   540   17  -5.000NA     -100.0NA       100.0NA
   543   17   2.000NA     -100.0NA       100.0NA
   548   19  -5.000NA     -100.0NA       100.0NA
   551   19   2.000NA     -100.0NA       100.0NA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -4.000NA     -100.0NA       100.0NA
   581    3   3.000NA     -100.0NA       100.0NA
   586    5  -6.000NA     -100.0NA       100.0NA
   589    5   3.000NA     -100.0NA       100.0NA
   594    7  -6.000NA     -100.0NA       100.0NA
   597    7   3.000NA     -100.0NA       100.0NA
   602    9  -6.000NA     -100.0NA       100.0NA
   605    9   3.000NA     -100.0NA       100.0NA
   613   12  -5.000NA     -100.0NA       100.0NA
   616   12   2.000NA     -100.0NA       100.0NA
   621   14  -6.000NA     -100.0NA       100.0NA
   624   14   3.000NA     -100.0NA       100.0NA
   629   16  -6.000NA     -100.0NA       100.0NA
   632   16   2.000NA     -100.0NA       100.0NA
   637   18  -5.000NA     -100.0NA       100.0NA
   640   18   2.000NA     -100.0NA       100.0NA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20   4.000NA                   4.000UA
   679   20  -6.000NA                   4.000UA


EIR 1.....10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

Post Burn-In Test Results at +125°C

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 1

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-540.0MV	-1.500 V	-100.0MV
58	2	-550.0MV	-1.500 V	-100.0MV
58	4	-540.0MV	-1.500 V	-100.0MV
58	6	-540.0MV	-1.500 V	-100.0MV
58	8	-540.0MV	-1.500 V	-100.0MV
58	11	-540.0MV	-1.500 V	-100.0MV
58	13	-540.0MV	-1.500 V	-100.0MV
58	15	-540.0MV	-1.500 V	-100.0MV
58	17	-540.0MV	-1.500 V	-100.0MV
58	19	-540.0MV	-1.500 V	-100.0MV
68	3	330.0MV	100.0MV	1.500 V
68	5	340.0MV	100.0MV	1.500 V
68	7	340.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	320.0MV	100.0MV	1.500 V
68	14	340.0MV	100.0MV	1.500 V
68	16	330.0MV	100.0MV	1.500 V
68	18	320.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	36.00MV		100.0MV
350	7	36.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

FUNCTIONAL TEST

```
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   400.0MV
   409    5   132.0MV                   400.0MV
   415    7   138.0MV                   400.0MV
   421    9   152.0MV                   400.0MV
   427   12   146.0MV                   400.0MV
   433   14   132.0MV                   400.0MV
   439   16   132.0MV                   400.0MV
   445   18   136.0MV                   400.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
-----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.280 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.310 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   162.0MV                   400.0MV
   409    5   158.0MV                   400.0MV
   415    7   168.0MV                   400.0MV
   421    9   186.0MV                   400.0MV
   427   12   176.0MV                   400.0MV
   433   14   160.0MV                   400.0MV
   439   16   158.0MV                   400.0MV
   445   18   164.0MV                   400.0MV

 ---------------------------------------------
            FUNCTIONAL  TEST
```

```
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.780 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   180.0MV                   400.0MV
   409    5   174.0MV                   400.0MV
   415    7   188.0MV                   400.0MV
   421    9   210.0MV                   400.0MV
   427   12   198.0MV                   400.0MV
   433   14   180.0MV                   400.0MV
   439   16   178.0MV                   400.0MV
   445   18   182.0MV                   400.0MV

 ---------------------------------
            IIN  TEST
```

```
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   5.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   16.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -5.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   3.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -6.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -5.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
          IOZ  TEST
          VCC= 6
          IOZ LIMIT +- 0.5UA @25C/-55C
          IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -149.0NA     -1.000UA       1.000UA
   581    3   46.00NA     -1.000UA       1.000UA
   586    5  -132.0NA     -1.000UA       1.000UA
   589    5   33.00NA     -1.000UA       1.000UA
   594    7  -120.0NA     -1.000UA       1.000UA
   597    7   30.00NA     -1.000UA       1.000UA
   602    9  -147.0NA     -1.000UA       1.000UA
   605    9   30.00NA     -1.000UA       1.000UA
   613   12  -185.0NA     -1.000UA       1.000UA
   616   12   32.00NA     -1.000UA       1.000UA
   621   14  -143.0NA     -1.000UA       1.000UA
   624   14   34.00NA     -1.000UA       1.000UA
   629   16  -159.0NA     -1.000UA       1.000UA
   632   16   35.00NA     -1.000UA       1.000UA
   637   18  -225.0NA     -1.000UA       1.000UA
   640   18   35.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20       0 A                   160.0UA
   679   20       0 A                   160.0UA


EIR 1........10    FCT     DCT
    0000000000     PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 2

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-480.0MV	-1.500 V	-100.0MV
58	2	-480.0MV	-1.500 V	-100.0MV
58	4	-480.0MV	-1.500 V	-100.0MV
58	6	-480.0MV	-1.500 V	-100.0MV
58	8	-480.0MV	-1.500 V	-100.0MV
58	11	-480.0MV	-1.500 V	-100.0MV
58	13	-480.0MV	-1.500 V	-100.0MV
58	15	-480.0MV	-1.500 V	-100.0MV
58	17	-480.0MV	-1.500 V	-100.0MV
58	19	-480.0MV	-1.500 V	-100.0MV
68	3	280.0MV	100.0MV	1.500 V
68	5	290.0MV	100.0MV	1.500 V
68	7	300.0MV	100.0MV	1.500 V
68	9	290.0MV	100.0MV	1.500 V
68	12	290.0MV	100.0MV	1.500 V
68	14	290.0MV	100.0MV	1.500 V
68	16	290.0MV	100.0MV	1.500 V
68	18	280.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	36.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	36.00MV		100.0MV
368	14	36.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.840 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.840 V      2.200 V
   317   18   2.850 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   400.0MV
   409    5   140.0MV                   400.0MV
   415    7   146.0MV                   400.0MV
   421    9   164.0MV                   400.0MV
   427   12   154.0MV                   400.0MV
   433   14   144.0MV                   400.0MV
   439   16   140.0MV                   400.0MV
   445   18   148.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.270 V      3.700 V
   305   14   4.280 V      3.700 V
   311   16   4.280 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   38.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   38.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   168.0MV                   400.0MV
   409    5   166.0MV                   400.0MV
   415    7   176.0MV                   400.0MV
   421    9   200.0MV                   400.0MV
   427   12   186.0MV                   400.0MV
   433   14   172.0MV                   400.0MV
   439   16   166.0MV                   400.0MV
   445   18   174.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.790 V      5.200 V
   287    7   5.790 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   48.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   186.0MV                   400.0MV
   409    5   182.0MV                   400.0MV
   415    7   194.0MV                   400.0MV
   421    9   222.0MV                   400.0MV
   427   12   204.0MV                   400.0MV
   433   14   188.0MV                   400.0MV
   439   16   184.0MV                   400.0MV
   445   18   190.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   19.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -6.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -6.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -6.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -6.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -280.0NA     -1.000UA       1.000UA
   581    3   67.00NA     -1.000UA       1.000UA
   586    5  -244.0NA     -1.000UA       1.000UA
   589    5   49.00NA     -1.000UA       1.000UA
   594    7  -223.0NA     -1.000UA       1.000UA
   597    7   48.00NA     -1.000UA       1.000UA
   602    9  -259.0NA     -1.000UA       1.000UA
   605    9   45.00NA     -1.000UA       1.000UA
   613   12  -249.0NA     -1.000UA       1.000UA
   616   12   45.00NA     -1.000UA       1.000UA
   621   14  -228.0NA     -1.000UA       1.000UA
   624   14   48.00NA     -1.000UA       1.000UA
   629   16  -224.0NA     -1.000UA       1.000UA
   632   16   49.00NA     -1.000UA       1.000UA
   637   18  -370.0NA     -1.000UA       1.000UA
   640   18   50.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 3

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-540.0MV	-1.500 V	-100.0MV
58	2	-530.0MV	-1.500 V	-100.0MV
58	4	-530.0MV	-1.500 V	-100.0MV
58	6	-530.0MV	-1.500 V	-100.0MV
58	8	-530.0MV	-1.500 V	-100.0MV
58	11	-530.0MV	-1.500 V	-100.0MV
58	13	-530.0MV	-1.500 V	-100.0MV
58	15	-530.0MV	-1.500 V	-100.0MV
58	17	-530.0MV	-1.500 V	-100.0MV
58	19	-530.0MV	-1.500 V	-100.0MV
68	3	320.0MV	100.0MV	1.500 V
68	5	320.0MV	100.0MV	1.500 V
68	7	320.0MV	100.0MV	1.500 V
68	9	310.0MV	100.0MV	1.500 V
68	12	310.0MV	100.0MV	1.500 V
68	14	310.0MV	100.0MV	1.500 V
68	16	310.0MV	100.0MV	1.500 V
68	18	300.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	36.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.970 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.970 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.840 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.840 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.840 V      2.200 V
   317   18   2.850 V      2.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   38.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   400.0MV
   409    5   134.0MV                   400.0MV
   415    7   140.0MV                   400.0MV
   421    9   150.0MV                   400.0MV
   427   12   142.0MV                   400.0MV
   433   14   134.0MV                   400.0MV
   439   16   134.0MV                   400.0MV
   445   18   140.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   168.0MV                   400.0MV
   409    5   162.0MV                   400.0MV
   415    7   168.0MV                   400.0MV
   421    9   188.0MV                   400.0MV
   427   12   174.0MV                   400.0MV
   433   14   162.0MV                   400.0MV
   439   16   162.0MV                   400.0MV
   445   18   168.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.790 V      5.200 V
   281    5   5.790 V      5.200 V
   287    7   5.780 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.800 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   190.0MV                   400.0MV
   409    5   180.0MV                   400.0MV
   415    7   190.0MV                   400.0MV
   421    9   210.0MV                   400.0MV
   427   12   196.0MV                   400.0MV
   433   14   180.0MV                   400.0MV
   439   16   182.0MV                   400.0MV
   445   18   188.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   20.00NA     -1.000UA       1.000UA
   492    4  -5.000NA     -1.000UA       1.000UA
   495    4   5.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -6.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -5.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -216.0NA     -1.000UA       1.000UA
   581    3   66.00NA     -1.000UA       1.000UA
   586    5  -222.0NA     -1.000UA       1.000UA
   589    5   53.00NA     -1.000UA       1.000UA
   594    7  -242.0NA     -1.000UA       1.000UA
   597    7   53.00NA     -1.000UA       1.000UA
   602    9  -295.0NA     -1.000UA       1.000UA
   605    9   56.00NA     -1.000UA       1.000UA
   613   12  -383.0NA     -1.000UA       1.000UA
   616   12   60.00NA     -1.000UA       1.000UA
   621   14  -330.0NA     -1.000UA       1.000UA
   624   14   64.00NA     -1.000UA       1.000UA
   629   16  -306.0NA     -1.000UA       1.000UA
   632   16   59.00NA     -1.000UA       1.000UA
   637   18  -314.0NA     -1.000UA       1.000UA
   640   18   57.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 4

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-520.0MV	-1.500 V	-100.0MV
58	2	-520.0MV	-1.500 V	-100.0MV
58	4	-520.0MV	-1.500 V	-100.0MV
58	6	-520.0MV	-1.500 V	-100.0MV
58	8	-520.0MV	-1.500 V	-100.0MV
58	11	-520.0MV	-1.500 V	-100.0MV
58	13	-520.0MV	-1.500 V	-100.0MV
58	15	-520.0MV	-1.500 V	-100.0MV
58	17	-520.0MV	-1.500 V	-100.0MV
58	19	-520.0MV	-1.500 V	-100.0MV
68	3	330.0MV	100.0MV	1.500 V
68	5	330.0MV	100.0MV	1.500 V
68	7	330.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	330.0MV	100.0MV	1.500 V
68	14	330.0MV	100.0MV	1.500 V
68	16	330.0MV	100.0MV	1.500 V
68	18	320.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	36.00MV		100.0MV
362	12	32.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	36.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.850 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   140.0MV                   400.0MV
   409    5   136.0MV                   400.0MV
   415    7   144.0MV                   400.0MV
   421    9   156.0MV                   400.0MV
   427   12   148.0MV                   400.0MV
   433   14   140.0MV                   400.0MV
   439   16   140.0MV                   400.0MV
   445   18   144.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.460 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.300 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.290 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   170.0MV                   400.0MV
   409    5   162.0MV                   400.0MV
   415    7   172.0MV                   400.0MV
   421    9   192.0MV                   400.0MV
   427   12   178.0MV                   400.0MV
   433   14   168.0MV                   400.0MV
   439   16   168.0MV                   400.0MV
   445   18   174.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.790 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   48.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   188.0MV                   400.0MV
   409    5   180.0MV                   400.0MV
   415    7   192.0MV                   400.0MV
   421    9   214.0MV                   400.0MV
   427   12   198.0MV                   400.0MV
   433   14   188.0MV                   400.0MV
   439   16   186.0MV                   400.0MV
   445   18   192.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   20.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   5.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -6.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -6.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -5.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -202.0NA     -1.000UA       1.000UA
   581    3   58.00NA     -1.000UA       1.000UA
   586    5  -218.0NA     -1.000UA       1.000UA
   589    5   46.00NA     -1.000UA       1.000UA
   594    7  -214.0NA     -1.000UA       1.000UA
   597    7   43.00NA     -1.000UA       1.000UA
   602    9  -250.0NA     -1.000UA       1.000UA
   605    9   45.00NA     -1.000UA       1.000UA
   613   12  -287.0NA     -1.000UA       1.000UA
   616   12   45.00NA     -1.000UA       1.000UA
   621   14  -260.0NA     -1.000UA       1.000UA
   624   14   46.00NA     -1.000UA       1.000UA
   629   16  -236.0NA     -1.000UA       1.000UA
   632   16   44.00NA     -1.000UA       1.000UA
   637   18  -271.0NA     -1.000UA       1.000UA
   640   18   44.00NA     -1.000UA       1.000UA

 -------------------------------------
           ICC  TEST
           VCC= 6
           ICC LIMIT MAX. 4.0UA @25C/-55C
           ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 5

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-530.0MV	-1.500 V	-100.0MV
58	2	-530.0MV	-1.500 V	-100.0MV
58	4	-530.0MV	-1.500 V	-100.0MV
58	6	-530.0MV	-1.500 V	-100.0MV
58	8	-530.0MV	-1.500 V	-100.0MV
58	11	-530.0MV	-1.500 V	-100.0MV
58	13	-530.0MV	-1.500 V	-100.0MV
58	15	-530.0MV	-1.500 V	-100.0MV
58	17	-530.0MV	-1.500 V	-100.0MV
58	19	-530.0MV	-1.500 V	-100.0MV
68	3	340.0MV	100.0MV	1.500 V
68	5	340.0MV	100.0MV	1.500 V
68	7	340.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	330.0MV	100.0MV	1.500 V
68	14	340.0MV	100.0MV	1.500 V
68	16	330.0MV	100.0MV	1.500 V
68	18	320.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	36.00MV		100.0MV
344	5	36.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	36.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.970 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.840 V      2.200 V
   281    5   2.840 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.840 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   34.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   136.0MV                   400.0MV
   409    5   134.0MV                   400.0MV
   415    7   138.0MV                   400.0MV
   421    9   150.0MV                   400.0MV
   427   12   146.0MV                   400.0MV
   433   14   136.0MV                   400.0MV
   439   16   134.0MV                   400.0MV
   445   18   140.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.280 V      3.700 V
   311   16   4.280 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   164.0MV                   400.0MV
   409    5   160.0MV                   400.0MV
   415    7   168.0MV                   400.0MV
   421    9   186.0MV                   400.0MV
   427   12   178.0MV                   400.0MV
   433   14   164.0MV                   400.0MV
   439   16   162.0MV                   400.0MV
   445   18   168.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.790 V      5.200 V
   287    7   5.780 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.780 V      5.200 V
   317   18   5.810 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   46.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   186.0MV                   400.0MV
   409    5   178.0MV                   400.0MV
   415    7   186.0MV                   400.0MV
   421    9   210.0MV                   400.0MV
   427   12   200.0MV                   400.0MV
   433   14   182.0MV                   400.0MV
   439   16   180.0MV                   400.0MV
   445   18   186.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   19.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   5.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -6.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -5.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -6.000NA     -1.000UA       1.000UA
   551   19   3.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT            GT
   578    3  -158.0NA     -1.000UA       1.000UA
   581    3   56.00NA     -1.000UA       1.000UA
   586    5  -166.0NA     -1.000UA       1.000UA
   589    5   41.00NA     -1.000UA       1.000UA
   594    7  -180.0NA     -1.000UA       1.000UA
   597    7   43.00NA     -1.000UA       1.000UA
   602    9  -229.0NA     -1.000UA       1.000UA
   605    9   41.00NA     -1.000UA       1.000UA
   613   12  -245.0NA     -1.000UA       1.000UA
   616   12   42.00NA     -1.000UA       1.000UA
   621   14  -190.0NA     -1.000UA       1.000UA
   624   14   44.00NA     -1.000UA       1.000UA
   629   16  -202.0NA     -1.000UA       1.000UA
   632   16   45.00NA     -1.000UA       1.000UA
   637   18  -266.0NA     -1.000UA       1.000UA
   640   18   43.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
   672   20       0 A                   160.0UA
   679   20       0 A                   160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 6

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-530.0MV	-1.500 V	-100.0MV
58	2	-520.0MV	-1.500 V	-100.0MV
58	4	-520.0MV	-1.500 V	-100.0MV
58	6	-520.0MV	-1.500 V	-100.0MV
58	8	-520.0MV	-1.500 V	-100.0MV
58	11	-520.0MV	-1.500 V	-100.0MV
58	13	-520.0MV	-1.500 V	-100.0MV
58	15	-520.0MV	-1.500 V	-100.0MV
58	17	-520.0MV	-1.500 V	-100.0MV
58	19	-520.0MV	-1.500 V	-100.0MV
68	3	330.0MV	100.0MV	1.500 V
68	5	330.0MV	100.0MV	1.500 V
68	7	330.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	320.0MV	100.0MV	1.500 V
68	14	330.0MV	100.0MV	1.500 V
68	16	330.0MV	100.0MV	1.500 V
68	18	310.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	36.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	36.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	32.00MV		100.0MV
380	18	36.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.840 V      2.200 V
   281    5   2.840 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.840 V      2.200 V
   317   18   2.850 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   400.0MV
   409    5   138.0MV                   400.0MV
   415    7   140.0MV                   400.0MV
   421    9   156.0MV                   400.0MV
   427   12   150.0MV                   400.0MV
   433   14   140.0MV                   400.0MV
   439   16   136.0MV                   400.0MV
   445   18   142.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.280 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.270 V      3.700 V
   305   14   4.280 V      3.700 V
   311   16   4.280 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   168.0MV                   400.0MV
   409    5   166.0MV                   400.0MV
   415    7   168.0MV                   400.0MV
   421    9   192.0MV                   400.0MV
   427   12   182.0MV                   400.0MV
   433   14   166.0MV                   400.0MV
   439   16   164.0MV                   400.0MV
   445   18   170.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.790 V      5.200 V
   281    5   5.790 V      5.200 V
   287    7   5.780 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.770 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.800 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   186.0MV                   400.0MV
   409    5   180.0MV                   400.0MV
   415    7   190.0MV                   400.0MV
   421    9   214.0MV                   400.0MV
   427   12   202.0MV                   400.0MV
   433   14   186.0MV                   400.0MV
   439   16   184.0MV                   400.0MV
   445   18   190.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   20.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   5.000NA     -1.000UA       1.000UA
   500    6  -5.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -6.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -6.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -181.0NA     -1.000UA       1.000UA
   581    3   58.00NA     -1.000UA       1.000UA
   586    5  -189.0NA     -1.000UA       1.000UA
   589    5   45.00NA     -1.000UA       1.000UA
   594    7  -198.0NA     -1.000UA       1.000UA
   597    7   46.00NA     -1.000UA       1.000UA
   602    9  -241.0NA     -1.000UA       1.000UA
   605    9   45.00NA     -1.000UA       1.000UA
   613   12  -237.0NA     -1.000UA       1.000UA
   616   12   44.00NA     -1.000UA       1.000UA
   621   14  -210.0NA     -1.000UA       1.000UA
   624   14   47.00NA     -1.000UA       1.000UA
   629   16  -216.0NA     -1.000UA       1.000UA
   632   16   48.00NA     -1.000UA       1.000UA
   637   18  -297.0NA     -1.000UA       1.000UA
   640   18   47.00NA     -1.000UA       1.000UA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 7

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-530.0MV	-1.500 V	-100.0MV
58	2	-530.0MV	-1.500 V	-100.0MV
58	4	-530.0MV	-1.500 V	-100.0MV
58	6	-530.0MV	-1.500 V	-100.0MV
58	8	-530.0MV	-1.500 V	-100.0MV
58	11	-530.0MV	-1.500 V	-100.0MV
58	13	-530.0MV	-1.500 V	-100.0MV
58	15	-530.0MV	-1.500 V	-100.0MV
58	17	-520.0MV	-1.500 V	-100.0MV
58	19	-520.0MV	-1.500 V	-100.0MV
68	3	340.0MV	100.0MV	1.500 V
68	5	340.0MV	100.0MV	1.500 V
68	7	330.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	320.0MV	100.0MV	1.500 V
68	14	330.0MV	100.0MV	1.500 V
68	16	320.0MV	100.0MV	1.500 V
68	18	320.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	36.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	36.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.840 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   400.0MV
   409    5   130.0MV                   400.0MV
   415    7   134.0MV                   400.0MV
   421    9   146.0MV                   400.0MV
   427   12   140.0MV                   400.0MV
   433   14   130.0MV                   400.0MV
   439   16   130.0MV                   400.0MV
   445   18   138.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.290 V      3.700 V
   293    9   4.280 V      3.700 V
   299   12   4.290 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ---------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   38.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   162.0MV                   400.0MV
   409    5   156.0MV                   400.0MV
   415    7   160.0MV                   400.0MV
   421    9   180.0MV                   400.0MV
   427   12   170.0MV                   400.0MV
   433   14   158.0MV                   400.0MV
   439   16   156.0MV                   400.0MV
   445   18   166.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.790 V      5.200 V
   293    9   5.780 V      5.200 V
   299   12   5.790 V      5.200 V
   305   14   5.800 V      5.200 V
   311   16   5.800 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   48.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   182.0MV                   400.0MV
   409    5   174.0MV                   400.0MV
   415    7   180.0MV                   400.0MV
   421    9   204.0MV                   400.0MV
   427   12   192.0MV                   400.0MV
   433   14   176.0MV                   400.0MV
   439   16   176.0MV                   400.0MV
   445   18   184.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   16.00NA     -1.000UA       1.000UA
   492    4  -5.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   3.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -5.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -6.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -121.0NA     -1.000UA       1.000UA
   581    3   41.00NA     -1.000UA       1.000UA
   586    5  -140.0NA     -1.000UA       1.000UA
   589    5   32.00NA     -1.000UA       1.000UA
   594    7  -154.0NA     -1.000UA       1.000UA
   597    7   33.00NA     -1.000UA       1.000UA
   602    9  -200.0NA     -1.000UA       1.000UA
   605    9   33.00NA     -1.000UA       1.000UA
   613   12  -233.0NA     -1.000UA       1.000UA
   616   12   34.00NA     -1.000UA       1.000UA
   621   14  -198.0NA     -1.000UA       1.000UA
   624   14   38.00NA     -1.000UA       1.000UA
   629   16  -205.0NA     -1.000UA       1.000UA
   632   16   38.00NA     -1.000UA       1.000UA
   637   18  -217.0NA     -1.000UA       1.000UA
   640   18   33.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 8

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-530.0MV	-1.500 V	-100.0MV
58	2	-530.0MV	-1.500 V	-100.0MV
58	4	-530.0MV	-1.500 V	-100.0MV
58	6	-530.0MV	-1.500 V	-100.0MV
58	8	-530.0MV	-1.500 V	-100.0MV
58	11	-530.0MV	-1.500 V	-100.0MV
58	13	-530.0MV	-1.500 V	-100.0MV
58	15	-530.0MV	-1.500 V	-100.0MV
58	17	-530.0MV	-1.500 V	-100.0MV
58	19	-530.0MV	-1.500 V	-100.0MV
68	3	330.0MV	100.0MV	1.500 V
68	5	330.0MV	100.0MV	1.500 V
68	7	330.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	330.0MV	100.0MV	1.500 V
68	14	330.0MV	100.0MV	1.500 V
68	16	320.0MV	100.0MV	1.500 V
68	18	310.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.970 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	36.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	36.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	36.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.860 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.850 V      2.200 V
   293    9   2.840 V      2.200 V
   299   12   2.850 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   34.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   400.0MV
   409    5   132.0MV                   400.0MV
   415    7   138.0MV                   400.0MV
   421    9   152.0MV                   400.0MV
   427   12   148.0MV                   400.0MV
   433   14   138.0MV                   400.0MV
   439   16   134.0MV                   400.0MV
   445   18   136.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.300 V      3.700 V
   281    5   4.300 V      3.700 V
   287    7   4.290 V      3.700 V
   293    9   4.280 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.310 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   160.0MV                   400.0MV
   409    5   158.0MV                   400.0MV
   415    7   166.0MV                   400.0MV
   421    9   188.0MV                   400.0MV
   427   12   178.0MV                   400.0MV
   433   14   166.0MV                   400.0MV
   439   16   160.0MV                   400.0MV
   445   18   166.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.810 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.790 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   50.00MV                   100.0MV
   350    7   48.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   178.0MV                   400.0MV
   409    5   174.0MV                   400.0MV
   415    7   186.0MV                   400.0MV
   421    9   210.0MV                   400.0MV
   427   12   198.0MV                   400.0MV
   433   14   184.0MV                   400.0MV
   439   16   180.0MV                   400.0MV
   445   18   182.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   17.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -5.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -6.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -6.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -272.0NA     -1.000UA       1.000UA
   581    3   58.00NA     -1.000UA       1.000UA
   586    5  -242.0NA     -1.000UA       1.000UA
   589    5   43.00NA     -1.000UA       1.000UA
   594    7  -237.0NA     -1.000UA       1.000UA
   597    7   43.00NA     -1.000UA       1.000UA
   602    9  -268.0NA     -1.000UA       1.000UA
   605    9   41.00NA     -1.000UA       1.000UA
   613   12  -259.0NA     -1.000UA       1.000UA
   616   12   40.00NA     -1.000UA       1.000UA
   621   14  -222.0NA     -1.000UA       1.000UA
   624   14   40.00NA     -1.000UA       1.000UA
   629   16  -266.0NA     -1.000UA       1.000UA
   632   16   46.00NA     -1.000UA       1.000UA
   637   18  -341.0NA     -1.000UA       1.000UA
   640   18   45.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 9

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-520.0MV	-1.500 V	-100.0MV
58	2	-520.0MV	-1.500 V	-100.0MV
58	4	-520.0MV	-1.500 V	-100.0MV
58	6	-520.0MV	-1.500 V	-100.0MV
58	8	-520.0MV	-1.500 V	-100.0MV
58	11	-520.0MV	-1.500 V	-100.0MV
58	13	-520.0MV	-1.500 V	-100.0MV
58	15	-520.0MV	-1.500 V	-100.0MV
58	17	-510.0MV	-1.500 V	-100.0MV
58	19	-520.0MV	-1.500 V	-100.0MV
68	3	320.0MV	100.0MV	1.500 V
68	5	320.0MV	100.0MV	1.500 V
68	7	320.0MV	100.0MV	1.500 V
68	9	320.0MV	100.0MV	1.500 V
68	12	310.0MV	100.0MV	1.500 V
68	14	320.0MV	100.0MV	1.500 V
68	16	320.0MV	100.0MV	1.500 V
68	18	300.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	36.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	36.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.970 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.840 V      2.200 V
   281    5   2.840 V      2.200 V
   287    7   2.830 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.840 V      2.200 V
   317   18   2.850 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   34.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   34.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   138.0MV                   400.0MV
   409    5   136.0MV                   400.0MV
   415    7   142.0MV                   400.0MV
   421    9   152.0MV                   400.0MV
   427   12   146.0MV                   400.0MV
   433   14   138.0MV                   400.0MV
   439   16   136.0MV                   400.0MV
   445   18   140.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.280 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.280 V      3.700 V
   311   16   4.280 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   40.00MV                   100.0MV
   350    7   40.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   168.0MV                   400.0MV
   409    5   162.0MV                   400.0MV
   415    7   170.0MV                   400.0MV
   421    9   188.0MV                   400.0MV
   427   12   178.0MV                   400.0MV
   433   14   164.0MV                   400.0MV
   439   16   164.0MV                   400.0MV
   445   18   168.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.790 V      5.200 V
   287    7   5.780 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.800 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   50.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   186.0MV                   400.0MV
   409    5   180.0MV                   400.0MV
   415    7   190.0MV                   400.0MV
   421    9   212.0MV                   400.0MV
   427   12   200.0MV                   400.0MV
   433   14   184.0MV                   400.0MV
   439   16   182.0MV                   400.0MV
   445   18   188.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   17.00NA     -1.000UA       1.000UA
   492    4  -5.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   3.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -5.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -6.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -6.000NA     -1.000UA       1.000UA
   551   19   3.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -157.0NA     -1.000UA       1.000UA
   581    3   52.00NA     -1.000UA       1.000UA
   586    5  -165.0NA     -1.000UA       1.000UA
   589    5   40.00NA     -1.000UA       1.000UA
   594    7  -160.0NA     -1.000UA       1.000UA
   597    7   39.00NA     -1.000UA       1.000UA
   602    9  -185.0NA     -1.000UA       1.000UA
   605    9   38.00NA     -1.000UA       1.000UA
   613   12  -219.0NA     -1.000UA       1.000UA
   616   12   41.00NA     -1.000UA       1.000UA
   621   14  -180.0NA     -1.000UA       1.000UA
   624   14   42.00NA     -1.000UA       1.000UA
   629   16  -188.0NA     -1.000UA       1.000UA
   632   16   42.00NA     -1.000UA       1.000UA
   637   18  -258.0NA     -1.000UA       1.000UA
   640   18   44.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 10

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-530.0MV	-1.500 V	-100.0MV
58	2	-530.0MV	-1.500 V	-100.0MV
58	4	-530.0MV	-1.500 V	-100.0MV
58	6	-530.0MV	-1.500 V	-100.0MV
58	8	-530.0MV	-1.500 V	-100.0MV
58	11	-530.0MV	-1.500 V	-100.0MV
58	13	-530.0MV	-1.500 V	-100.0MV
58	15	-530.0MV	-1.500 V	-100.0MV
58	17	-530.0MV	-1.500 V	-100.0MV
58	19	-530.0MV	-1.500 V	-100.0MV
68	3	310.0MV	100.0MV	1.500 V
68	5	320.0MV	100.0MV	1.500 V
68	7	320.0MV	100.0MV	1.500 V
68	9	310.0MV	100.0MV	1.500 V
68	12	310.0MV	100.0MV	1.500 V
68	14	310.0MV	100.0MV	1.500 V
68	16	310.0MV	100.0MV	1.500 V
68	18	300.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.980 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.970 V	1.900 V	
240	14	1.980 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	36.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	36.00MV		100.0MV

```
 ------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ------------------------------------------


 ---------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.970 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.850 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.840 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.850 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   38.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   132.0MV                   400.0MV
   409    5   132.0MV                   400.0MV
   415    7   138.0MV                   400.0MV
   421    9   150.0MV                   400.0MV
   427   12   144.0MV                   400.0MV
   433   14   132.0MV                   400.0MV
   439   16   132.0MV                   400.0MV
   445   18   134.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.300 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.280 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   42.00MV                   100.0MV
   368   14   42.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   162.0MV                   400.0MV
   409    5   160.0MV                   400.0MV
   415    7   168.0MV                   400.0MV
   421    9   188.0MV                   400.0MV
   427   12   176.0MV                   400.0MV
   433   14   162.0MV                   400.0MV
   439   16   158.0MV                   400.0MV
   445   18   164.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.790 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ----------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   54.00MV                   100.0MV
   344    5   54.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   52.00MV                   100.0MV
   362   12   52.00MV                   100.0MV
   368   14   52.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   184.0MV                   400.0MV
   409    5   178.0MV                   400.0MV
   415    7   190.0MV                   400.0MV
   421    9   212.0MV                   400.0MV
   427   12   198.0MV                   400.0MV
   433   14   182.0MV                   400.0MV
   439   16   180.0MV                   400.0MV
   445   18   182.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   18.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -6.000NA     -1.000UA       1.000UA
   511    8   4.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -6.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -5.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -314.0NA     -1.000UA       1.000UA
   581    3   72.00NA     -1.000UA       1.000UA
   586    5  -254.0NA     -1.000UA       1.000UA
   589    5   54.00NA     -1.000UA       1.000UA
   594    7  -244.0NA     -1.000UA       1.000UA
   597    7   53.00NA     -1.000UA       1.000UA
   602    9  -314.0NA     -1.000UA       1.000UA
   605    9   55.00NA     -1.000UA       1.000UA
   613   12  -368.0NA     -1.000UA       1.000UA
   616   12   55.00NA     -1.000UA       1.000UA
   621   14  -286.0NA     -1.000UA       1.000UA
   624   14   57.00NA     -1.000UA       1.000UA
   629   16  -319.0NA     -1.000UA       1.000UA
   632   16   60.00NA     -1.000UA       1.000UA
   637   18  -414.0NA     -1.000UA       1.000UA
   640   18   60.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 11

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-520.0MV	-1.500 V	-100.0MV
58	2	-520.0MV	-1.500 V	-100.0MV
58	4	-520.0MV	-1.500 V	-100.0MV
58	6	-520.0MV	-1.500 V	-100.0MV
58	8	-520.0MV	-1.500 V	-100.0MV
58	11	-520.0MV	-1.500 V	-100.0MV
58	13	-520.0MV	-1.500 V	-100.0MV
58	15	-520.0MV	-1.500 V	-100.0MV
58	17	-520.0MV	-1.500 V	-100.0MV
58	19	-520.0MV	-1.500 V	-100.0MV
68	3	330.0MV	100.0MV	1.500 V
68	5	330.0MV	100.0MV	1.500 V
68	7	340.0MV	100.0MV	1.500 V
68	9	330.0MV	100.0MV	1.500 V
68	12	320.0MV	100.0MV	1.500 V
68	14	330.0MV	100.0MV	1.500 V
68	16	330.0MV	100.0MV	1.500 V
68	18	310.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.970 V	1.900 V	
222	7	1.970 V	1.900 V	
228	9	1.970 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.980 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	34.00MV		100.0MV
362	12	36.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	36.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.980 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.980 V      2.900 V
   234   12   2.980 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.980 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.840 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.830 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.840 V      2.200 V
   317   18   2.860 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   34.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   34.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   36.00MV                   100.0MV
   380   18   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   134.0MV                   400.0MV
   409    5   134.0MV                   400.0MV
   415    7   138.0MV                   400.0MV
   421    9   152.0MV                   400.0MV
   427   12   146.0MV                   400.0MV
   433   14   134.0MV                   400.0MV
   439   16   132.0MV                   400.0MV
   445   18   140.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.280 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.280 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   42.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   40.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   40.00MV                   100.0MV
   380   18   40.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   162.0MV                   400.0MV
   409    5   158.0MV                   400.0MV
   415    7   168.0MV                   400.0MV
   421    9   186.0MV                   400.0MV
   427   12   178.0MV                   400.0MV
   433   14   162.0MV                   400.0MV
   439   16   162.0MV                   400.0MV
   445   18   166.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.780 V      5.200 V
   293    9   5.770 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   52.00MV                   100.0MV
   356    9   48.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   48.00MV                   100.0MV
   374   16   52.00MV                   100.0MV
   380   18   50.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   182.0MV                   400.0MV
   409    5   176.0MV                   400.0MV
   415    7   186.0MV                   400.0MV
   421    9   212.0MV                   400.0MV
   427   12   198.0MV                   400.0MV
   433   14   182.0MV                   400.0MV
   439   16   180.0MV                   400.0MV
   445   18   186.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   5.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   16.00NA     -1.000UA       1.000UA
   492    4  -5.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -5.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -5.000NA     -1.000UA       1.000UA
   511    8   3.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -5.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -5.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   3.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -120.0NA     -1.000UA       1.000UA
   581    3   43.00NA     -1.000UA       1.000UA
   586    5  -116.0NA     -1.000UA       1.000UA
   589    5   30.00NA     -1.000UA       1.000UA
   594    7  -103.0NA     -1.000UA       1.000UA
   597    7   29.00NA     -1.000UA       1.000UA
   602    9  -147.0NA     -1.000UA       1.000UA
   605    9   28.00NA     -1.000UA       1.000UA
   613   12  -168.0NA     -1.000UA       1.000UA
   616   12   30.00NA     -1.000UA       1.000UA
   621   14  -133.0NA     -1.000UA       1.000UA
   624   14   32.00NA     -1.000UA       1.000UA
   629   16  -125.0NA     -1.000UA       1.000UA
   632   16   33.00NA     -1.000UA       1.000UA
   637   18  -196.0NA     -1.000UA       1.000UA
   640   18   31.00NA     -1.000UA       1.000UA

 ------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 ------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

STAT1 08/27/11 06:41
TEST PROGRAM HC244 S/N 12

DDS-101-12-A PN 54HC244 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
58	1	-490.0MV	-1.500 V	-100.0MV
58	2	-490.0MV	-1.500 V	-100.0MV
58	4	-490.0MV	-1.500 V	-100.0MV
58	6	-490.0MV	-1.500 V	-100.0MV
58	8	-490.0MV	-1.500 V	-100.0MV
58	11	-490.0MV	-1.500 V	-100.0MV
58	13	-490.0MV	-1.500 V	-100.0MV
58	15	-490.0MV	-1.500 V	-100.0MV
58	17	-490.0MV	-1.500 V	-100.0MV
58	19	-490.0MV	-1.500 V	-100.0MV
68	3	300.0MV	100.0MV	1.500 V
68	5	300.0MV	100.0MV	1.500 V
68	7	300.0MV	100.0MV	1.500 V
68	9	290.0MV	100.0MV	1.500 V
68	12	290.0MV	100.0MV	1.500 V
68	14	290.0MV	100.0MV	1.500 V
68	16	290.0MV	100.0MV	1.500 V
68	18	290.0MV	100.0MV	1.500 V

FUNCTIONAL TEST
VCC= 2
VIH= 1.500 VIL= 500.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
210	3	1.970 V	1.900 V	
216	5	1.980 V	1.900 V	
222	7	1.980 V	1.900 V	
228	9	1.980 V	1.900 V	
234	12	1.980 V	1.900 V	
240	14	1.970 V	1.900 V	
246	16	1.980 V	1.900 V	
252	18	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
338	3	34.00MV		100.0MV
344	5	34.00MV		100.0MV
350	7	34.00MV		100.0MV
356	9	36.00MV		100.0MV
362	12	34.00MV		100.0MV
368	14	34.00MV		100.0MV
374	16	34.00MV		100.0MV
380	18	34.00MV		100.0MV

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        3
            VIH=    2.100      VIL=     900.0E-03
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        3
            VOH LIMIT   2.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   2.980 V      2.900 V
   216    5   2.970 V      2.900 V
   222    7   2.980 V      2.900 V
   228    9   2.970 V      2.900 V
   234   12   2.970 V      2.900 V
   240   14   2.980 V      2.900 V
   246   16   2.980 V      2.900 V
   252   18   2.970 V      2.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        3
            VOH2 LIMIT  2.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   2.850 V      2.200 V
   281    5   2.840 V      2.200 V
   287    7   2.840 V      2.200 V
   293    9   2.840 V      2.200 V
   299   12   2.840 V      2.200 V
   305   14   2.840 V      2.200 V
   311   16   2.850 V      2.200 V
   317   18   2.850 V      2.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        3
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   36.00MV                   100.0MV
   344    5   36.00MV                   100.0MV
   350    7   36.00MV                   100.0MV
   356    9   36.00MV                   100.0MV
   362   12   36.00MV                   100.0MV
   368   14   36.00MV                   100.0MV
   374   16   34.00MV                   100.0MV
   380   18   36.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   142.0MV                   400.0MV
   409    5   138.0MV                   400.0MV
   415    7   140.0MV                   400.0MV
   421    9   154.0MV                   400.0MV
   427   12   144.0MV                   400.0MV
   433   14   138.0MV                   400.0MV
   439   16   138.0MV                   400.0MV
   445   18   144.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=    4.500
            VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=    4.500
            VOH LIMIT   4.400
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   4.450 V      4.400 V
   216    5   4.450 V      4.400 V
   222    7   4.450 V      4.400 V
   228    9   4.450 V      4.400 V
   234   12   4.450 V      4.400 V
   240   14   4.450 V      4.400 V
   246   16   4.450 V      4.400 V
   252   18   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   4.290 V      3.700 V
   281    5   4.290 V      3.700 V
   287    7   4.290 V      3.700 V
   293    9   4.270 V      3.700 V
   299   12   4.280 V      3.700 V
   305   14   4.290 V      3.700 V
   311   16   4.290 V      3.700 V
   317   18   4.300 V      3.700 V

 ----------------------------------------
            VOL1  TEST
            VCC=    4.500
            VOL LIMIT   100.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   40.00MV                   100.0MV
   344    5   42.00MV                   100.0MV
   350    7   42.00MV                   100.0MV
   356    9   42.00MV                   100.0MV
   362   12   40.00MV                   100.0MV
   368   14   40.00MV                   100.0MV
   374   16   42.00MV                   100.0MV
   380   18   42.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   168.0MV                   400.0MV
   409    5   164.0MV                   400.0MV
   415    7   170.0MV                   400.0MV
   421    9   188.0MV                   400.0MV
   427   12   176.0MV                   400.0MV
   433   14   164.0MV                   400.0MV
   439   16   164.0MV                   400.0MV
   445   18   172.0MV                   400.0MV
```

```
 ---------------------------------------------
            FUNCTIONAL  TEST
            VCC=        6
            VIH=    4.200      VIL=     1.800
 ---------------------------------------------


 ----------------------------------------
            VOH1 TEST
            VCC=        6
            VOH LIMIT   5.900
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
   210    3   5.970 V      5.900 V
   216    5   5.970 V      5.900 V
   222    7   5.970 V      5.900 V
   228    9   5.970 V      5.900 V
   234   12   5.970 V      5.900 V
   240   14   5.970 V      5.900 V
   246   16   5.970 V      5.900 V
   252   18   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
   275    3   5.800 V      5.200 V
   281    5   5.800 V      5.200 V
   287    7   5.790 V      5.200 V
   293    9   5.780 V      5.200 V
   299   12   5.780 V      5.200 V
   305   14   5.790 V      5.200 V
   311   16   5.790 V      5.200 V
   317   18   5.810 V      5.200 V

 ---------------------------------------
            VOL1  TEST
            VCC=        6
            VOL LIMIT   100.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   338    3   52.00MV                   100.0MV
   344    5   52.00MV                   100.0MV
   350    7   50.00MV                   100.0MV
   356    9   50.00MV                   100.0MV
   362   12   50.00MV                   100.0MV
   368   14   50.00MV                   100.0MV
   374   16   50.00MV                   100.0MV
   380   18   52.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT            GT
   403    3   188.0MV                   400.0MV
   409    5   180.0MV                   400.0MV
   415    7   188.0MV                   400.0MV
   421    9   212.0MV                   400.0MV
   427   12   198.0MV                   400.0MV
   433   14   184.0MV                   400.0MV
   439   16   182.0MV                   400.0MV
   445   18   190.0MV                   400.0MV
```

```
 ---------------------------------
            IIN  TEST
            VCC= 6
            IIL/IIH LIMIT +- 0.1UA @25C/-55C
            IIL/IIH LIMIT +- 1.0UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   476    1  -4.000NA     -1.000UA       1.000UA
   479    1   6.000NA     -1.000UA       1.000UA
   484    2  -5.000NA     -1.000UA       1.000UA
   487    2   20.00NA     -1.000UA       1.000UA
   492    4  -6.000NA     -1.000UA       1.000UA
   495    4   4.000NA     -1.000UA       1.000UA
   500    6  -6.000NA     -1.000UA       1.000UA
   503    6   3.000NA     -1.000UA       1.000UA
   508    8  -6.000NA     -1.000UA       1.000UA
   511    8   5.000NA     -1.000UA       1.000UA
   516   11  -5.000NA     -1.000UA       1.000UA
   519   11   3.000NA     -1.000UA       1.000UA
   524   13  -6.000NA     -1.000UA       1.000UA
   527   13   3.000NA     -1.000UA       1.000UA
   532   15  -5.000NA     -1.000UA       1.000UA
   535   15   3.000NA     -1.000UA       1.000UA
   540   17  -5.000NA     -1.000UA       1.000UA
   543   17   2.000NA     -1.000UA       1.000UA
   548   19  -5.000NA     -1.000UA       1.000UA
   551   19   2.000NA     -1.000UA       1.000UA

 ---------------------------------
           IOZ  TEST
           VCC= 6
           IOZ LIMIT +- 0.5UA @25C/-55C
           IOZ LIMIT +-  10UA @+125C
 ---------------------------------

INST #  PIN   MEASURED        LT           GT
   578    3  -160.0NA     -1.000UA       1.000UA
   581    3   51.00NA     -1.000UA       1.000UA
   586    5  -184.0NA     -1.000UA       1.000UA
   589    5   38.00NA     -1.000UA       1.000UA
   594    7  -211.0NA     -1.000UA       1.000UA
   597    7   42.00NA     -1.000UA       1.000UA
   602    9  -255.0NA     -1.000UA       1.000UA
   605    9   40.00NA     -1.000UA       1.000UA
   613   12  -255.0NA     -1.000UA       1.000UA
   616   12   40.00NA     -1.000UA       1.000UA
   621   14  -236.0NA     -1.000UA       1.000UA
   624   14   43.00NA     -1.000UA       1.000UA
   629   16  -226.0NA     -1.000UA       1.000UA
   632   16   41.00NA     -1.000UA       1.000UA
   637   18  -234.0NA     -1.000UA       1.000UA
   640   18   36.00NA     -1.000UA       1.000UA

 -------------------------------------
          ICC  TEST
          VCC= 6
          ICC LIMIT MAX. 4.0UA @25C/-55C
          ICC LIMIT MAX. 160UA @+125C
 -------------------------------------

INST #  PIN   MEASURED        LT           GT
   672   20       0 A                  160.0UA
   679   20       0 A                  160.0UA


EIR 1.........10    FCT     DCT
    0000000000      PASS    PASS    EOT
```

Scanning Electron Microscopy (SEM) analysis

TANDEX TEST LABS, INC.

15849 Business Ctr. Dr. Irwindale CA. 91706
Phone: (626)-962-7166 Fax: (626)-960-6896

SCANNING ELECTRON MICROSCOPE ANALYSIS

DIE DEVICES
TTL Job # DDS-101-12-W
Date: June 28, 2018
Part Number: 54HC244
Part Type: CMOS LOGIC MICROCIRCUIT
Lot: Lot# 210144 D/C: 1810 WFR# 15
Quantity: Eight (8)
Purchase Order: SS139

Submitted by: _____
Jason A. Salinas
DPA/MTS

Approved by: Deborah M. Gorham
Deborah M. Gorham
Quality Assurance

TANDEX TEST LABS TTL Job # DDS-101-12-W

Summary

Eight (8) CMOS Logic Microcircuit P/N: 54HC244 were submitted by Die Devices for Scanning Electron Microscopy Analysis. This Analysis was performed in accordance with Mil-Std-883, Method 2018.6 The devices were assigned sample number 1 through 8 by Tandex Test Labs.

1. **Plasma Etching** Carbon Tetraflouride Gas 92% and 8% Oxygen was used to remove the glassivation. This etching is destructive and uneven in the rates of glass removal in various areas of the die.

2. **SEM Inspection** was performed on all eight devices. All eight devices revealed adequate metallization coverage and met the requirements of MIL-STD-883, Method 2018.6. See DPA form on page 3 and figures 1 through 3, for typical photographs.

Conclusion: This lot is acceptable for use.

TANDEX TEST LABS TTL Job # DDS-101-12-W
SEM EXAMINATION

TTL Job No.	Part Number	Part Type	Date
DDS-101-12-W	54HC244	CMOS Logic Microcircuit	June 25, 2018
Lot Date Code: WFR# 15 Lot# 210144 D/C: 1810	Sample Qty. 8	Serial Numbers 1 - 8	Test Specifications Mil-Std-883 Method 2018.6
Misc. ID No.	Qty . Accept 8	Qty. Reject 0	Qty. Suspect 0

Notes:

S/N	Investigation Findings / Comments	A/R/S
1	No Anomalies	A
2	No Anomalies	A
3	No Anomalies	A
4	No Anomalies	A
5	No Anomalies	A
6	No Anomalies	A
7	No Anomalies	A
8	No Anomalies	A

Each sample was inspected for the general metallization condition at a magnification between 1,000 X and 6,000 X over 25% of the total metallization (unless specified differently). Each sample was inspected from four (4) viewing directions at a magnification between 5,000 X and 20,000 X

Inspection required Yes: X No: Devices constructed with expanded Metallization Yes: X No:

Sample Glassivated Yes: X No: Dual Level Metallization Yes: No: X

Glassivation Removed Using: PLASMA ETCHING

Beam accelerating voltage **10kV to 20kV** Viewing angle **45 deg**

TTL 4

Technician Stamp:

TANDEX TEST LABS TTL Job # DDS-101-12-W

Photodocumentation

TANDEX TEST LABS TTL Job # DDS-101-12-W

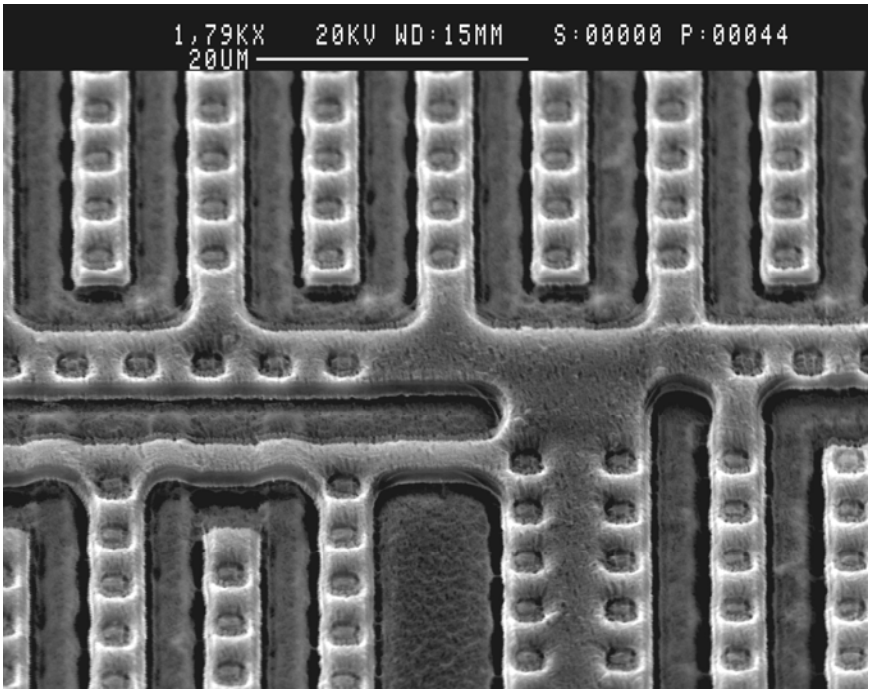

Fig: 1

Mag: 1,790X

S/N: 2

Description: SEM photograph of general metallization.

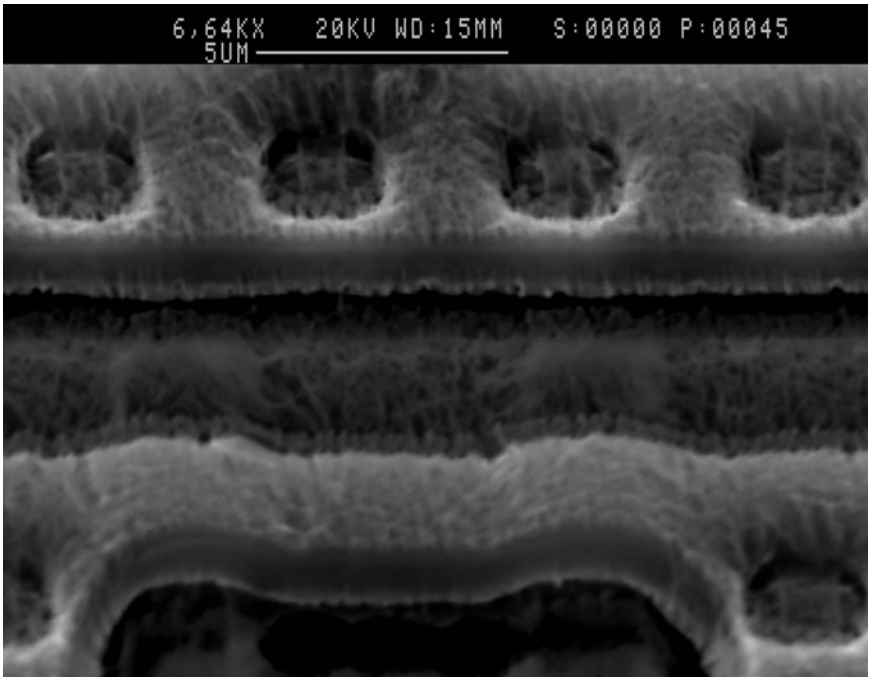

Fig: 2

Mag: 6,640X

S/N: 2

Description: SEM photograph of metallization typical step.

TANDEX TEST LABS TTL Job # DDS-101-12-W

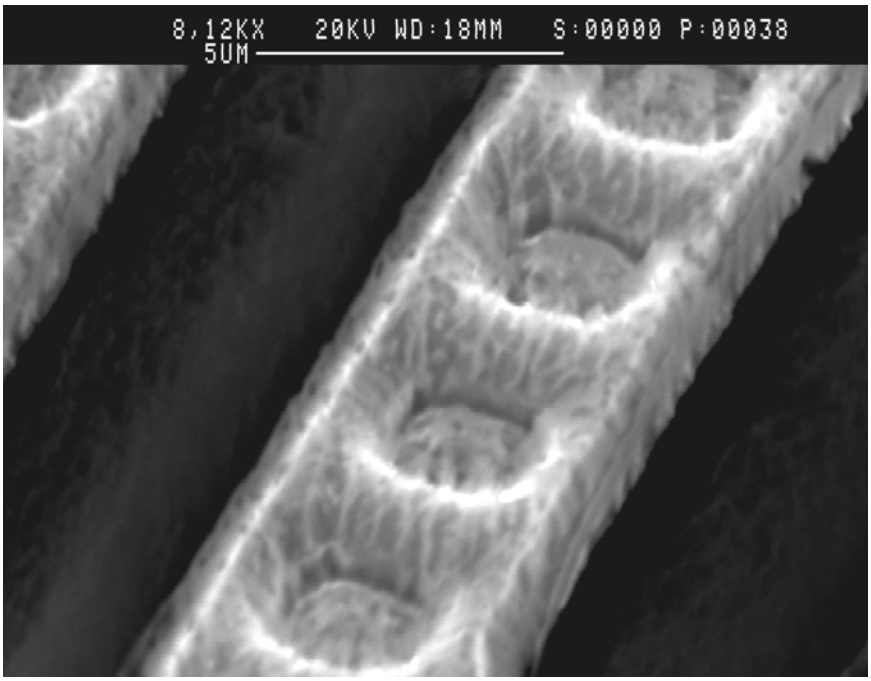

Fig: 3

Mag: 8,120X

S/N: 2

Description: SEM photograph of typical contact window device.

TANDEX TEST LABS, INC.

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e-mail: via web site

Certificate of Conformance

CUSTOMER:	Silicon Supplies Limited 47 Wherry Road Norwich, NR1, 1WS United Kingdom Vat GB# 114 3513 56	DATE: June 28, 2018	
TEST REPORT:	DDS-101-12-W	QUANTITY REQUIRED:	8
P.O. NUMBER:	SS139	QUANTITY PROCESSED:	8
DESCRIPTION:	CMOS LOGIC MICROCIRCUIT	QUANTITY PASSED:	8
PART NUMBER(S):	54HC244	QUANTITY FAILED:	0
MFG PART NUMBER	54HC244	QUANTITY SHIPPING:	8
LOT / DATE CODE:	LOT# 210144 WFR# 15 D/C: 1810		
MFG:	SILICON SUPPLIES		

METHOD OF TESTING: MIL-STD-883 METHOD 2018.6

I hereby certify that the subject components have been processed and inspected in accordance with instructions with specifications referenced in your purchase order. Physical records and/or data pertinent to applicable military, proprietary, and/or commercial specifications are on file and available upon request for inspection at this facility.

Deborah M. Gorham

QA TANDEX 2

Deborah M. Gorham
QUALITY ASSURANCE