Reliability Report – 54HC4060

High Speed CMOS Logic - 14-Stage Binary Ripple Counter / Divider with Oscillator

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

CONTENTS:

- Certificate of Conformance
- Process Flow Chart + Mechanical Test Results
- Pre Burn-In Electrical Test Results at -55°C, 25°C, 125°C
- Post Burn-In Electrical Test Results at -55°C, 25°C, 125°C
- Scanning Electron Microscopy (SEM) analysis.

Certificate of Conformance

TANDEX TEST LABS, INC.
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http://www.tandexlabs.com
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: January 18, 2019*	
TEST REPORT:	***DDS-101-09-A***	*QUANTITY RECEIVED:*	***30 DIE***
P.O. NUMBER:	***SS139***	*QUANTITY REQUIRED:*	*10/5/8*
DESCRIPTION:	***CMOS LOGIC MICROCIRCUIT***	*QUANTITY PROCESSED:*	*17*
PART NUMBER(S):	***54HC4060***	*QUANTITY PASSED:*	*17*
P/N: AS RECEIVED / MFG. PART NUMBER:	***54HC4060***	*QUANTITY FAILED:*	*0*
LOT / DATE CODE:	***1810 LOT# 200207 WF48***		
MANUFACTURE: CAGE CODE:	***SILICON SUPPLIES***	***QUANTITY SHIPPING:***	***17****
		INCLUDES: 10 PROCESS ACCEPT 5 BOND PULL DEVICES 2 SPARES	
TANDEX CAGE CODE:	***1FE65***	**8 DIE TRANSFERRED TO DDS-101-09-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

15849 BUSINESS CENTER DRIVE, IRWINDALE, CA. 91706 PH: (626)962-7166 FAX: (626) 960-6896

PROCESS FLOW CHART

FLOW NUMBER: DDS-101-09-A REV. 0

CUSTOMER:	DIE DEVICES	P.O. NUMBER:	SS139
PART NUMBER:	54HC4060	P/N AS RECEIVED:	54HC4060
PART TYPE:	CMOS LOGIC MICROCIRCUIT	DRAWING:	MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE:	7/12/18	JOB NUMBER:	DDS-101-09-A
LDC AS RECEIVED:	1810 LOT# 200207 WF48	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.
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. ESD MAT DUE DATE: 4/29/18. EQUIPMENT USED: Olympus . ASSET #: 20091	30	ø	30	4/5/18	TTL A
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: SCREENING	10+2	Ø	10+2	5/8/18	TTL 30
			EUTETIC Lot#: 149555 Exp. Date: N/A BOND PULL	5	Ø	5	5/8/18 LA	TTL 30
			ESD MAT DUE DATE: 5/27/18. SEM TRANSFER TO DDS-101-09-W MIL-STD-883 METHOD 2018 * **Package Type: 16 PIN DIP**	8	ø	8	4/5/18	TTL A
		P-4010	WIRE BOND: Utilize 1 Mil Au Wire (.001) 1 Mil Au bonder MECH-EL Asset #: 20060 Gold Wire: Lot# 900188915 Exp. Date: 3/21/2019	17	Ø LA	17	5/8/18	TTL 30

TANDEX TEST LABS INC.

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-09-A REV. 0

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC4060
P/N AS RECEIVED: 54HC4060
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-09-A
LDC AS RECEIVED: 1810 LOT# 200207 WF48
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: 5/27/18. EQUIPMENT USED: NIKON SMZ645 ASSET #: 30663	17	0	17	5/8/18	TTL 30
07	SEAL		SEAL DEVICES VACUUM BAKE: ESD MAT DUE DATE: 5/27/18. Pre Seal Bake Time: Temp: 125°C Time: 24hrs Actual time in: 10:15am – 5/8/18 Actual time out: 10:30am 5/9/18 FURNACE LDC STAMP Actual temp: 125°C 1818 TTL 27	10+2	0	12	5/9/18	TTL 27
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: SENTRY ASSET#: 1093 +25°C TEST FIXTURE: 1377/1210 SOFTWARE ID: 54HC4060 REV N/A	10+2	0	12	9/6/18	
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	9/7/18 5:57A.M 9/7/18 10:53A.M	TTL 48 TTL 48
10	ACCE		PERFORM CONSTANT ACCELERATION PER MIL-PRF-38534 MIL-STD-883 METHOD 2001. ESD MAT DUE DATE: 9/7/18 Y1 DIRECTION ONLY @ 3000 G's (min) EQUIPMENT USED: TRio Tech . ASSET #: 30260	10+2	0	10+2	9/10/18	TTL 52
11	SER		SERIALIZE ESD MAT DUE DATE: 9/10/18 01-12 S/N: 01-10	10+2	0	10+2	9/10/18	TTL 33

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-09-A

PART NUMBER 54HC 4060

DATE CODE 1810 LOT #200207 WF48

BURN-IN TIME 240hrs Min

θJC= N/A

TEMPERATURE TA = +125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5 VDC

VOLT METER# 31223

POWER SUPPLY# 31652

BOARD# 31259

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
10/31/18	7:00AM	VCC=+5 VDC	ICC=.01A	126.7°C	CM	
11/1/18	5:45AM	VCC=+5VDC	ICC=.01A	126.5°C	CM	
11/2/18	8:00AM	VCC=+5VDC	ICC=.01A	127.5°C	CM	
11/5/18	5:35AM	VCC=+5VDC	ICC=.01A	127.4°C	CM	
11/6/18	NO	DATA	TAKEN			
11/7/18	5:30AM	VCC=+5VDC	ICC=.01A	126.9°C	CM	
11/8/18	5:25AM	VCC=+5VDC	ICC=.01A	125.9°C	CM	
11/9/18	10:30AM	VCC=+5VDC	ICC=.01A	126.6°C	CM	
				~~126.4°C~~	~~CM~~	
11/12/18	5:40AM	VCC=+5VDC	ICC=.01A	126.4°C	CM	

TANDEX TEST LABS INC.

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15849 BUSINESS CENTER DRIVE, IRWINDALE, CA. 91706 PH: (626)962-7166 FAX: (626) 960-6896

PROCESS FLOW CHART

FLOW NUMBER: DDS-101-09-A REV. 0

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC4060
P/N AS RECEIVED: 54HC4060
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-09-A
LDC AS RECEIVED: 1810 LOT# 200207 WF48
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) DATE IN: / TIME IN: DATE OUT: / TIME OUT: BURN-IN BOARD # / DESC: 31259 BURN-IN OVEN #: 21 **ESD MAT DUE DATE:** 1/27/19	12 12	Ø Ø	12 12	11/20/18 10:00AM 1/2/19 6:15AM	TTL 13 TTL 53
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. unload STATIC AND FUNCTIONAL TESTS TEST +25°C WITHIN 96 HOURS +25°C - 55°C +125°C EQUIPMENT USED: Sentry 7 ASSET#: 1093 TEST FIXTURE: 1372/1210 SOFTWARE ID: C4060 REV N/A **ESD MAT DUE DATE:** 1/27/19	12 12 12 12	Ø Ø Ø Ø	12 12 12 12	1/2/19 1/2/19 1/2/19 1/2/19	TTL 23 QA TANDEX 5 #27 QA TANDEX 5 #27 QA TANDEX 5 #27
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 #: 30285	5	Ø	5	10/4/18	TTL 4
19	SEM		PULLED 8 DEVICES AT SEQ. 05 AND TRANSFERRED TO: DDS-101-09-W	8	Ø	8	4/5/18	QA TANDEX 5

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-09-A

PART NUMBER 54HC 4060

DATE CODE 1810 LOT #200207 WF48

BURN-IN TIME 1000hrs

θJC= N/A

TEMPERATURE TA = +125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5 VDC

VOLT METER# 31223

POWER SUPPLY# 31110

BOARD# 31259

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
11/20/18	11:00AM	VCC=+5VDC	ICC=.01A	125.2°C	CM	
11/21/18	4:20AM	VCC=+5VDC	ICC=.01A	125.6°C	CM	
11/22/18	NO	DATA	TAKEN			
11/23/18	NO	DATA	TAKEN			
11/26/18	5:30AM	VCC=+5VDC	ICC=.01A	125.9°C	CM	
11/27/18	5:10AM	VCC=+5VDC	ICC=.01A	126.1°C	CM	
11/28/18	5:40AM	VCC=+5VDC	ICC=.01A	126.6°C	CM	
11/29/18	6:05AM	VCC=+5VDC	ICC=.01A	126.8°C	CM	
11/30/18	5:00AM	VCC=+5VDC	ICC=.01A	126.5°C	CM	

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-09-A

PART NUMBER 54HC 4060

DATE CODE 1810 LOT #200207 WF48

BURN-IN TIME 1000hrs

θJC= N/A

TEMPERATURE TA = +125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5 VDC

VOLT METER# 31223

POWER SUPPLY# 31110

BOARD# 31259

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
12/3/18	5:45AM	VCC=+5VDC	ICC=.01A	126.3°C	CM	
12/4/18	5:25AM	VCC=+5VDC	ICC=.01A	126.1°C	CM	
12/5/18	7:20AM	VCC=+5VDC	ICC=.01A	126.7°C	CM	
12/6/18	5:50AM	VCC=+5VDC	ICC=.01A	126.8°C	CM	
12/7/18	NO	DATA	TAKEN			
12/10/18	5:30AM	VCC=+5VDC	ICC=.01A	126.8°C	CM	
12/11/18	5:40AM	VCC=+5VDC	ICC=.01A	127.2°C	CM	
12/12/18	8:05AM	VCC=+5VDC	ICC=.01A	126.4°C	CM	
12/13/18	5:35AM	VCC=+5VDC	ICC=.01A	125.9°C	CM	
12/14/18	NO	DATA	TAKEN			

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-09-A

PART NUMBER 54HC 4060

DATE CODE 1810 LOT #200207 WF48

BURN-IN TIME 1000 hrs

θJC= N/A

TEMPERATURE TA = +125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5 VDC

VOLT METER# 31223

POWER SUPPLY# 31110

BOARD# 31259

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
12/17/18	7:25 AM	VCC=+5V	ICC=.01A	127.2°C	CM	
12/18/18	7:15 AM	VCC=+5V	ICC=.01A	126.8°C	CM	
12/19/18	5:55 AM	VCC=+5V	ICC=.01A	126.6°C	CM	
12/20/18	6:20 AM	VCC=+5V	ICC=.01A	126.5°C	CM	
12/21/18	8:00 AM	VCC=+5V	ICC=.01A	126.9°C	CM	
12/24/18	~~8:00 AM~~ NO DATA TAKEN			~~126.9°C~~	~~CM~~	
12/25/18	NO DATA TAKEN					
12/26/18	6:15 AM	VCC=+5VDC	ICC=.01A	126.8°C	RM	
12/27/18	1:45 PM	VCC=+5VDC	ICC=.01A	127.1°C	RM	
12/28/18	NO DATA TAKEN					

TANDEX TEST LABS

BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-09-A

PART NUMBER 54HC 4060

DATE CODE 1810 LOT #200207 WF48

BURN-IN TIME 1000 hrs

θJC= N/A

TEMPERATURE TA = +125°C Min

TEMP. METER # 31368

VOLTAGE VCC = +5 VDC

VOLT METER# 31223

POWER SUPPLY# 3/110

BOARD# 31259

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
12/31/18	6:13AM	VCC=+5VDC	ICC=.01A	126.5°C	RM	
1/1/19	NO DATA TAKEN					
1/2/19	6:11AM	VCC=+5VDC	ICC=.01A	126.5°C	RM	

TANDEX TEST LABS TTL# DDS-101-09-A
BOND PULL
BOND STRENGTH TESTING

TTL Job No.	Part Number	Part Type	Date
DDS-101-09-A	54HC4060	CMOS LOGIC MICROCIRCUIT	October 4, 2018
Lot Date Code	**Sample Qty.**	**Serial Numbers**	**Test Specifications**
LOT# 200207 W# 48 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	4.5	G	1	2.5	G	1	2.5	G	1	4.5	G	1	6.5	G	1		
2	4.5	G	2	6.5	G	2	3.5	G	2	10.5	G	2	5.5	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.

TTL 4

TECHNICIAN STAMP:

TANDEX TEST LABS INC.

15849 BUSINESS CENTER DRIVE, IRWINDALE, CA. 91706 PH: (626)962-7166 FAX: (626) 960-6896

QMF22B

PROCESS FLOW CHART

FLOW NUMBER: DDS-101-09-A REV. 0

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC4060
P/N AS RECEIVED: 54HC4060
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-09-A
LDC AS RECEIVED: 1810 LOT# 200207 WF48
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: 1377/1210 SOFTWARE ID: 54HC4060 REV N/A TEMPERATURE SOAK 10 SEC.	12 12 12	0 0 0	12 12 12	10/26/18 10/26/18 10/26/18	CTM CTM CTM
			ESD MAT DUE DATE: 11/27/18.					
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: 31259 BURN-IN OVEN #: 21 DATE OUT: / TIME OUT:	12 12	0 0	12 12	10/31/18 7:00AM 11/12/18 5:40AM	TTL 13 TTL 13
			ESD MAT DUE DATE: 11/27/18.					
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 I ASSET#: 1093 TEST FIXTURE: 1377/1210 SOFTWARE ID: REV TEMPERATURE SOAK 10 SEC.	12 12 12	0 0 0	12 12 12	11/13/18 11/13/18 11/13/18	TTL 27 TTL 27 TTL 27
			ESD MAT DUE DATE: 11/27/18.					
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: 11/14/18.				11/20/18	QA TANDEX 5

TANDEX TEST LABS INC.

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-09-A REV. 0

CUSTOMER: DIE DEVICES
P.O. NUMBER: SS139
PART NUMBER: 54HC4060
P/N AS RECEIVED: 54HC4060
PART TYPE: CMOS LOGIC MICROCIRCUIT
DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
DUE DATE: 7/12/18
JOB NUMBER: DDS-101-09-A
LDC AS RECEIVED: 1810 LOT# 200207 WF48
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	1/18/19	QA TANDEX 5
21	PKG		USE ORIGINAL OR TANDEX PACKAGING.	17	Ø	17	1/18/19	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 ACCEPTS 5 BOND PULL 2 SPARES **8 TRANFERRED TO DDS-101-09-W FOR SEM	*17			1/18/19	QA TANDEX 5

Pre Burn-In Test Results at -55°C

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       1

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -710.0MV     -1.500 V      -100.0MV
    71    1   600.0MV      100.0MV       1.500 V
    71    2   610.0MV      100.0MV       1.500 V
    71    3   610.0MV      100.0MV       1.500 V
    71    4   610.0MV      100.0MV       1.500 V
    71    5   610.0MV      100.0MV       1.500 V
    71    6   610.0MV      100.0MV       1.500 V
    71    7   610.0MV      100.0MV       1.500 V
    71    9   680.0MV      100.0MV       1.500 V
    71   10   650.0MV      100.0MV       1.500 V
    71   13   610.0MV      100.0MV       1.500 V
    71   14   610.0MV      100.0MV       1.500 V
    71   15   620.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
```

1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.840 V	2.200 V	
1429	2	2.820 V	2.200 V	
1435	3	2.840 V	2.200 V	
1441	4	2.840 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.840 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.850 V	2.200 V	
1471	14	2.810 V	2.200 V	
1477	15	2.820 V	2.200 V	
1486	9	2.830 V	2.200 V	
1495	10	2.820 V	2.200 V	

VOL1 TEST
VCC= 3
VOL LIMIT 100.0E-03

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   108.0MV                   400.0MV
  1617    2   120.0MV                   400.0MV
  1623    3   100.0MV                   400.0MV
  1629    4   102.0MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   100.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   100.0MV                   400.0MV
  1659   14   136.0MV                   400.0MV
  1665   15   116.0MV                   400.0MV
  1674    9   142.0MV                   400.0MV
  1683   10   132.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V
```

```
 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT           GT
  1423    1   4.290 V      3.700 V
  1429    2   4.270 V      3.700 V
  1435    3   4.300 V      3.700 V
  1441    4   4.300 V      3.700 V
  1447    5   4.300 V      3.700 V
  1453    6   4.300 V      3.700 V
  1459    7   4.300 V      3.700 V
  1465   13   4.310 V      3.700 V
  1471   14   4.260 V      3.700 V
  1477   15   4.270 V      3.700 V
  1486    9   4.310 V      3.700 V
  1495   10   4.300 V      3.700 V

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

INST #  PIN   MEASURED        LT           GT
  1516    1   32.00MV                  100.0MV
  1522    2   32.00MV                  100.0MV
  1528    3   30.00MV                  100.0MV
  1534    4   32.00MV                  100.0MV
  1540    5   30.00MV                  100.0MV
  1546    6   30.00MV                  100.0MV
  1552    7   32.00MV                  100.0MV
  1558   13   30.00MV                  100.0MV
  1564   14   32.00MV                  100.0MV
  1570   15   32.00MV                  100.0MV
  1579    9   34.00MV                  100.0MV
  1588   10   32.00MV                  100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT           GT
  1611    1   118.0MV                  400.0MV
  1617    2   140.0MV                  400.0MV
  1623    3   108.0MV                  400.0MV
  1629    4   110.0MV                  400.0MV
  1635    5   106.0MV                  400.0MV
  1641    6   106.0MV                  400.0MV
  1647    7   104.0MV                  400.0MV
  1653   13   108.0MV                  400.0MV
  1659   14   164.0MV                  400.0MV
  1665   15   140.0MV                  400.0MV
  1674    9   136.0MV                  400.0MV
  1683   10   130.0MV                  400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------


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

```
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.800 V      5.200 V
  1429    2   5.780 V      5.200 V
  1435    3   5.820 V      5.200 V
  1441    4   5.810 V      5.200 V
  1447    5   5.820 V      5.200 V
  1453    6   5.810 V      5.200 V
  1459    7   5.810 V      5.200 V
  1465   13   5.820 V      5.200 V
  1471   14   5.760 V      5.200 V
  1477   15   5.780 V      5.200 V
  1486    9   5.820 V      5.200 V
  1495   10   5.810 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------
```

```
INST #  PIN   MEASURED        LT            GT
  1611    1   126.0MV                   400.0MV
  1617    2   152.0MV                   400.0MV
  1623    3   114.0MV                   400.0MV
  1629    4   116.0MV                   400.0MV
  1635    5   110.0MV                   400.0MV
  1641    6   112.0MV                   400.0MV
  1647    7   106.0MV                   400.0MV
  1653   13   114.0MV                   400.0MV
  1659   14   172.0MV                   400.0MV
  1665   15   152.0MV                   400.0MV
  1674    9   144.0MV                   400.0MV
  1683   10   138.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   53.00NA                   4.000UA
  1801   16   53.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       2

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   600.0MV      100.0MV       1.500 V
    71    2   610.0MV      100.0MV       1.500 V
    71    3   600.0MV      100.0MV       1.500 V
    71    4   610.0MV      100.0MV       1.500 V
    71    5   600.0MV      100.0MV       1.500 V
    71    6   610.0MV      100.0MV       1.500 V
    71    7   610.0MV      100.0MV       1.500 V
    71    9   680.0MV      100.0MV       1.500 V
    71   10   640.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   610.0MV      100.0MV       1.500 V
    71   15   610.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.980 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.870 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.870 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.860 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   110.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   92.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   90.00MV                   400.0MV
  1659   14   110.0MV                   400.0MV
  1665   15   108.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   116.0MV                   400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.330 V	3.700 V	
1471	14	4.300 V	3.700 V	
1477	15	4.300 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	108.0MV		400.0MV
1617	2	130.0MV		400.0MV
1623	3	100.0MV		400.0MV
1629	4	102.0MV		400.0MV
1635	5	98.00MV		400.0MV
1641	6	100.0MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	98.00MV		400.0MV
1659	14	132.0MV		400.0MV
1665	15	124.0MV		400.0MV
1674	9	128.0MV		400.0MV
1683	10	116.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.980 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.850 V      5.200 V
  1471   14   5.810 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.850 V      5.200 V
  1495   10   5.840 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   100.0MV                   400.0MV
  1641    6   100.0MV                   400.0MV
  1647    7   96.00MV                   400.0MV
  1653   13   102.0MV                   400.0MV
  1659   14   158.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   124.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   43.00NA                   4.000UA
  1801   16   42.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       3

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   610.0MV      100.0MV       1.500 V
    71    2   610.0MV      100.0MV       1.500 V
    71    3   610.0MV      100.0MV       1.500 V
    71    4   610.0MV      100.0MV       1.500 V
    71    5   610.0MV      100.0MV       1.500 V
    71    6   610.0MV      100.0MV       1.500 V
    71    7   610.0MV      100.0MV       1.500 V
    71    9   680.0MV      100.0MV       1.500 V
    71   10   640.0MV      100.0MV       1.500 V
    71   13   610.0MV      100.0MV       1.500 V
    71   14   610.0MV      100.0MV       1.500 V
    71   15   620.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	30.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.860 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.870 V	2.200 V	
1465	13	2.870 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.860 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   96.00MV                   400.0MV
  1617    2   108.0MV                   400.0MV
  1623    3   90.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   88.00MV                   400.0MV
  1641    6   88.00MV                   400.0MV
  1647    7   84.00MV                   400.0MV
  1653   13   88.00MV                   400.0MV
  1659   14   106.0MV                   400.0MV
  1665   15   106.0MV                   400.0MV
  1674    9   126.0MV                   400.0MV
  1683   10   114.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.330 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.330 V	3.700 V	
1471	14	4.300 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.340 V	3.700 V	
1495	10	4.330 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	108.0MV		400.0MV
1617	2	128.0MV		400.0MV
1623	3	100.0MV		400.0MV
1629	4	100.0MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	96.00MV		400.0MV
1647	7	92.00MV		400.0MV
1653	13	96.00MV		400.0MV
1659	14	126.0MV		400.0MV
1665	15	128.0MV		400.0MV
1674	9	124.0MV		400.0MV
1683	10	114.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.840 V      5.200 V
  1459    7   5.840 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.850 V      5.200 V
  1495   10   5.840 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   106.0MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   100.0MV                   400.0MV
  1647    7   96.00MV                   400.0MV
  1653   13   102.0MV                   400.0MV
  1659   14   140.0MV                   400.0MV
  1665   15   134.0MV                   400.0MV
  1674    9   128.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   35.00NA                   4.000UA
  1801   16   35.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       4

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -720.0MV     -1.500 V      -100.0MV
    61   12  -720.0MV     -1.500 V      -100.0MV
    71    1   620.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   620.0MV      100.0MV       1.500 V
    71    4   620.0MV      100.0MV       1.500 V
    71    5   620.0MV      100.0MV       1.500 V
    71    6   630.0MV      100.0MV       1.500 V
    71    7   630.0MV      100.0MV       1.500 V
    71    9   700.0MV      100.0MV       1.500 V
    71   10   660.0MV      100.0MV       1.500 V
    71   13   620.0MV      100.0MV       1.500 V
    71   14   630.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	30.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	34.00MV	100.0MV
1570	15	30.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   112.0MV                   400.0MV
  1623    3   94.00MV                   400.0MV
  1629    4   96.00MV                   400.0MV
  1635    5   92.00MV                   400.0MV
  1641    6   92.00MV                   400.0MV
  1647    7   92.00MV                   400.0MV
  1653   13   94.00MV                   400.0MV
  1659   14   116.0MV                   400.0MV
  1665   15   108.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.310 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.280 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.320 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	114.0MV		400.0MV
1617	2	134.0MV		400.0MV
1623	3	104.0MV		400.0MV
1629	4	106.0MV		400.0MV
1635	5	100.0MV		400.0MV
1641	6	102.0MV		400.0MV
1647	7	100.0MV		400.0MV
1653	13	104.0MV		400.0MV
1659	14	144.0MV		400.0MV
1665	15	130.0MV		400.0MV
1674	9	132.0MV		400.0MV
1683	10	124.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.790 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   400.0MV
  1617    2   144.0MV                   400.0MV
  1623    3   106.0MV                   400.0MV
  1629    4   110.0MV                   400.0MV
  1635    5   104.0MV                   400.0MV
  1641    6   106.0MV                   400.0MV
  1647    7   102.0MV                   400.0MV
  1653   13   106.0MV                   400.0MV
  1659   14   146.0MV                   400.0MV
  1665   15   140.0MV                   400.0MV
  1674    9   138.0MV                   400.0MV
  1683   10   130.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   34.00NA                   4.000UA
  1801   16   34.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       5

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -720.0MV     -1.500 V      -100.0MV
    61   12  -720.0MV     -1.500 V      -100.0MV
    71    1   610.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   620.0MV      100.0MV       1.500 V
    71    4   620.0MV      100.0MV       1.500 V
    71    5   620.0MV      100.0MV       1.500 V
    71    6   620.0MV      100.0MV       1.500 V
    71    7   620.0MV      100.0MV       1.500 V
    71    9   700.0MV      100.0MV       1.500 V
    71   10   660.0MV      100.0MV       1.500 V
    71   13   620.0MV      100.0MV       1.500 V
    71   14   620.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	30.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   110.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   112.0MV                   400.0MV
  1665   15   110.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.330 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	110.0MV		400.0MV
1617	2	128.0MV		400.0MV
1623	3	102.0MV		400.0MV
1629	4	102.0MV		400.0MV
1635	5	98.00MV		400.0MV
1641	6	98.00MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	102.0MV		400.0MV
1659	14	128.0MV		400.0MV
1665	15	128.0MV		400.0MV
1674	9	128.0MV		400.0MV
1683	10	122.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.980 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.790 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   102.0MV                   400.0MV
  1647    7   96.00MV                   400.0MV
  1653   13   102.0MV                   400.0MV
  1659   14   150.0MV                   400.0MV
  1665   15   134.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   128.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   37.00NA                   4.000UA
  1801   16   37.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       6

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -720.0MV     -1.500 V      -100.0MV
    61   12  -720.0MV     -1.500 V      -100.0MV
    71    1   620.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   620.0MV      100.0MV       1.500 V
    71    4   620.0MV      100.0MV       1.500 V
    71    5   620.0MV      100.0MV       1.500 V
    71    6   620.0MV      100.0MV       1.500 V
    71    7   630.0MV      100.0MV       1.500 V
    71    9   700.0MV      100.0MV       1.500 V
    71   10   660.0MV      100.0MV       1.500 V
    71   13   620.0MV      100.0MV       1.500 V
    71   14   620.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	30.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.850 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.850 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.840 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   112.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   92.00MV                   400.0MV
  1641    6   92.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   90.00MV                   400.0MV
  1659   14   108.0MV                   400.0MV
  1665   15   104.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   120.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.310 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.320 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	110.0MV		400.0MV
1617	2	128.0MV		400.0MV
1623	3	102.0MV		400.0MV
1629	4	104.0MV		400.0MV
1635	5	100.0MV		400.0MV
1641	6	102.0MV		400.0MV
1647	7	98.00MV		400.0MV
1653	13	100.0MV		400.0MV
1659	14	126.0MV		400.0MV
1665	15	126.0MV		400.0MV
1674	9	126.0MV		400.0MV
1683	10	122.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   400.0MV
  1617    2   142.0MV                   400.0MV
  1623    3   106.0MV                   400.0MV
  1629    4   108.0MV                   400.0MV
  1635    5   104.0MV                   400.0MV
  1641    6   102.0MV                   400.0MV
  1647    7   100.0MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   138.0MV                   400.0MV
  1665   15   136.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   130.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   38.00NA                   4.000UA
  1801   16   38.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       7

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -710.0MV     -1.500 V      -100.0MV
    61   12  -710.0MV     -1.500 V      -100.0MV
    71    1   610.0MV      100.0MV       1.500 V
    71    2   610.0MV      100.0MV       1.500 V
    71    3   620.0MV      100.0MV       1.500 V
    71    4   620.0MV      100.0MV       1.500 V
    71    5   620.0MV      100.0MV       1.500 V
    71    6   620.0MV      100.0MV       1.500 V
    71    7   620.0MV      100.0MV       1.500 V
    71    9   700.0MV      100.0MV       1.500 V
    71   10   650.0MV      100.0MV       1.500 V
    71   13   620.0MV      100.0MV       1.500 V
    71   14   620.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.860 V	2.200 V	
1429	2	2.850 V	2.200 V	
1435	3	2.870 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.870 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   96.00MV                   400.0MV
  1617    2   106.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   88.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   110.0MV                   400.0MV
  1665   15   106.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   118.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.320 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.280 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	30.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	110.0MV		400.0MV
1617	2	126.0MV		400.0MV
1623	3	98.00MV		400.0MV
1629	4	100.0MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	98.00MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	100.0MV		400.0MV
1659	14	218.0MV		400.0MV
1665	15	128.0MV		400.0MV
1674	9	126.0MV		400.0MV
1683	10	120.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.840 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.840 V      5.200 V
  1459    7   5.840 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.790 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   102.0MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   102.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   148.0MV                   400.0MV
  1665   15   134.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   124.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   41.00NA                   4.000UA
  1801   16   41.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       8

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -720.0MV     -1.500 V      -100.0MV
    61   12  -710.0MV     -1.500 V      -100.0MV
    71    1   610.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   620.0MV      100.0MV       1.500 V
    71    4   620.0MV      100.0MV       1.500 V
    71    5   620.0MV      100.0MV       1.500 V
    71    6   620.0MV      100.0MV       1.500 V
    71    7   620.0MV      100.0MV       1.500 V
    71    9   700.0MV      100.0MV       1.500 V
    71   10   660.0MV      100.0MV       1.500 V
    71   13   620.0MV      100.0MV       1.500 V
    71   14   620.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.850 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.830 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.840 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   112.0MV                   400.0MV
  1623    3   96.00MV                   400.0MV
  1629    4   96.00MV                   400.0MV
  1635    5   94.00MV                   400.0MV
  1641    6   96.00MV                   400.0MV
  1647    7   92.00MV                   400.0MV
  1653   13   94.00MV                   400.0MV
  1659   14   116.0MV                   400.0MV
  1665   15   108.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   124.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.310 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.310 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.280 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.320 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	28.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	112.0MV		400.0MV
1617	2	132.0MV		400.0MV
1623	3	102.0MV		400.0MV
1629	4	106.0MV		400.0MV
1635	5	102.0MV		400.0MV
1641	6	102.0MV		400.0MV
1647	7	100.0MV		400.0MV
1653	13	102.0MV		400.0MV
1659	14	134.0MV		400.0MV
1665	15	130.0MV		400.0MV
1674	9	130.0MV		400.0MV
1683	10	122.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.770 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.820 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   400.0MV
  1617    2   144.0MV                   400.0MV
  1623    3   106.0MV                   400.0MV
  1629    4   110.0MV                   400.0MV
  1635    5   106.0MV                   400.0MV
  1641    6   104.0MV                   400.0MV
  1647    7   102.0MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   160.0MV                   400.0MV
  1665   15   136.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   130.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   48.00NA                   4.000UA
  1801   16   48.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       9

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -720.0MV     -1.500 V      -100.0MV
    61   12  -720.0MV     -1.500 V      -100.0MV
    71    1   620.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   630.0MV      100.0MV       1.500 V
    71    4   630.0MV      100.0MV       1.500 V
    71    5   630.0MV      100.0MV       1.500 V
    71    6   630.0MV      100.0MV       1.500 V
    71    7   630.0MV      100.0MV       1.500 V
    71    9   710.0MV      100.0MV       1.500 V
    71   10   670.0MV      100.0MV       1.500 V
    71   13   630.0MV      100.0MV       1.500 V
    71   14   630.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   110.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   92.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   112.0MV                   400.0MV
  1665   15   106.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   118.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	112.0MV		400.0MV
1617	2	128.0MV		400.0MV
1623	3	100.0MV		400.0MV
1629	4	104.0MV		400.0MV
1635	5	98.00MV		400.0MV
1641	6	100.0MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	100.0MV		400.0MV
1659	14	134.0MV		400.0MV
1665	15	128.0MV		400.0MV
1674	9	128.0MV		400.0MV
1683	10	118.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   104.0MV                   400.0MV
  1629    4   106.0MV                   400.0MV
  1635    5   100.0MV                   400.0MV
  1641    6   104.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   144.0MV                   400.0MV
  1665   15   134.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   128.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   49.00NA                   4.000UA
  1801   16   48.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      10

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -720.0MV     -1.500 V      -100.0MV
    61   12  -720.0MV     -1.500 V      -100.0MV
    71    1   620.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   630.0MV      100.0MV       1.500 V
    71    4   630.0MV      100.0MV       1.500 V
    71    5   630.0MV      100.0MV       1.500 V
    71    6   630.0MV      100.0MV       1.500 V
    71    7   630.0MV      100.0MV       1.500 V
    71    9   700.0MV      100.0MV       1.500 V
    71   10   660.0MV      100.0MV       1.500 V
    71   13   630.0MV      100.0MV       1.500 V
    71   14   630.0MV      100.0MV       1.500 V
    71   15   640.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.860 V	2.200 V	
1429	2	2.850 V	2.200 V	
1435	3	2.870 V	2.200 V	
1441	4	2.870 V	2.200 V	
1447	5	2.870 V	2.200 V	
1453	6	2.870 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.870 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   96.00MV                   400.0MV
  1617    2   108.0MV                   400.0MV
  1623    3   90.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   88.00MV                   400.0MV
  1641    6   88.00MV                   400.0MV
  1647    7   86.00MV                   400.0MV
  1653   13   90.00MV                   400.0MV
  1659   14   108.0MV                   400.0MV
  1665   15   106.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   120.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.330 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.330 V	3.700 V	
1453	6	4.330 V	3.700 V	
1459	7	4.330 V	3.700 V	
1465	13	4.330 V	3.700 V	
1471	14	4.300 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	108.0MV		400.0MV
1617	2	126.0MV		400.0MV
1623	3	98.00MV		400.0MV
1629	4	100.0MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	98.00MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	98.00MV		400.0MV
1659	14	126.0MV		400.0MV
1665	15	126.0MV		400.0MV
1674	9	130.0MV		400.0MV
1683	10	120.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.840 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.840 V      5.200 V
  1459    7   5.840 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.810 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   100.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   100.0MV                   400.0MV
  1647    7   96.00MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   132.0MV                   400.0MV
  1665   15   136.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   130.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   49.00NA                   4.000UA
  1801   16   49.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      11

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -730.0MV     -1.500 V      -100.0MV
    61   12  -730.0MV     -1.500 V      -100.0MV
    71    1   630.0MV      100.0MV       1.500 V
    71    2   630.0MV      100.0MV       1.500 V
    71    3   630.0MV      100.0MV       1.500 V
    71    4   640.0MV      100.0MV       1.500 V
    71    5   630.0MV      100.0MV       1.500 V
    71    6   640.0MV      100.0MV       1.500 V
    71    7   640.0MV      100.0MV       1.500 V
    71    9   710.0MV      100.0MV       1.500 V
    71   10   670.0MV      100.0MV       1.500 V
    71   13   640.0MV      100.0MV       1.500 V
    71   14   640.0MV      100.0MV       1.500 V
    71   15   640.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	34.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.860 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   34.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   36.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   110.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   96.00MV                   400.0MV
  1635    5   92.00MV                   400.0MV
  1641    6   92.00MV                   400.0MV
  1647    7   88.00MV                   400.0MV
  1653   13   94.00MV                   400.0MV
  1659   14   110.0MV                   400.0MV
  1665   15   110.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

```
 1391    9   4.450 V      4.400 V
 1400   10   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
 1423    1   4.310 V      3.700 V
 1429    2   4.290 V      3.700 V
 1435    3   4.320 V      3.700 V
 1441    4   4.320 V      3.700 V
 1447    5   4.320 V      3.700 V
 1453    6   4.320 V      3.700 V
 1459    7   4.320 V      3.700 V
 1465   13   4.320 V      3.700 V
 1471   14   4.290 V      3.700 V
 1477   15   4.290 V      3.700 V
 1486    9   4.330 V      3.700 V
 1495   10   4.320 V      3.700 V

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

INST #  PIN   MEASURED        LT            GT
 1516    1   32.00MV                   100.0MV
 1522    2   32.00MV                   100.0MV
 1528    3   30.00MV                   100.0MV
 1534    4   30.00MV                   100.0MV
 1540    5   32.00MV                   100.0MV
 1546    6   32.00MV                   100.0MV
 1552    7   32.00MV                   100.0MV
 1558   13   32.00MV                   100.0MV
 1564   14   30.00MV                   100.0MV
 1570   15   32.00MV                   100.0MV
 1579    9   32.00MV                   100.0MV
 1588   10   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
 1611    1   112.0MV                   400.0MV
 1617    2   130.0MV                   400.0MV
 1623    3   102.0MV                   400.0MV
 1629    4   104.0MV                   400.0MV
 1635    5   100.0MV                   400.0MV
 1641    6   100.0MV                   400.0MV
 1647    7   96.00MV                   400.0MV
 1653   13   102.0MV                   400.0MV
 1659   14   130.0MV                   400.0MV
 1665   15   130.0MV                   400.0MV
 1674    9   132.0MV                   400.0MV
 1683   10   122.0MV                   400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   400.0MV
  1617    2   142.0MV                   400.0MV
  1623    3   106.0MV                   400.0MV
  1629    4   108.0MV                   400.0MV
  1635    5   104.0MV                   400.0MV
  1641    6   104.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   108.0MV                   400.0MV
  1659   14   138.0MV                   400.0MV
  1665   15   140.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   128.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   49.00NA                   4.000UA
  1801   16   49.00NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      12

DDS-101-09-A PN 54HC4060 TEST SEQ12 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -710.0MV     -1.500 V      -100.0MV
    61   12  -710.0MV     -1.500 V      -100.0MV
    71    1   610.0MV      100.0MV       1.500 V
    71    2   620.0MV      100.0MV       1.500 V
    71    3   620.0MV      100.0MV       1.500 V
    71    4   620.0MV      100.0MV       1.500 V
    71    5   620.0MV      100.0MV       1.500 V
    71    6   620.0MV      100.0MV       1.500 V
    71    7   630.0MV      100.0MV       1.500 V
    71    9   690.0MV      100.0MV       1.500 V
    71   10   650.0MV      100.0MV       1.500 V
    71   13   620.0MV      100.0MV       1.500 V
    71   14   630.0MV      100.0MV       1.500 V
    71   15   630.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.860 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.870 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.870 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.870 V	2.200 V	
1471	14	2.830 V	2.200 V	
1477	15	2.860 V	2.200 V	
1486	9	2.860 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   96.00MV                   400.0MV
  1617    2   108.0MV                   400.0MV
  1623    3   90.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   88.00MV                   400.0MV
  1647    7   86.00MV                   400.0MV
  1653   13   88.00MV                   400.0MV
  1659   14   130.0MV                   400.0MV
  1665   15   104.0MV                   400.0MV
  1674    9   126.0MV                   400.0MV
  1683   10   114.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.320 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.330 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.330 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.300 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.330 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	106.0MV		400.0MV
1617	2	126.0MV		400.0MV
1623	3	98.00MV		400.0MV
1629	4	98.00MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	96.00MV		400.0MV
1647	7	94.00MV		400.0MV
1653	13	96.00MV		400.0MV
1659	14	150.0MV		400.0MV
1665	15	122.0MV		400.0MV
1674	9	124.0MV		400.0MV
1683	10	114.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.980 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.840 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.850 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.810 V      5.200 V
  1486    9   5.850 V      5.200 V
  1495   10   5.840 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   112.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   100.0MV                   400.0MV
  1641    6   100.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   100.0MV                   400.0MV
  1659   14   150.0MV                   400.0MV
  1665   15   134.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   50.00NA                   4.000UA
  1801   16   50.00NA                   4.000UA


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

Pre Burn-In Test Results at 25°C

STAT1 10/26/11 07:35
TEST PROGRAM C4060 S/N 1

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-640.0MV	-1.500 V	-100.0MV
61	12	-640.0MV	-1.500 V	-100.0MV
71	1	540.0MV	100.0MV	1.500 V
71	2	540.0MV	100.0MV	1.500 V
71	3	540.0MV	100.0MV	1.500 V
71	4	540.0MV	100.0MV	1.500 V
71	5	540.0MV	100.0MV	1.500 V
71	6	540.0MV	100.0MV	1.500 V
71	7	540.0MV	100.0MV	1.500 V
71	9	600.0MV	100.0MV	1.500 V
71	10	570.0MV	100.0MV	1.500 V
71	13	540.0MV	100.0MV	1.500 V
71	14	540.0MV	100.0MV	1.500 V
71	15	550.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV

1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.480 V	
1429	2	2.790 V	2.480 V	
1435	3	2.820 V	2.480 V	
1441	4	2.810 V	2.480 V	
1447	5	2.820 V	2.480 V	
1453	6	2.820 V	2.480 V	
1459	7	2.810 V	2.480 V	
1465	13	2.820 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.790 V	2.480 V	
1486	9	2.790 V	2.480 V	
1495	10	2.790 V	2.480 V	

VOL1 TEST
VCC= 3
VOL LIMIT 100.0E-03

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   34.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   128.0MV                   260.0MV
  1617    2   146.0MV                   260.0MV
  1623    3   120.0MV                   260.0MV
  1629    4   120.0MV                   260.0MV
  1635    5   120.0MV                   260.0MV
  1641    6   118.0MV                   260.0MV
  1647    7   116.0MV                   260.0MV
  1653   13   120.0MV                   260.0MV
  1659   14   134.0MV                   260.0MV
  1665   15   138.0MV                   260.0MV
  1674    9   172.0MV                   260.0MV
  1683   10   158.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V
```

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

INST #  PIN   MEASURED        LT           GT
  1423    1   4.250 V      3.980 V
  1429    2   4.220 V      3.980 V
  1435    3   4.270 V      3.980 V
  1441    4   4.260 V      3.980 V
  1447    5   4.270 V      3.980 V
  1453    6   4.260 V      3.980 V
  1459    7   4.260 V      3.980 V
  1465   13   4.270 V      3.980 V
  1471   14   4.250 V      3.980 V
  1477   15   4.230 V      3.980 V
  1486    9   4.270 V      3.980 V
  1495   10   4.260 V      3.980 V

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

INST #  PIN   MEASURED        LT           GT
  1516    1   32.00MV                  100.0MV
  1522    2   32.00MV                  100.0MV
  1528    3   30.00MV                  100.0MV
  1534    4   30.00MV                  100.0MV
  1540    5   32.00MV                  100.0MV
  1546    6   30.00MV                  100.0MV
  1552    7   30.00MV                  100.0MV
  1558   13   32.00MV                  100.0MV
  1564   14   30.00MV                  100.0MV
  1570   15   32.00MV                  100.0MV
  1579    9   32.00MV                  100.0MV
  1588   10   34.00MV                  100.0MV

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

INST #  PIN   MEASURED        LT           GT
  1611    1   144.0MV                  260.0MV
  1617    2   176.0MV                  260.0MV
  1623    3   134.0MV                  260.0MV
  1629    4   136.0MV                  260.0MV
  1635    5   130.0MV                  260.0MV
  1641    6   134.0MV                  260.0MV
  1647    7   130.0MV                  260.0MV
  1653   13   136.0MV                  260.0MV
  1659   14   156.0MV                  260.0MV
  1665   15   166.0MV                  260.0MV
  1674    9   170.0MV                  260.0MV
  1683   10   158.0MV                  260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------


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

```
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.760 V      5.480 V
  1429    2   5.730 V      5.480 V
  1435    3   5.780 V      5.480 V
  1441    4   5.780 V      5.480 V
  1447    5   5.770 V      5.480 V
  1453    6   5.770 V      5.480 V
  1459    7   5.780 V      5.480 V
  1465   13   5.780 V      5.480 V
  1471   14   5.750 V      5.480 V
  1477   15   5.740 V      5.480 V
  1486    9   5.780 V      5.480 V
  1495   10   5.770 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

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

```
INST #  PIN   MEASURED        LT            GT
  1611    1   152.0MV                   260.0MV
  1617    2   184.0MV                   260.0MV
  1623    3   138.0MV                   260.0MV
  1629    4   138.0MV                   260.0MV
  1635    5   134.0MV                   260.0MV
  1641    6   136.0MV                   260.0MV
  1647    7   130.0MV                   260.0MV
  1653   13   138.0MV                   260.0MV
  1659   14   164.0MV                   260.0MV
  1665   15   176.0MV                   260.0MV
  1674    9   174.0MV                   260.0MV
  1683   10   166.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   117.0NA                  4.000UA
  1801   16   116.0NA                  4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       2

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.850 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.830 V	2.480 V	
1495	10	2.820 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   112.0MV                   260.0MV
  1617    2   132.0MV                   260.0MV
  1623    3   108.0MV                   260.0MV
  1629    4   108.0MV                   260.0MV
  1635    5   106.0MV                   260.0MV
  1641    6   106.0MV                   260.0MV
  1647    7   104.0MV                   260.0MV
  1653   13   106.0MV                   260.0MV
  1659   14   138.0MV                   260.0MV
  1665   15   122.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   136.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.280 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.290 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.290 V	3.980 V	
1459	7	4.290 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.240 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.300 V	3.980 V	
1495	10	4.290 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	130.0MV		260.0MV
1617	2	160.0MV		260.0MV
1623	3	120.0MV		260.0MV
1629	4	122.0MV		260.0MV
1635	5	120.0MV		260.0MV
1641	6	118.0MV		260.0MV
1647	7	116.0MV		260.0MV
1653	13	120.0MV		260.0MV
1659	14	172.0MV		260.0MV
1665	15	152.0MV		260.0MV
1674	9	156.0MV		260.0MV
1683	10	142.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.790 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.810 V      5.480 V
  1471   14   5.740 V      5.480 V
  1477   15   5.760 V      5.480 V
  1486    9   5.810 V      5.480 V
  1495   10   5.800 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   260.0MV
  1617    2   170.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   126.0MV                   260.0MV
  1635    5   120.0MV                   260.0MV
  1641    6   122.0MV                   260.0MV
  1647    7   120.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   188.0MV                   260.0MV
  1665   15   158.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   148.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   136.0NA                   4.000UA
  1801   16   135.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       3

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   570.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.840 V	2.480 V	
1495	10	2.830 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   112.0MV                   260.0MV
  1617    2   128.0MV                   260.0MV
  1623    3   106.0MV                   260.0MV
  1629    4   106.0MV                   260.0MV
  1635    5   102.0MV                   260.0MV
  1641    6   102.0MV                   260.0MV
  1647    7   100.0MV                   260.0MV
  1653   13   104.0MV                   260.0MV
  1659   14   126.0MV                   260.0MV
  1665   15   122.0MV                   260.0MV
  1674    9   152.0MV                   260.0MV
  1683   10   134.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.280 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.290 V	3.980 V	
1441	4	4.290 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.290 V	3.980 V	
1459	7	4.290 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.310 V	3.980 V	
1495	10	4.300 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	128.0MV		260.0MV
1617	2	154.0MV		260.0MV
1623	3	118.0MV		260.0MV
1629	4	120.0MV		260.0MV
1635	5	114.0MV		260.0MV
1641	6	116.0MV		260.0MV
1647	7	112.0MV		260.0MV
1653	13	118.0MV		260.0MV
1659	14	152.0MV		260.0MV
1665	15	148.0MV		260.0MV
1674	9	152.0MV		260.0MV
1683	10	136.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.790 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.760 V      5.480 V
  1486    9   5.810 V      5.480 V
  1495   10   5.810 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   134.0MV                   260.0MV
  1617    2   166.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   124.0MV                   260.0MV
  1635    5   116.0MV                   260.0MV
  1641    6   120.0MV                   260.0MV
  1647    7   114.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   162.0MV                   260.0MV
  1665   15   158.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   144.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   105.0NA                   4.000UA
  1801   16   104.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       4

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	30.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   260.0MV
  1617    2   130.0MV                   260.0MV
  1623    3   110.0MV                   260.0MV
  1629    4   112.0MV                   260.0MV
  1635    5   106.0MV                   260.0MV
  1641    6   110.0MV                   260.0MV
  1647    7   104.0MV                   260.0MV
  1653   13   108.0MV                   260.0MV
  1659   14   124.0MV                   260.0MV
  1665   15   126.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   142.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.300 V	3.980 V	
1495	10	4.290 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	134.0MV		260.0MV
1617	2	158.0MV		260.0MV
1623	3	124.0MV		260.0MV
1629	4	124.0MV		260.0MV
1635	5	120.0MV		260.0MV
1641	6	120.0MV		260.0MV
1647	7	118.0MV		260.0MV
1653	13	122.0MV		260.0MV
1659	14	150.0MV		260.0MV
1665	15	152.0MV		260.0MV
1674	9	158.0MV		260.0MV
1683	10	146.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.760 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   170.0MV                   260.0MV
  1623    3   126.0MV                   260.0MV
  1629    4   128.0MV                   260.0MV
  1635    5   122.0MV                   260.0MV
  1641    6   124.0MV                   260.0MV
  1647    7   120.0MV                   260.0MV
  1653   13   126.0MV                   260.0MV
  1659   14   164.0MV                   260.0MV
  1665   15   162.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   152.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   118.0NA                   4.000UA
  1801   16   117.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       5

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	34.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	30.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   260.0MV
  1617    2   132.0MV                   260.0MV
  1623    3   110.0MV                   260.0MV
  1629    4   112.0MV                   260.0MV
  1635    5   110.0MV                   260.0MV
  1641    6   108.0MV                   260.0MV
  1647    7   108.0MV                   260.0MV
  1653   13   112.0MV                   260.0MV
  1659   14   142.0MV                   260.0MV
  1665   15   130.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   146.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.230 V	3.980 V	
1477	15	4.250 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	136.0MV		260.0MV
1617	2	156.0MV		260.0MV
1623	3	124.0MV		260.0MV
1629	4	126.0MV		260.0MV
1635	5	120.0MV		260.0MV
1641	6	122.0MV		260.0MV
1647	7	120.0MV		260.0MV
1653	13	124.0MV		260.0MV
1659	14	174.0MV		260.0MV
1665	15	156.0MV		260.0MV
1674	9	160.0MV		260.0MV
1683	10	148.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.740 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   168.0MV                   260.0MV
  1623    3   128.0MV                   260.0MV
  1629    4   130.0MV                   260.0MV
  1635    5   122.0MV                   260.0MV
  1641    6   126.0MV                   260.0MV
  1647    7   122.0MV                   260.0MV
  1653   13   128.0MV                   260.0MV
  1659   14   178.0MV                   260.0MV
  1665   15   164.0MV                   260.0MV
  1674    9   166.0MV                   260.0MV
  1683   10   156.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   115.0NA                   4.000UA
  1801   16   114.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       6

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   560.0MV      100.0MV       1.500 V
    71    7   560.0MV      100.0MV       1.500 V
    71    9   620.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   560.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	30.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.820 V	2.480 V	
1459	7	2.820 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.810 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   260.0MV
  1617    2   132.0MV                   260.0MV
  1623    3   112.0MV                   260.0MV
  1629    4   112.0MV                   260.0MV
  1635    5   112.0MV                   260.0MV
  1641    6   110.0MV                   260.0MV
  1647    7   110.0MV                   260.0MV
  1653   13   110.0MV                   260.0MV
  1659   14   124.0MV                   260.0MV
  1665   15   126.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   148.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.260 V	3.980 V	
1429	2	4.240 V	3.980 V	
1435	3	4.270 V	3.980 V	
1441	4	4.270 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.270 V	3.980 V	
1459	7	4.270 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.250 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	136.0MV		260.0MV
1617	2	156.0MV		260.0MV
1623	3	124.0MV		260.0MV
1629	4	126.0MV		260.0MV
1635	5	122.0MV		260.0MV
1641	6	124.0MV		260.0MV
1647	7	120.0MV		260.0MV
1653	13	124.0MV		260.0MV
1659	14	146.0MV		260.0MV
1665	15	152.0MV		260.0MV
1674	9	160.0MV		260.0MV
1683	10	148.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.770 V      5.480 V
  1429    2   5.740 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.780 V      5.480 V
  1447    5   5.790 V      5.480 V
  1453    6   5.780 V      5.480 V
  1459    7   5.780 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   168.0MV                   260.0MV
  1623    3   128.0MV                   260.0MV
  1629    4   130.0MV                   260.0MV
  1635    5   126.0MV                   260.0MV
  1641    6   128.0MV                   260.0MV
  1647    7   124.0MV                   260.0MV
  1653   13   128.0MV                   260.0MV
  1659   14   156.0MV                   260.0MV
  1665   15   164.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   154.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   113.0NA                   4.000UA
  1801   16   113.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       7

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   128.0MV                   260.0MV
  1623    3   108.0MV                   260.0MV
  1629    4   110.0MV                   260.0MV
  1635    5   106.0MV                   260.0MV
  1641    6   108.0MV                   260.0MV
  1647    7   106.0MV                   260.0MV
  1653   13   108.0MV                   260.0MV
  1659   14   134.0MV                   260.0MV
  1665   15   128.0MV                   260.0MV
  1674    9   158.0MV                   260.0MV
  1683   10   144.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

```
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   4.270 V      3.980 V
  1429    2   4.260 V      3.980 V
  1435    3   4.290 V      3.980 V
  1441    4   4.290 V      3.980 V
  1447    5   4.290 V      3.980 V
  1453    6   4.280 V      3.980 V
  1459    7   4.290 V      3.980 V
  1465   13   4.290 V      3.980 V
  1471   14   4.250 V      3.980 V
  1477   15   4.250 V      3.980 V
  1486    9   4.290 V      3.980 V
  1495   10   4.290 V      3.980 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   132.0MV                   260.0MV
  1617    2   152.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   122.0MV                   260.0MV
  1635    5   118.0MV                   260.0MV
  1641    6   120.0MV                   260.0MV
  1647    7   116.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   160.0MV                   260.0MV
  1665   15   154.0MV                   260.0MV
  1674    9   158.0MV                   260.0MV
  1683   10   146.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.750 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   260.0MV
  1617    2   166.0MV                   260.0MV
  1623    3   124.0MV                   260.0MV
  1629    4   126.0MV                   260.0MV
  1635    5   122.0MV                   260.0MV
  1641    6   124.0MV                   260.0MV
  1647    7   118.0MV                   260.0MV
  1653   13   128.0MV                   260.0MV
  1659   14   168.0MV                   260.0MV
  1665   15   166.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   154.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   112.0NA                   4.000UA
  1801   16   112.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       8

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.800 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.820 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.820 V	2.480 V	
1459	7	2.820 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.810 V	2.480 V	
1495	10	2.800 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   260.0MV
  1617    2   136.0MV                   260.0MV
  1623    3   114.0MV                   260.0MV
  1629    4   116.0MV                   260.0MV
  1635    5   112.0MV                   260.0MV
  1641    6   114.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   112.0MV                   260.0MV
  1659   14   132.0MV                   260.0MV
  1665   15   132.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   150.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.260 V	3.980 V	
1429	2	4.240 V	3.980 V	
1435	3	4.270 V	3.980 V	
1441	4	4.270 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.270 V	3.980 V	
1459	7	4.270 V	3.980 V	
1465	13	4.270 V	3.980 V	
1471	14	4.240 V	3.980 V	
1477	15	4.240 V	3.980 V	
1486	9	4.280 V	3.980 V	
1495	10	4.270 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	136.0MV		260.0MV
1617	2	160.0MV		260.0MV
1623	3	128.0MV		260.0MV
1629	4	130.0MV		260.0MV
1635	5	126.0MV		260.0MV
1641	6	126.0MV		260.0MV
1647	7	124.0MV		260.0MV
1653	13	128.0MV		260.0MV
1659	14	158.0MV		260.0MV
1665	15	162.0MV		260.0MV
1674	9	162.0MV		260.0MV
1683	10	150.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.770 V      5.480 V
  1429    2   5.740 V      5.480 V
  1435    3   5.780 V      5.480 V
  1441    4   5.780 V      5.480 V
  1447    5   5.790 V      5.480 V
  1453    6   5.780 V      5.480 V
  1459    7   5.780 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.740 V      5.480 V
  1477   15   5.740 V      5.480 V
  1486    9   5.790 V      5.480 V
  1495   10   5.780 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   144.0MV                   260.0MV
  1617    2   174.0MV                   260.0MV
  1623    3   130.0MV                   260.0MV
  1629    4   134.0MV                   260.0MV
  1635    5   128.0MV                   260.0MV
  1641    6   130.0MV                   260.0MV
  1647    7   128.0MV                   260.0MV
  1653   13   130.0MV                   260.0MV
  1659   14   174.0MV                   260.0MV
  1665   15   174.0MV                   260.0MV
  1674    9   168.0MV                   260.0MV
  1683   10   158.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   114.0NA                   4.000UA
  1801   16   114.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       9

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   560.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   260.0MV
  1617    2   130.0MV                   260.0MV
  1623    3   112.0MV                   260.0MV
  1629    4   112.0MV                   260.0MV
  1635    5   110.0MV                   260.0MV
  1641    6   110.0MV                   260.0MV
  1647    7   108.0MV                   260.0MV
  1653   13   110.0MV                   260.0MV
  1659   14   130.0MV                   260.0MV
  1665   15   130.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   144.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.250 V	3.980 V	
1477	15	4.250 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	136.0MV		260.0MV
1617	2	156.0MV		260.0MV
1623	3	124.0MV		260.0MV
1629	4	126.0MV		260.0MV
1635	5	120.0MV		260.0MV
1641	6	122.0MV		260.0MV
1647	7	120.0MV		260.0MV
1653	13	124.0MV		260.0MV
1659	14	152.0MV		260.0MV
1665	15	160.0MV		260.0MV
1674	9	160.0MV		260.0MV
1683	10	148.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.790 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   168.0MV                   260.0MV
  1623    3   128.0MV                   260.0MV
  1629    4   130.0MV                   260.0MV
  1635    5   124.0MV                   260.0MV
  1641    6   126.0MV                   260.0MV
  1647    7   120.0MV                   260.0MV
  1653   13   128.0MV                   260.0MV
  1659   14   162.0MV                   260.0MV
  1665   15   170.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   156.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   113.0NA                   4.000UA
  1801   16   113.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      10

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	30.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   260.0MV
  1617    2   130.0MV                   260.0MV
  1623    3   108.0MV                   260.0MV
  1629    4   110.0MV                   260.0MV
  1635    5   108.0MV                   260.0MV
  1641    6   108.0MV                   260.0MV
  1647    7   106.0MV                   260.0MV
  1653   13   110.0MV                   260.0MV
  1659   14   128.0MV                   260.0MV
  1665   15   130.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   144.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.460 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.260 V	3.980 V	
1435	3	4.290 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.250 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	134.0MV		260.0MV
1617	2	154.0MV		260.0MV
1623	3	122.0MV		260.0MV
1629	4	122.0MV		260.0MV
1635	5	118.0MV		260.0MV
1641	6	120.0MV		260.0MV
1647	7	116.0MV		260.0MV
1653	13	122.0MV		260.0MV
1659	14	150.0MV		260.0MV
1665	15	158.0MV		260.0MV
1674	9	160.0MV		260.0MV
1683	10	148.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.980 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   260.0MV
  1617    2   168.0MV                   260.0MV
  1623    3   126.0MV                   260.0MV
  1629    4   128.0MV                   260.0MV
  1635    5   122.0MV                   260.0MV
  1641    6   122.0MV                   260.0MV
  1647    7   118.0MV                   260.0MV
  1653   13   126.0MV                   260.0MV
  1659   14   166.0MV                   260.0MV
  1665   15   168.0MV                   260.0MV
  1674    9   166.0MV                   260.0MV
  1683   10   156.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   113.0NA                   4.000UA
  1801   16   112.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      11

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -650.0MV     -1.500 V      -100.0MV
    61   12  -650.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	30.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.790 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   36.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   260.0MV
  1617    2   130.0MV                   260.0MV
  1623    3   112.0MV                   260.0MV
  1629    4   112.0MV                   260.0MV
  1635    5   108.0MV                   260.0MV
  1641    6   110.0MV                   260.0MV
  1647    7   106.0MV                   260.0MV
  1653   13   112.0MV                   260.0MV
  1659   14   150.0MV                   260.0MV
  1665   15   130.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   146.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.230 V	3.980 V	
1477	15	4.250 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	136.0MV		260.0MV
1617	2	156.0MV		260.0MV
1623	3	124.0MV		260.0MV
1629	4	124.0MV		260.0MV
1635	5	122.0MV		260.0MV
1641	6	122.0MV		260.0MV
1647	7	118.0MV		260.0MV
1653	13	124.0MV		260.0MV
1659	14	174.0MV		260.0MV
1665	15	158.0MV		260.0MV
1674	9	160.0MV		260.0MV
1683	10	148.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.750 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   168.0MV                   260.0MV
  1623    3   128.0MV                   260.0MV
  1629    4   130.0MV                   260.0MV
  1635    5   122.0MV                   260.0MV
  1641    6   124.0MV                   260.0MV
  1647    7   120.0MV                   260.0MV
  1653   13   128.0MV                   260.0MV
  1659   14   170.0MV                   260.0MV
  1665   15   164.0MV                   260.0MV
  1674    9   166.0MV                   260.0MV
  1683   10   156.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   114.0NA                   4.000UA
  1801   16   113.0NA                   4.000UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      12

DDS-101-09-A PN 54HC4060 TEST SEQ12 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -640.0MV     -1.500 V      -100.0MV
    61   12  -640.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   540.0MV      100.0MV       1.500 V
    71    3   540.0MV      100.0MV       1.500 V
    71    4   540.0MV      100.0MV       1.500 V
    71    5   540.0MV      100.0MV       1.500 V
    71    6   540.0MV      100.0MV       1.500 V
    71    7   540.0MV      100.0MV       1.500 V
    71    9   600.0MV      100.0MV       1.500 V
    71   10   560.0MV      100.0MV       1.500 V
    71   13   540.0MV      100.0MV       1.500 V
    71   14   540.0MV      100.0MV       1.500 V
    71   15   540.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.830 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.830 V	2.480 V	
1495	10	2.820 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   112.0MV                   260.0MV
  1617    2   128.0MV                   260.0MV
  1623    3   108.0MV                   260.0MV
  1629    4   108.0MV                   260.0MV
  1635    5   106.0MV                   260.0MV
  1641    6   106.0MV                   260.0MV
  1647    7   104.0MV                   260.0MV
  1653   13   106.0MV                   260.0MV
  1659   14   118.0MV                   260.0MV
  1665   15   120.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   136.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.280 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.290 V	3.980 V	
1441	4	4.290 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.280 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.300 V	3.980 V	
1495	10	4.290 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	130.0MV		260.0MV
1617	2	152.0MV		260.0MV
1623	3	122.0MV		260.0MV
1629	4	122.0MV		260.0MV
1635	5	116.0MV		260.0MV
1641	6	118.0MV		260.0MV
1647	7	114.0MV		260.0MV
1653	13	118.0MV		260.0MV
1659	14	140.0MV		260.0MV
1665	15	148.0MV		260.0MV
1674	9	156.0MV		260.0MV
1683	10	138.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.980 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.790 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.810 V      5.480 V
  1471   14   5.780 V      5.480 V
  1477   15   5.760 V      5.480 V
  1486    9   5.810 V      5.480 V
  1495   10   5.800 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   138.0MV                   260.0MV
  1617    2   166.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   128.0MV                   260.0MV
  1635    5   120.0MV                   260.0MV
  1641    6   122.0MV                   260.0MV
  1647    7   116.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   148.0MV                   260.0MV
  1665   15   162.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   146.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -100.0NA       100.0NA
  1736   12   1.000NA     -100.0NA       100.0NA
  1748   11  -5.000NA     -100.0NA       100.0NA
  1755   12  -5.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   116.0NA                   4.000UA
  1801   16   116.0NA                   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 10/26/11 07:35
TEST PROGRAM C4060 S/N 1

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-600.0MV	-1.500 V	-100.0MV
61	12	-600.0MV	-1.500 V	-100.0MV
71	1	490.0MV	100.0MV	1.500 V
71	2	500.0MV	100.0MV	1.500 V
71	3	490.0MV	100.0MV	1.500 V
71	4	490.0MV	100.0MV	1.500 V
71	5	490.0MV	100.0MV	1.500 V
71	6	490.0MV	100.0MV	1.500 V
71	7	490.0MV	100.0MV	1.500 V
71	9	550.0MV	100.0MV	1.500 V
71	10	520.0MV	100.0MV	1.500 V
71	13	490.0MV	100.0MV	1.500 V
71	14	490.0MV	100.0MV	1.500 V
71	15	490.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.960 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	34.00MV		100.0MV

1528	3	32.00MV	100.0MV
1534	4	34.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	30.00MV	100.0MV
1579	9	38.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.780 V	2.200 V	
1429	2	2.770 V	2.200 V	
1435	3	2.790 V	2.200 V	
1441	4	2.790 V	2.200 V	
1447	5	2.790 V	2.200 V	
1453	6	2.790 V	2.200 V	
1459	7	2.790 V	2.200 V	
1465	13	2.800 V	2.200 V	
1471	14	2.760 V	2.200 V	
1477	15	2.770 V	2.200 V	
1486	9	2.770 V	2.200 V	
1495	10	2.760 V	2.200 V	

VOL1 TEST
VCC= 3
VOL LIMIT 100.0E-03

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   36.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   148.0MV                   400.0MV
  1617    2   158.0MV                   400.0MV
  1623    3   140.0MV                   400.0MV
  1629    4   142.0MV                   400.0MV
  1635    5   138.0MV                   400.0MV
  1641    6   138.0MV                   400.0MV
  1647    7   138.0MV                   400.0MV
  1653   13   140.0MV                   400.0MV
  1659   14   182.0MV                   400.0MV
  1665   15   156.0MV                   400.0MV
  1674    9   202.0MV                   400.0MV
  1683   10   186.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V
```

```
 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT           GT
  1423    1   4.220 V      3.700 V
  1429    2   4.200 V      3.700 V
  1435    3   4.230 V      3.700 V
  1441    4   4.230 V      3.700 V
  1447    5   4.230 V      3.700 V
  1453    6   4.230 V      3.700 V
  1459    7   4.230 V      3.700 V
  1465   13   4.240 V      3.700 V
  1471   14   4.170 V      3.700 V
  1477   15   4.200 V      3.700 V
  1486    9   4.240 V      3.700 V
  1495   10   4.230 V      3.700 V

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

INST #  PIN   MEASURED        LT           GT
  1516    1   32.00MV                  100.0MV
  1522    2   32.00MV                  100.0MV
  1528    3   30.00MV                  100.0MV
  1534    4   32.00MV                  100.0MV
  1540    5   30.00MV                  100.0MV
  1546    6   30.00MV                  100.0MV
  1552    7   32.00MV                  100.0MV
  1558   13   32.00MV                  100.0MV
  1564   14   32.00MV                  100.0MV
  1570   15   30.00MV                  100.0MV
  1579    9   34.00MV                  100.0MV
  1588   10   34.00MV                  100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT           GT
  1611    1   172.0MV                  400.0MV
  1617    2   190.0MV                  400.0MV
  1623    3   162.0MV                  400.0MV
  1629    4   162.0MV                  400.0MV
  1635    5   158.0MV                  400.0MV
  1641    6   158.0MV                  400.0MV
  1647    7   156.0MV                  400.0MV
  1653   13   162.0MV                  400.0MV
  1659   14   222.0MV                  400.0MV
  1665   15   188.0MV                  400.0MV
  1674    9   204.0MV                  400.0MV
  1683   10   190.0MV                  400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------


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

```
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.720 V      5.200 V
  1429    2   5.700 V      5.200 V
  1435    3   5.740 V      5.200 V
  1441    4   5.740 V      5.200 V
  1447    5   5.730 V      5.200 V
  1453    6   5.740 V      5.200 V
  1459    7   5.740 V      5.200 V
  1465   13   5.740 V      5.200 V
  1471   14   5.700 V      5.200 V
  1477   15   5.700 V      5.200 V
  1486    9   5.740 V      5.200 V
  1495   10   5.730 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------
```

```
INST #  PIN   MEASURED        LT            GT
  1611    1   182.0MV                   400.0MV
  1617    2   206.0MV                   400.0MV
  1623    3   166.0MV                   400.0MV
  1629    4   168.0MV                   400.0MV
  1635    5   164.0MV                   400.0MV
  1641    6   166.0MV                   400.0MV
  1647    7   162.0MV                   400.0MV
  1653   13   168.0MV                   400.0MV
  1659   14   212.0MV                   400.0MV
  1665   15   206.0MV                   400.0MV
  1674    9   214.0MV                   400.0MV
  1683   10   202.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16  -10.00UA                  160.0UA
  1801   16       0 A                  160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       2

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.820 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

VCC= 3
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 3
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	130.0MV		400.0MV
1617	2	144.0MV		400.0MV
1623	3	126.0MV		400.0MV
1629	4	126.0MV		400.0MV
1635	5	124.0MV		400.0MV
1641	6	124.0MV		400.0MV
1647	7	122.0MV		400.0MV
1653	13	122.0MV		400.0MV
1659	14	144.0MV		400.0MV
1665	15	140.0MV		400.0MV
1674	9	184.0MV		400.0MV
1683	10	160.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 4.500
VIH= 3.150 VIL= 1.350

FUNCTIONAL TEST
FULL PATTERN
VCC= 4.500
VIH= 3.600 VIL= 800.0E-03

VOH1 TEST
VCC= 4.500
VOH LIMIT 4.400

INST #	PIN	MEASURED	LT	GT
1328	1	4.450 V	4.400 V	
1334	2	4.450 V	4.400 V	
1340	3	4.450 V	4.400 V	
1346	4	4.450 V	4.400 V	
1352	5	4.450 V	4.400 V	
1358	6	4.450 V	4.400 V	
1364	7	4.450 V	4.400 V	
1370	13	4.450 V	4.400 V	
1376	14	4.450 V	4.400 V	
1382	15	4.450 V	4.400 V	

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.250 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.260 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.270 V	3.700 V	
1471	14	4.230 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.270 V	3.700 V	
1495	10	4.260 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	152.0MV		400.0MV
1617	2	174.0MV		400.0MV
1623	3	146.0MV		400.0MV
1629	4	146.0MV		400.0MV
1635	5	142.0MV		400.0MV
1641	6	142.0MV		400.0MV
1647	7	138.0MV		400.0MV
1653	13	140.0MV		400.0MV
1659	14	174.0MV		400.0MV
1665	15	170.0MV		400.0MV
1674	9	186.0MV		400.0MV
1683	10	166.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.730 V      5.200 V
  1477   15   5.740 V      5.200 V
  1486    9   5.780 V      5.200 V
  1495   10   5.770 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   164.0MV                   400.0MV
  1617    2   190.0MV                   400.0MV
  1623    3   152.0MV                   400.0MV
  1629    4   152.0MV                   400.0MV
  1635    5   146.0MV                   400.0MV
  1641    6   148.0MV                   400.0MV
  1647    7   144.0MV                   400.0MV
  1653   13   148.0MV                   400.0MV
  1659   14   190.0MV                   400.0MV
  1665   15   184.0MV                   400.0MV
  1674    9   196.0MV                   400.0MV
  1683   10   176.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       3

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   490.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	30.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	30.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	30.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.820 V	2.200 V	
1459	7	2.820 V	2.200 V	
1465	13	2.820 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.810 V	2.200 V	
1495	10	2.800 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   130.0MV                   400.0MV
  1617    2   142.0MV                   400.0MV
  1623    3   122.0MV                   400.0MV
  1629    4   122.0MV                   400.0MV
  1635    5   120.0MV                   400.0MV
  1641    6   120.0MV                   400.0MV
  1647    7   118.0MV                   400.0MV
  1653   13   122.0MV                   400.0MV
  1659   14   142.0MV                   400.0MV
  1665   15   140.0MV                   400.0MV
  1674    9   178.0MV                   400.0MV
  1683   10   158.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.260 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.230 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.280 V	3.700 V	
1495	10	4.270 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	152.0MV		400.0MV
1617	2	172.0MV		400.0MV
1623	3	142.0MV		400.0MV
1629	4	142.0MV		400.0MV
1635	5	136.0MV		400.0MV
1641	6	138.0MV		400.0MV
1647	7	134.0MV		400.0MV
1653	13	140.0MV		400.0MV
1659	14	172.0MV		400.0MV
1665	15	172.0MV		400.0MV
1674	9	182.0MV		400.0MV
1683	10	162.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.980 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.770 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.730 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.780 V      5.200 V
  1495   10   5.770 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   164.0MV                   400.0MV
  1617    2   186.0MV                   400.0MV
  1623    3   148.0MV                   400.0MV
  1629    4   148.0MV                   400.0MV
  1635    5   142.0MV                   400.0MV
  1641    6   144.0MV                   400.0MV
  1647    7   140.0MV                   400.0MV
  1653   13   146.0MV                   400.0MV
  1659   14   186.0MV                   400.0MV
  1665   15   184.0MV                   400.0MV
  1674    9   190.0MV                   400.0MV
  1683   10   174.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       4

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   500.0MV      100.0MV       1.500 V
    71    2   500.0MV      100.0MV       1.500 V
    71    3   500.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   500.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   550.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   490.0MV      100.0MV       1.500 V
    71   14   490.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	34.00MV	100.0MV
1540	5	30.00MV	100.0MV
1546	6	30.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   134.0MV                   400.0MV
  1617    2   146.0MV                   400.0MV
  1623    3   128.0MV                   400.0MV
  1629    4   128.0MV                   400.0MV
  1635    5   124.0MV                   400.0MV
  1641    6   124.0MV                   400.0MV
  1647    7   124.0MV                   400.0MV
  1653   13   124.0MV                   400.0MV
  1659   14   136.0MV                   400.0MV
  1665   15   144.0MV                   400.0MV
  1674    9   186.0MV                   400.0MV
  1683   10   166.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.230 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	158.0MV		400.0MV
1617	2	176.0MV		400.0MV
1623	3	146.0MV		400.0MV
1629	4	146.0MV		400.0MV
1635	5	142.0MV		400.0MV
1641	6	142.0MV		400.0MV
1647	7	140.0MV		400.0MV
1653	13	144.0MV		400.0MV
1659	14	166.0MV		400.0MV
1665	15	174.0MV		400.0MV
1674	9	190.0MV		400.0MV
1683	10	170.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.740 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   168.0MV                   400.0MV
  1617    2   190.0MV                   400.0MV
  1623    3   152.0MV                   400.0MV
  1629    4   150.0MV                   400.0MV
  1635    5   148.0MV                   400.0MV
  1641    6   150.0MV                   400.0MV
  1647    7   144.0MV                   400.0MV
  1653   13   150.0MV                   400.0MV
  1659   14   178.0MV                   400.0MV
  1665   15   186.0MV                   400.0MV
  1674    9   198.0MV                   400.0MV
  1683   10   180.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       5

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -590.0MV     -1.500 V      -100.0MV
    61   12  -590.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   480.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.780 V	2.200 V	
1477	15	2.780 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   400.0MV
  1617    2   150.0MV                   400.0MV
  1623    3   130.0MV                   400.0MV
  1629    4   130.0MV                   400.0MV
  1635    5   130.0MV                   400.0MV
  1641    6   130.0MV                   400.0MV
  1647    7   130.0MV                   400.0MV
  1653   13   132.0MV                   400.0MV
  1659   14   156.0MV                   400.0MV
  1665   15   148.0MV                   400.0MV
  1674    9   192.0MV                   400.0MV
  1683   10   172.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.240 V	3.700 V	
1471	14	4.210 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	162.0MV		400.0MV
1617	2	180.0MV		400.0MV
1623	3	152.0MV		400.0MV
1629	4	150.0MV		400.0MV
1635	5	148.0MV		400.0MV
1641	6	150.0MV		400.0MV
1647	7	146.0MV		400.0MV
1653	13	152.0MV		400.0MV
1659	14	192.0MV		400.0MV
1665	15	182.0MV		400.0MV
1674	9	196.0MV		400.0MV
1683	10	180.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.750 V      5.200 V
  1447    5   5.750 V      5.200 V
  1453    6   5.750 V      5.200 V
  1459    7   5.750 V      5.200 V
  1465   13   5.750 V      5.200 V
  1471   14   5.710 V      5.200 V
  1477   15   5.720 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   174.0MV                   400.0MV
  1617    2   196.0MV                   400.0MV
  1623    3   160.0MV                   400.0MV
  1629    4   156.0MV                   400.0MV
  1635    5   154.0MV                   400.0MV
  1641    6   156.0MV                   400.0MV
  1647    7   152.0MV                   400.0MV
  1653   13   158.0MV                   400.0MV
  1659   14   200.0MV                   400.0MV
  1665   15   198.0MV                   400.0MV
  1674    9   206.0MV                   400.0MV
  1683   10   192.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   2.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       6

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	30.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	38.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.790 V	2.200 V	
1429	2	2.780 V	2.200 V	
1435	3	2.800 V	2.200 V	
1441	4	2.800 V	2.200 V	
1447	5	2.800 V	2.200 V	
1453	6	2.800 V	2.200 V	
1459	7	2.800 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.790 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.780 V	2.200 V	
1495	10	2.770 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   400.0MV
  1617    2   148.0MV                   400.0MV
  1623    3   132.0MV                   400.0MV
  1629    4   132.0MV                   400.0MV
  1635    5   130.0MV                   400.0MV
  1641    6   132.0MV                   400.0MV
  1647    7   130.0MV                   400.0MV
  1653   13   128.0MV                   400.0MV
  1659   14   142.0MV                   400.0MV
  1665   15   146.0MV                   400.0MV
  1674    9   192.0MV                   400.0MV
  1683   10   174.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.220 V	3.700 V	
1429	2	4.210 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.240 V	3.700 V	
1447	5	4.240 V	3.700 V	
1453	6	4.240 V	3.700 V	
1459	7	4.240 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.230 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.250 V	3.700 V	
1495	10	4.240 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	164.0MV		400.0MV
1617	2	180.0MV		400.0MV
1623	3	152.0MV		400.0MV
1629	4	150.0MV		400.0MV
1635	5	150.0MV		400.0MV
1641	6	152.0MV		400.0MV
1647	7	148.0MV		400.0MV
1653	13	150.0MV		400.0MV
1659	14	168.0MV		400.0MV
1665	15	178.0MV		400.0MV
1674	9	194.0MV		400.0MV
1683	10	180.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.730 V      5.200 V
  1429    2   5.710 V      5.200 V
  1435    3   5.750 V      5.200 V
  1441    4   5.750 V      5.200 V
  1447    5   5.740 V      5.200 V
  1453    6   5.740 V      5.200 V
  1459    7   5.740 V      5.200 V
  1465   13   5.750 V      5.200 V
  1471   14   5.720 V      5.200 V
  1477   15   5.720 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   174.0MV                   400.0MV
  1617    2   198.0MV                   400.0MV
  1623    3   158.0MV                   400.0MV
  1629    4   158.0MV                   400.0MV
  1635    5   158.0MV                   400.0MV
  1641    6   158.0MV                   400.0MV
  1647    7   156.0MV                   400.0MV
  1653   13   156.0MV                   400.0MV
  1659   14   184.0MV                   400.0MV
  1665   15   192.0MV                   400.0MV
  1674    9   204.0MV                   400.0MV
  1683   10   192.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12   2.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       7

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -590.0MV     -1.500 V      -100.0MV
    61   12  -590.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   480.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   530.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	30.00MV	100.0MV
1579	9	38.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.780 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   36.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   400.0MV
  1617    2   146.0MV                   400.0MV
  1623    3   130.0MV                   400.0MV
  1629    4   128.0MV                   400.0MV
  1635    5   126.0MV                   400.0MV
  1641    6   128.0MV                   400.0MV
  1647    7   126.0MV                   400.0MV
  1653   13   130.0MV                   400.0MV
  1659   14   162.0MV                   400.0MV
  1665   15   148.0MV                   400.0MV
  1674    9   190.0MV                   400.0MV
  1683   10   170.0MV                   400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.210 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	32.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	160.0MV		400.0MV
1617	2	176.0MV		400.0MV
1623	3	150.0MV		400.0MV
1629	4	146.0MV		400.0MV
1635	5	144.0MV		400.0MV
1641	6	146.0MV		400.0MV
1647	7	144.0MV		400.0MV
1653	13	152.0MV		400.0MV
1659	14	198.0MV		400.0MV
1665	15	180.0MV		400.0MV
1674	9	196.0MV		400.0MV
1683	10	176.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.750 V      5.200 V
  1471   14   5.710 V      5.200 V
  1477   15   5.720 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   172.0MV                   400.0MV
  1617    2   192.0MV                   400.0MV
  1623    3   154.0MV                   400.0MV
  1629    4   152.0MV                   400.0MV
  1635    5   150.0MV                   400.0MV
  1641    6   152.0MV                   400.0MV
  1647    7   148.0MV                   400.0MV
  1653   13   156.0MV                   400.0MV
  1659   14   200.0MV                   400.0MV
  1665   15   194.0MV                   400.0MV
  1674    9   204.0MV                   400.0MV
  1683   10   188.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   2.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       8

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -610.0MV     -1.500 V      -100.0MV
    61   12  -610.0MV     -1.500 V      -100.0MV
    71    1   510.0MV      100.0MV       1.500 V
    71    2   510.0MV      100.0MV       1.500 V
    71    3   510.0MV      100.0MV       1.500 V
    71    4   510.0MV      100.0MV       1.500 V
    71    5   510.0MV      100.0MV       1.500 V
    71    6   510.0MV      100.0MV       1.500 V
    71    7   510.0MV      100.0MV       1.500 V
    71    9   570.0MV      100.0MV       1.500 V
    71   10   540.0MV      100.0MV       1.500 V
    71   13   510.0MV      100.0MV       1.500 V
    71   14   510.0MV      100.0MV       1.500 V
    71   15   510.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	34.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.790 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.800 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.800 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.790 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.780 V	2.200 V	
1495	10	2.770 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   400.0MV
  1617    2   148.0MV                   400.0MV
  1623    3   130.0MV                   400.0MV
  1629    4   132.0MV                   400.0MV
  1635    5   130.0MV                   400.0MV
  1641    6   128.0MV                   400.0MV
  1647    7   130.0MV                   400.0MV
  1653   13   128.0MV                   400.0MV
  1659   14   148.0MV                   400.0MV
  1665   15   146.0MV                   400.0MV
  1674    9   188.0MV                   400.0MV
  1683   10   174.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.230 V	3.700 V	
1429	2	4.210 V	3.700 V	
1435	3	4.240 V	3.700 V	
1441	4	4.240 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.240 V	3.700 V	
1459	7	4.240 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.210 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.250 V	3.700 V	
1495	10	4.240 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	30.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	160.0MV		400.0MV
1617	2	180.0MV		400.0MV
1623	3	150.0MV		400.0MV
1629	4	150.0MV		400.0MV
1635	5	148.0MV		400.0MV
1641	6	148.0MV		400.0MV
1647	7	148.0MV		400.0MV
1653	13	148.0MV		400.0MV
1659	14	182.0MV		400.0MV
1665	15	180.0MV		400.0MV
1674	9	192.0MV		400.0MV
1683	10	176.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.710 V      5.200 V
  1435    3   5.750 V      5.200 V
  1441    4   5.750 V      5.200 V
  1447    5   5.750 V      5.200 V
  1453    6   5.750 V      5.200 V
  1459    7   5.750 V      5.200 V
  1465   13   5.750 V      5.200 V
  1471   14   5.710 V      5.200 V
  1477   15   5.720 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   30.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   168.0MV                   400.0MV
  1617    2   192.0MV                   400.0MV
  1623    3   156.0MV                   400.0MV
  1629    4   156.0MV                   400.0MV
  1635    5   154.0MV                   400.0MV
  1641    6   156.0MV                   400.0MV
  1647    7   152.0MV                   400.0MV
  1653   13   156.0MV                   400.0MV
  1659   14   200.0MV                   400.0MV
  1665   15   192.0MV                   400.0MV
  1674    9   198.0MV                   400.0MV
  1683   10   188.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N       9

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -590.0MV     -1.500 V      -100.0MV
    61   12  -590.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   480.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	34.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	38.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.790 V	2.200 V	
1429	2	2.780 V	2.200 V	
1435	3	2.800 V	2.200 V	
1441	4	2.800 V	2.200 V	
1447	5	2.800 V	2.200 V	
1453	6	2.800 V	2.200 V	
1459	7	2.800 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.770 V	2.200 V	
1477	15	2.780 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   34.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   400.0MV
  1617    2   152.0MV                   400.0MV
  1623    3   136.0MV                   400.0MV
  1629    4   134.0MV                   400.0MV
  1635    5   132.0MV                   400.0MV
  1641    6   132.0MV                   400.0MV
  1647    7   130.0MV                   400.0MV
  1653   13   134.0MV                   400.0MV
  1659   14   164.0MV                   400.0MV
  1665   15   152.0MV                   400.0MV
  1674    9   198.0MV                   400.0MV
  1683   10   176.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.230 V	3.700 V	
1429	2	4.210 V	3.700 V	
1435	3	4.240 V	3.700 V	
1441	4	4.240 V	3.700 V	
1447	5	4.240 V	3.700 V	
1453	6	4.240 V	3.700 V	
1459	7	4.240 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.180 V	3.700 V	
1477	15	4.210 V	3.700 V	
1486	9	4.250 V	3.700 V	
1495	10	4.240 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	30.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	30.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	166.0MV		400.0MV
1617	2	184.0MV		400.0MV
1623	3	156.0MV		400.0MV
1629	4	154.0MV		400.0MV
1635	5	152.0MV		400.0MV
1641	6	150.0MV		400.0MV
1647	7	148.0MV		400.0MV
1653	13	154.0MV		400.0MV
1659	14	224.0MV		400.0MV
1665	15	188.0MV		400.0MV
1674	9	198.0MV		400.0MV
1683	10	182.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.730 V      5.200 V
  1429    2   5.710 V      5.200 V
  1435    3   5.750 V      5.200 V
  1441    4   5.750 V      5.200 V
  1447    5   5.750 V      5.200 V
  1453    6   5.750 V      5.200 V
  1459    7   5.750 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.690 V      5.200 V
  1477   15   5.710 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   176.0MV                   400.0MV
  1617    2   198.0MV                   400.0MV
  1623    3   160.0MV                   400.0MV
  1629    4   160.0MV                   400.0MV
  1635    5   156.0MV                   400.0MV
  1641    6   158.0MV                   400.0MV
  1647    7   154.0MV                   400.0MV
  1653   13   160.0MV                   400.0MV
  1659   14   228.0MV                   400.0MV
  1665   15   198.0MV                   400.0MV
  1674    9   208.0MV                   400.0MV
  1683   10   192.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   2.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

STAT1 10/26/11 07:35
TEST PROGRAM C4060 S/N 10

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-580.0MV	-1.500 V	-100.0MV
61	12	-580.0MV	-1.500 V	-100.0MV
71	1	470.0MV	100.0MV	1.500 V
71	2	470.0MV	100.0MV	1.500 V
71	3	470.0MV	100.0MV	1.500 V
71	4	470.0MV	100.0MV	1.500 V
71	5	470.0MV	100.0MV	1.500 V
71	6	470.0MV	100.0MV	1.500 V
71	7	460.0MV	100.0MV	1.500 V
71	9	530.0MV	100.0MV	1.500 V
71	10	500.0MV	100.0MV	1.500 V
71	13	470.0MV	100.0MV	1.500 V
71	14	470.0MV	100.0MV	1.500 V
71	15	470.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT

1516	1	34.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	34.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	36.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.790 V	2.200 V	
1477	15	2.780 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   400.0MV
  1617    2   150.0MV                   400.0MV
  1623    3   132.0MV                   400.0MV
  1629    4   132.0MV                   400.0MV
  1635    5   130.0MV                   400.0MV
  1641    6   130.0MV                   400.0MV
  1647    7   128.0MV                   400.0MV
  1653   13   132.0MV                   400.0MV
  1659   14   154.0MV                   400.0MV
  1665   15   150.0MV                   400.0MV
  1674    9   196.0MV                   400.0MV
  1683   10   174.0MV                   400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.460 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.210 V	3.700 V	
1477	15	4.210 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	30.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	30.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	162.0MV		400.0MV
1617	2	178.0MV		400.0MV
1623	3	152.0MV		400.0MV
1629	4	148.0MV		400.0MV
1635	5	148.0MV		400.0MV
1641	6	148.0MV		400.0MV
1647	7	146.0MV		400.0MV
1653	13	154.0MV		400.0MV
1659	14	186.0MV		400.0MV
1665	15	186.0MV		400.0MV
1674	9	198.0MV		400.0MV
1683	10	182.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.750 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.710 V      5.200 V
  1477   15   5.710 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   30.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   32.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   174.0MV                   400.0MV
  1617    2   194.0MV                   400.0MV
  1623    3   156.0MV                   400.0MV
  1629    4   154.0MV                   400.0MV
  1635    5   154.0MV                   400.0MV
  1641    6   154.0MV                   400.0MV
  1647    7   150.0MV                   400.0MV
  1653   13   158.0MV                   400.0MV
  1659   14   200.0MV                   400.0MV
  1665   15   198.0MV                   400.0MV
  1674    9   208.0MV                   400.0MV
  1683   10   192.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   2.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      11

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -590.0MV     -1.500 V      -100.0MV
    61   12  -580.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   480.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	32.00MV	100.0MV
1528	3	32.00MV	100.0MV
1534	4	34.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	32.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	38.00MV	100.0MV
1588	10	36.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.770 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   34.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   400.0MV
  1617    2   148.0MV                   400.0MV
  1623    3   128.0MV                   400.0MV
  1629    4   128.0MV                   400.0MV
  1635    5   128.0MV                   400.0MV
  1641    6   128.0MV                   400.0MV
  1647    7   126.0MV                   400.0MV
  1653   13   130.0MV                   400.0MV
  1659   14   166.0MV                   400.0MV
  1665   15   150.0MV                   400.0MV
  1674    9   188.0MV                   400.0MV
  1683   10   170.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.220 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	32.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	30.00MV		100.0MV
1546	6	32.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	32.00MV		100.0MV
1564	14	30.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	34.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	158.0MV		400.0MV
1617	2	176.0MV		400.0MV
1623	3	148.0MV		400.0MV
1629	4	146.0MV		400.0MV
1635	5	144.0MV		400.0MV
1641	6	146.0MV		400.0MV
1647	7	140.0MV		400.0MV
1653	13	148.0MV		400.0MV
1659	14	180.0MV		400.0MV
1665	15	180.0MV		400.0MV
1674	9	192.0MV		400.0MV
1683	10	174.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.720 V      5.200 V
  1477   15   5.720 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   32.00MV                   100.0MV
  1546    6   30.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   30.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   166.0MV                   400.0MV
  1617    2   188.0MV                   400.0MV
  1623    3   152.0MV                   400.0MV
  1629    4   150.0MV                   400.0MV
  1635    5   148.0MV                   400.0MV
  1641    6   148.0MV                   400.0MV
  1647    7   146.0MV                   400.0MV
  1653   13   152.0MV                   400.0MV
  1659   14   192.0MV                   400.0MV
  1665   15   192.0MV                   400.0MV
  1674    9   198.0MV                   400.0MV
  1683   10   184.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               10/26/11  07:35
TEST PROGRAM   C4060         S/N      12

DDS-101-09-A PN 54HC4060 TEST SEQ12 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -580.0MV     -1.500 V      -100.0MV
    61   12  -580.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   470.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   530.0MV      100.0MV       1.500 V
    71   10   500.0MV      100.0MV       1.500 V
    71   13   470.0MV      100.0MV       1.500 V
    71   14   470.0MV      100.0MV       1.500 V
    71   15   470.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	32.00MV	100.0MV
1522	2	30.00MV	100.0MV
1528	3	30.00MV	100.0MV
1534	4	32.00MV	100.0MV
1540	5	32.00MV	100.0MV
1546	6	32.00MV	100.0MV
1552	7	32.00MV	100.0MV
1558	13	30.00MV	100.0MV
1564	14	32.00MV	100.0MV
1570	15	32.00MV	100.0MV
1579	9	38.00MV	100.0MV
1588	10	34.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.820 V	2.200 V	
1471	14	2.810 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.800 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   30.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   30.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   30.00MV                   100.0MV
  1558   13   30.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   30.00MV                   100.0MV
  1579    9   36.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   132.0MV                   400.0MV
  1617    2   144.0MV                   400.0MV
  1623    3   126.0MV                   400.0MV
  1629    4   126.0MV                   400.0MV
  1635    5   124.0MV                   400.0MV
  1641    6   122.0MV                   400.0MV
  1647    7   120.0MV                   400.0MV
  1653   13   124.0MV                   400.0MV
  1659   14   136.0MV                   400.0MV
  1665   15   142.0MV                   400.0MV
  1674    9   182.0MV                   400.0MV
  1683   10   158.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.270 V	3.700 V	
1471	14	4.250 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.270 V	3.700 V	
1495	10	4.260 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	32.00MV		100.0MV
1522	2	30.00MV		100.0MV
1528	3	32.00MV		100.0MV
1534	4	32.00MV		100.0MV
1540	5	32.00MV		100.0MV
1546	6	30.00MV		100.0MV
1552	7	32.00MV		100.0MV
1558	13	30.00MV		100.0MV
1564	14	32.00MV		100.0MV
1570	15	32.00MV		100.0MV
1579	9	34.00MV		100.0MV
1588	10	32.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	152.0MV		400.0MV
1617	2	174.0MV		400.0MV
1623	3	146.0MV		400.0MV
1629	4	144.0MV		400.0MV
1635	5	142.0MV		400.0MV
1641	6	142.0MV		400.0MV
1647	7	138.0MV		400.0MV
1653	13	142.0MV		400.0MV
1659	14	162.0MV		400.0MV
1665	15	174.0MV		400.0MV
1674	9	186.0MV		400.0MV
1683	10	164.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.750 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.780 V      5.200 V
  1495   10   5.770 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   32.00MV                   100.0MV
  1522    2   32.00MV                   100.0MV
  1528    3   32.00MV                   100.0MV
  1534    4   32.00MV                   100.0MV
  1540    5   30.00MV                   100.0MV
  1546    6   32.00MV                   100.0MV
  1552    7   32.00MV                   100.0MV
  1558   13   32.00MV                   100.0MV
  1564   14   32.00MV                   100.0MV
  1570   15   32.00MV                   100.0MV
  1579    9   34.00MV                   100.0MV
  1588   10   32.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   164.0MV                   400.0MV
  1617    2   188.0MV                   400.0MV
  1623    3   152.0MV                   400.0MV
  1629    4   150.0MV                   400.0MV
  1635    5   150.0MV                   400.0MV
  1641    6   148.0MV                   400.0MV
  1647    7   144.0MV                   400.0MV
  1653   13   150.0MV                   400.0MV
  1659   14   174.0MV                   400.0MV
  1665   15   188.0MV                   400.0MV
  1674    9   194.0MV                   400.0MV
  1683   10   176.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   2.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -5.000NA     -1.000UA       1.000UA
  1755   12  -5.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

Post Burn-In Test Results at -55°C

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 1

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-700.0MV	-1.500 V	-100.0MV
61	12	-700.0MV	-1.500 V	-100.0MV
71	1	590.0MV	100.0MV	1.500 V
71	2	590.0MV	100.0MV	1.500 V
71	3	600.0MV	100.0MV	1.500 V
71	4	600.0MV	100.0MV	1.500 V
71	5	600.0MV	100.0MV	1.500 V
71	6	600.0MV	100.0MV	1.500 V
71	7	600.0MV	100.0MV	1.500 V
71	9	670.0MV	100.0MV	1.500 V
71	10	630.0MV	100.0MV	1.500 V
71	13	600.0MV	100.0MV	1.500 V
71	14	600.0MV	100.0MV	1.500 V
71	15	600.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	24.00MV		100.0MV

1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.840 V	2.200 V	
1429	2	2.830 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.840 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.840 V	2.200 V	
1459	7	2.840 V	2.200 V	
1465	13	2.850 V	2.200 V	
1471	14	2.810 V	2.200 V	
1477	15	2.830 V	2.200 V	
1486	9	2.830 V	2.200 V	
1495	10	2.820 V	2.200 V	

VOL1 TEST
VCC= 3
VOL LIMIT 100.0E-03

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

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   106.0MV                   400.0MV
  1617    2   114.0MV                   400.0MV
  1623    3   98.00MV                   400.0MV
  1629    4   96.00MV                   400.0MV
  1635    5   96.00MV                   400.0MV
  1641    6   96.00MV                   400.0MV
  1647    7   94.00MV                   400.0MV
  1653   13   96.00MV                   400.0MV
  1659   14   134.0MV                   400.0MV
  1665   15   108.0MV                   400.0MV
  1674    9   140.0MV                   400.0MV
  1683   10   126.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V
```

```
 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT           GT
  1423    1   4.280 V      3.700 V
  1429    2   4.270 V      3.700 V
  1435    3   4.300 V      3.700 V
  1441    4   4.300 V      3.700 V
  1447    5   4.300 V      3.700 V
  1453    6   4.290 V      3.700 V
  1459    7   4.300 V      3.700 V
  1465   13   4.310 V      3.700 V
  1471   14   4.240 V      3.700 V
  1477   15   4.270 V      3.700 V
  1486    9   4.300 V      3.700 V
  1495   10   4.300 V      3.700 V

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

INST #  PIN   MEASURED        LT           GT
  1516    1   24.00MV                  100.0MV
  1522    2   26.00MV                  100.0MV
  1528    3   26.00MV                  100.0MV
  1534    4   26.00MV                  100.0MV
  1540    5   26.00MV                  100.0MV
  1546    6   26.00MV                  100.0MV
  1552    7   24.00MV                  100.0MV
  1558   13   26.00MV                  100.0MV
  1564   14   26.00MV                  100.0MV
  1570   15   26.00MV                  100.0MV
  1579    9   28.00MV                  100.0MV
  1588   10   28.00MV                  100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT           GT
  1611    1   118.0MV                  400.0MV
  1617    2   130.0MV                  400.0MV
  1623    3   104.0MV                  400.0MV
  1629    4   102.0MV                  400.0MV
  1635    5   102.0MV                  400.0MV
  1641    6   104.0MV                  400.0MV
  1647    7   100.0MV                  400.0MV
  1653   13   104.0MV                  400.0MV
  1659   14   164.0MV                  400.0MV
  1665   15   124.0MV                  400.0MV
  1674    9   134.0MV                  400.0MV
  1683   10   124.0MV                  400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------


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

```
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.800 V      5.200 V
  1429    2   5.780 V      5.200 V
  1435    3   5.820 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.820 V      5.200 V
  1453    6   5.810 V      5.200 V
  1459    7   5.810 V      5.200 V
  1465   13   5.820 V      5.200 V
  1471   14   5.740 V      5.200 V
  1477   15   5.780 V      5.200 V
  1486    9   5.820 V      5.200 V
  1495   10   5.810 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------
```

```
INST #  PIN   MEASURED        LT            GT
  1611    1   124.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   106.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   100.0MV                   400.0MV
  1641    6   106.0MV                   400.0MV
  1647    7   100.0MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   178.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   128.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   3.000NA                   4.000UA
  1801   16   2.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       2

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -690.0MV     -1.500 V      -100.0MV
    61   12  -690.0MV     -1.500 V      -100.0MV
    71    1   580.0MV      100.0MV       1.500 V
    71    2   590.0MV      100.0MV       1.500 V
    71    3   590.0MV      100.0MV       1.500 V
    71    4   590.0MV      100.0MV       1.500 V
    71    5   590.0MV      100.0MV       1.500 V
    71    6   590.0MV      100.0MV       1.500 V
    71    7   590.0MV      100.0MV       1.500 V
    71    9   660.0MV      100.0MV       1.500 V
    71   10   620.0MV      100.0MV       1.500 V
    71   13   590.0MV      100.0MV       1.500 V
    71   14   590.0MV      100.0MV       1.500 V
    71   15   590.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	24.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	24.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	28.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.980 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.870 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   96.00MV                   400.0MV
  1617    2   104.0MV                   400.0MV
  1623    3   86.00MV                   400.0MV
  1629    4   86.00MV                   400.0MV
  1635    5   86.00MV                   400.0MV
  1641    6   86.00MV                   400.0MV
  1647    7   84.00MV                   400.0MV
  1653   13   86.00MV                   400.0MV
  1659   14   110.0MV                   400.0MV
  1665   15   100.0MV                   400.0MV
  1674    9   126.0MV                   400.0MV
  1683   10   112.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.320 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.300 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	24.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	108.0MV		400.0MV
1617	2	122.0MV		400.0MV
1623	3	94.00MV		400.0MV
1629	4	94.00MV		400.0MV
1635	5	92.00MV		400.0MV
1641	6	94.00MV		400.0MV
1647	7	90.00MV		400.0MV
1653	13	92.00MV		400.0MV
1659	14	130.0MV		400.0MV
1665	15	116.0MV		400.0MV
1674	9	126.0MV		400.0MV
1683	10	112.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.980 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.840 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.810 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.840 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   24.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   26.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   112.0MV                   400.0MV
  1617    2   130.0MV                   400.0MV
  1623    3   94.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   94.00MV                   400.0MV
  1641    6   98.00MV                   400.0MV
  1647    7   92.00MV                   400.0MV
  1653   13   96.00MV                   400.0MV
  1659   14   136.0MV                   400.0MV
  1665   15   124.0MV                   400.0MV
  1674    9   128.0MV                   400.0MV
  1683   10   118.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   3.000NA                   4.000UA
  1801   16   4.000NA                   4.000UA


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

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 3

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-690.0MV	-1.500 V	-100.0MV
61	12	-690.0MV	-1.500 V	-100.0MV
71	1	590.0MV	100.0MV	1.500 V
71	2	590.0MV	100.0MV	1.500 V
71	3	590.0MV	100.0MV	1.500 V
71	4	590.0MV	100.0MV	1.500 V
71	5	590.0MV	100.0MV	1.500 V
71	6	590.0MV	100.0MV	1.500 V
71	7	590.0MV	100.0MV	1.500 V
71	9	660.0MV	100.0MV	1.500 V
71	10	620.0MV	100.0MV	1.500 V
71	13	590.0MV	100.0MV	1.500 V
71	14	590.0MV	100.0MV	1.500 V
71	15	600.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.860 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   96.00MV                   400.0MV
  1617    2   104.0MV                   400.0MV
  1623    3   88.00MV                   400.0MV
  1629    4   86.00MV                   400.0MV
  1635    5   86.00MV                   400.0MV
  1641    6   84.00MV                   400.0MV
  1647    7   82.00MV                   400.0MV
  1653   13   86.00MV                   400.0MV
  1659   14   96.00MV                   400.0MV
  1665   15   100.0MV                   400.0MV
  1674    9   124.0MV                   400.0MV
  1683   10   112.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.320 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.300 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.330 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	28.00MV		100.0MV
1528	3	24.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	24.00MV		100.0MV
1570	15	28.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	108.0MV		400.0MV
1617	2	122.0MV		400.0MV
1623	3	96.00MV		400.0MV
1629	4	94.00MV		400.0MV
1635	5	92.00MV		400.0MV
1641	6	94.00MV		400.0MV
1647	7	92.00MV		400.0MV
1653	13	94.00MV		400.0MV
1659	14	112.0MV		400.0MV
1665	15	116.0MV		400.0MV
1674	9	122.0MV		400.0MV
1683	10	112.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.810 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   26.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   400.0MV
  1617    2   130.0MV                   400.0MV
  1623    3   98.00MV                   400.0MV
  1629    4   96.00MV                   400.0MV
  1635    5   94.00MV                   400.0MV
  1641    6   96.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   96.00MV                   400.0MV
  1659   14   120.0MV                   400.0MV
  1665   15   126.0MV                   400.0MV
  1674    9   126.0MV                   400.0MV
  1683   10   116.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   2.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 4

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-700.0MV	-1.500 V	-100.0MV
61	12	-700.0MV	-1.500 V	-100.0MV
71	1	590.0MV	100.0MV	1.500 V
71	2	600.0MV	100.0MV	1.500 V
71	3	600.0MV	100.0MV	1.500 V
71	4	600.0MV	100.0MV	1.500 V
71	5	600.0MV	100.0MV	1.500 V
71	6	600.0MV	100.0MV	1.500 V
71	7	600.0MV	100.0MV	1.500 V
71	9	670.0MV	100.0MV	1.500 V
71	10	630.0MV	100.0MV	1.500 V
71	13	600.0MV	100.0MV	1.500 V
71	14	600.0MV	100.0MV	1.500 V
71	15	600.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT

1516	1	28.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	24.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.980 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.850 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   104.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   88.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   86.00MV                   400.0MV
  1653   13   88.00MV                   400.0MV
  1659   14   100.0MV                   400.0MV
  1665   15   102.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   116.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.310 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.320 V	3.700 V	
1471	14	4.300 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.320 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	28.00MV		100.0MV
1534	4	24.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	24.00MV		100.0MV
1558	13	28.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	112.0MV		400.0MV
1617	2	124.0MV		400.0MV
1623	3	96.00MV		400.0MV
1629	4	98.00MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	96.00MV		400.0MV
1647	7	92.00MV		400.0MV
1653	13	96.00MV		400.0MV
1659	14	114.0MV		400.0MV
1665	15	118.0MV		400.0MV
1674	9	128.0MV		400.0MV
1683	10	118.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.810 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   24.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   400.0MV
  1617    2   132.0MV                   400.0MV
  1623    3   98.00MV                   400.0MV
  1629    4   98.00MV                   400.0MV
  1635    5   96.00MV                   400.0MV
  1641    6   98.00MV                   400.0MV
  1647    7   94.00MV                   400.0MV
  1653   13   96.00MV                   400.0MV
  1659   14   120.0MV                   400.0MV
  1665   15   128.0MV                   400.0MV
  1674    9   132.0MV                   400.0MV
  1683   10   120.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       5

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -710.0MV     -1.500 V      -100.0MV
    61   12  -710.0MV     -1.500 V      -100.0MV
    71    1   600.0MV      100.0MV       1.500 V
    71    2   600.0MV      100.0MV       1.500 V
    71    3   610.0MV      100.0MV       1.500 V
    71    4   600.0MV      100.0MV       1.500 V
    71    5   600.0MV      100.0MV       1.500 V
    71    6   610.0MV      100.0MV       1.500 V
    71    7   600.0MV      100.0MV       1.500 V
    71    9   680.0MV      100.0MV       1.500 V
    71   10   640.0MV      100.0MV       1.500 V
    71   13   610.0MV      100.0MV       1.500 V
    71   14   610.0MV      100.0MV       1.500 V
    71   15   610.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	24.00MV	100.0MV
1522	2	24.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.840 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   104.0MV                   400.0MV
  1623    3   90.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   88.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   88.00MV                   400.0MV
  1653   13   90.00MV                   400.0MV
  1659   14   102.0MV                   400.0MV
  1665   15   104.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   118.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.310 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.320 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	24.00MV		100.0MV
1522	2	24.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	112.0MV		400.0MV
1617	2	120.0MV		400.0MV
1623	3	100.0MV		400.0MV
1629	4	96.00MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	96.00MV		400.0MV
1647	7	92.00MV		400.0MV
1653	13	98.00MV		400.0MV
1659	14	116.0MV		400.0MV
1665	15	120.0MV		400.0MV
1674	9	128.0MV		400.0MV
1683	10	116.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.830 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   24.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   26.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   400.0MV
  1617    2   132.0MV                   400.0MV
  1623    3   98.00MV                   400.0MV
  1629    4   98.00MV                   400.0MV
  1635    5   96.00MV                   400.0MV
  1641    6   98.00MV                   400.0MV
  1647    7   94.00MV                   400.0MV
  1653   13   98.00MV                   400.0MV
  1659   14   124.0MV                   400.0MV
  1665   15   128.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       6

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   590.0MV      100.0MV       1.500 V
    71    2   600.0MV      100.0MV       1.500 V
    71    3   600.0MV      100.0MV       1.500 V
    71    4   600.0MV      100.0MV       1.500 V
    71    5   600.0MV      100.0MV       1.500 V
    71    6   600.0MV      100.0MV       1.500 V
    71    7   600.0MV      100.0MV       1.500 V
    71    9   670.0MV      100.0MV       1.500 V
    71   10   630.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   600.0MV      100.0MV       1.500 V
    71   15   610.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.840 V	2.200 V	
1429	2	2.830 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.850 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.850 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.840 V	2.200 V	
1495	10	2.830 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   106.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   92.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   102.0MV                   400.0MV
  1665   15   102.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   120.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.290 V	3.700 V	
1429	2	4.280 V	3.700 V	
1435	3	4.300 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.310 V	3.700 V	
1453	6	4.300 V	3.700 V	
1459	7	4.300 V	3.700 V	
1465	13	4.310 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.310 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	24.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	24.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	28.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	112.0MV		400.0MV
1617	2	124.0MV		400.0MV
1623	3	100.0MV		400.0MV
1629	4	98.00MV		400.0MV
1635	5	98.00MV		400.0MV
1641	6	102.0MV		400.0MV
1647	7	98.00MV		400.0MV
1653	13	100.0MV		400.0MV
1659	14	116.0MV		400.0MV
1665	15	120.0MV		400.0MV
1674	9	130.0MV		400.0MV
1683	10	118.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.980 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.800 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.820 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.820 V      5.200 V
  1453    6   5.810 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.820 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.790 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.820 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   26.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   400.0MV
  1617    2   134.0MV                   400.0MV
  1623    3   100.0MV                   400.0MV
  1629    4   102.0MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   102.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   100.0MV                   400.0MV
  1659   14   124.0MV                   400.0MV
  1665   15   130.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   126.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       7

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   590.0MV      100.0MV       1.500 V
    71    2   590.0MV      100.0MV       1.500 V
    71    3   590.0MV      100.0MV       1.500 V
    71    4   590.0MV      100.0MV       1.500 V
    71    5   590.0MV      100.0MV       1.500 V
    71    6   590.0MV      100.0MV       1.500 V
    71    7   600.0MV      100.0MV       1.500 V
    71    9   670.0MV      100.0MV       1.500 V
    71   10   630.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   600.0MV      100.0MV       1.500 V
    71   15   600.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.830 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.840 V	2.200 V	
1495	10	2.830 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   106.0MV                   400.0MV
  1623    3   92.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   116.0MV                   400.0MV
  1665   15   104.0MV                   400.0MV
  1674    9   134.0MV                   400.0MV
  1683   10   120.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.310 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.310 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.310 V	3.700 V	
1471	14	4.270 V	3.700 V	
1477	15	4.290 V	3.700 V	
1486	9	4.310 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	28.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	114.0MV		400.0MV
1617	2	122.0MV		400.0MV
1623	3	100.0MV		400.0MV
1629	4	98.00MV		400.0MV
1635	5	96.00MV		400.0MV
1641	6	100.0MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	100.0MV		400.0MV
1659	14	150.0MV		400.0MV
1665	15	122.0MV		400.0MV
1674	9	132.0MV		400.0MV
1683	10	118.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.820 V      5.200 V
  1471   14   5.790 V      5.200 V
  1477   15   5.790 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.820 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   24.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   118.0MV                   400.0MV
  1617    2   130.0MV                   400.0MV
  1623    3   100.0MV                   400.0MV
  1629    4   98.00MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   104.0MV                   400.0MV
  1647    7   96.00MV                   400.0MV
  1653   13   102.0MV                   400.0MV
  1659   14   144.0MV                   400.0MV
  1665   15   128.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   124.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       8

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   590.0MV      100.0MV       1.500 V
    71    2   590.0MV      100.0MV       1.500 V
    71    3   600.0MV      100.0MV       1.500 V
    71    4   590.0MV      100.0MV       1.500 V
    71    5   600.0MV      100.0MV       1.500 V
    71    6   600.0MV      100.0MV       1.500 V
    71    7   600.0MV      100.0MV       1.500 V
    71    9   670.0MV      100.0MV       1.500 V
    71   10   630.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   600.0MV      100.0MV       1.500 V
    71   15   600.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.840 V	2.200 V	
1429	2	2.830 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.850 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.840 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.850 V	2.200 V	
1471	14	2.830 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.830 V	2.200 V	
1495	10	2.830 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   104.0MV                   400.0MV
  1617    2   110.0MV                   400.0MV
  1623    3   94.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   96.00MV                   400.0MV
  1641    6   94.00MV                   400.0MV
  1647    7   92.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   110.0MV                   400.0MV
  1665   15   106.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   124.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.290 V	3.700 V	
1429	2	4.280 V	3.700 V	
1435	3	4.300 V	3.700 V	
1441	4	4.300 V	3.700 V	
1447	5	4.300 V	3.700 V	
1453	6	4.300 V	3.700 V	
1459	7	4.300 V	3.700 V	
1465	13	4.300 V	3.700 V	
1471	14	4.280 V	3.700 V	
1477	15	4.280 V	3.700 V	
1486	9	4.310 V	3.700 V	
1495	10	4.300 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	24.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	26.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	118.0MV		400.0MV
1617	2	128.0MV		400.0MV
1623	3	102.0MV		400.0MV
1629	4	102.0MV		400.0MV
1635	5	102.0MV		400.0MV
1641	6	104.0MV		400.0MV
1647	7	100.0MV		400.0MV
1653	13	102.0MV		400.0MV
1659	14	126.0MV		400.0MV
1665	15	122.0MV		400.0MV
1674	9	132.0MV		400.0MV
1683	10	124.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.800 V      5.200 V
  1429    2   5.780 V      5.200 V
  1435    3   5.820 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.810 V      5.200 V
  1453    6   5.810 V      5.200 V
  1459    7   5.810 V      5.200 V
  1465   13   5.820 V      5.200 V
  1471   14   5.780 V      5.200 V
  1477   15   5.790 V      5.200 V
  1486    9   5.820 V      5.200 V
  1495   10   5.820 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   400.0MV
  1617    2   136.0MV                   400.0MV
  1623    3   104.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   102.0MV                   400.0MV
  1641    6   106.0MV                   400.0MV
  1647    7   100.0MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   136.0MV                   400.0MV
  1665   15   132.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   126.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       9

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   590.0MV      100.0MV       1.500 V
    71    2   600.0MV      100.0MV       1.500 V
    71    3   600.0MV      100.0MV       1.500 V
    71    4   600.0MV      100.0MV       1.500 V
    71    5   600.0MV      100.0MV       1.500 V
    71    6   600.0MV      100.0MV       1.500 V
    71    7   600.0MV      100.0MV       1.500 V
    71    9   670.0MV      100.0MV       1.500 V
    71   10   630.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   600.0MV      100.0MV       1.500 V
    71   15   600.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.840 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.850 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.850 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.850 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.840 V	2.200 V	
1495	10	2.830 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   106.0MV                   400.0MV
  1623    3   94.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   92.00MV                   400.0MV
  1641    6   92.00MV                   400.0MV
  1647    7   90.00MV                   400.0MV
  1653   13   90.00MV                   400.0MV
  1659   14   106.0MV                   400.0MV
  1665   15   104.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   120.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.290 V	3.700 V	
1429	2	4.280 V	3.700 V	
1435	3	4.310 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.310 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.310 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.280 V	3.700 V	
1486	9	4.310 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	116.0MV		400.0MV
1617	2	126.0MV		400.0MV
1623	3	102.0MV		400.0MV
1629	4	102.0MV		400.0MV
1635	5	98.00MV		400.0MV
1641	6	100.0MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	102.0MV		400.0MV
1659	14	122.0MV		400.0MV
1665	15	122.0MV		400.0MV
1674	9	134.0MV		400.0MV
1683	10	120.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.800 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.820 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.820 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.800 V      5.200 V
  1477   15   5.790 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.820 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   24.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   26.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   400.0MV
  1617    2   134.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   102.0MV                   400.0MV
  1635    5   100.0MV                   400.0MV
  1641    6   102.0MV                   400.0MV
  1647    7   98.00MV                   400.0MV
  1653   13   102.0MV                   400.0MV
  1659   14   130.0MV                   400.0MV
  1665   15   130.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   126.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      10

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -700.0MV     -1.500 V      -100.0MV
    61   12  -700.0MV     -1.500 V      -100.0MV
    71    1   590.0MV      100.0MV       1.500 V
    71    2   590.0MV      100.0MV       1.500 V
    71    3   600.0MV      100.0MV       1.500 V
    71    4   600.0MV      100.0MV       1.500 V
    71    5   600.0MV      100.0MV       1.500 V
    71    6   600.0MV      100.0MV       1.500 V
    71    7   600.0MV      100.0MV       1.500 V
    71    9   670.0MV      100.0MV       1.500 V
    71   10   630.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   600.0MV      100.0MV       1.500 V
    71   15   600.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.980 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.850 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.860 V	2.200 V	
1471	14	2.840 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.840 V	2.200 V	
1495	10	2.830 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   24.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   100.0MV                   400.0MV
  1617    2   106.0MV                   400.0MV
  1623    3   90.00MV                   400.0MV
  1629    4   90.00MV                   400.0MV
  1635    5   90.00MV                   400.0MV
  1641    6   90.00MV                   400.0MV
  1647    7   88.00MV                   400.0MV
  1653   13   92.00MV                   400.0MV
  1659   14   106.0MV                   400.0MV
  1665   15   106.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   122.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.300 V	3.700 V	
1429	2	4.280 V	3.700 V	
1435	3	4.310 V	3.700 V	
1441	4	4.310 V	3.700 V	
1447	5	4.310 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.310 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.280 V	3.700 V	
1486	9	4.310 V	3.700 V	
1495	10	4.310 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	24.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	28.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	28.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	114.0MV		400.0MV
1617	2	124.0MV		400.0MV
1623	3	98.00MV		400.0MV
1629	4	98.00MV		400.0MV
1635	5	98.00MV		400.0MV
1641	6	100.0MV		400.0MV
1647	7	96.00MV		400.0MV
1653	13	100.0MV		400.0MV
1659	14	126.0MV		400.0MV
1665	15	122.0MV		400.0MV
1674	9	132.0MV		400.0MV
1683	10	122.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.810 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.830 V      5.200 V
  1471   14   5.790 V      5.200 V
  1477   15   5.800 V      5.200 V
  1486    9   5.830 V      5.200 V
  1495   10   5.820 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   120.0MV                   400.0MV
  1617    2   132.0MV                   400.0MV
  1623    3   102.0MV                   400.0MV
  1629    4   98.00MV                   400.0MV
  1635    5   98.00MV                   400.0MV
  1641    6   100.0MV                   400.0MV
  1647    7   96.00MV                   400.0MV
  1653   13   104.0MV                   400.0MV
  1659   14   134.0MV                   400.0MV
  1665   15   130.0MV                   400.0MV
  1674    9   136.0MV                   400.0MV
  1683   10   128.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      11

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -690.0MV     -1.500 V      -100.0MV
    61   12  -690.0MV     -1.500 V      -100.0MV
    71    1   580.0MV      100.0MV       1.500 V
    71    2   590.0MV      100.0MV       1.500 V
    71    3   590.0MV      100.0MV       1.500 V
    71    4   590.0MV      100.0MV       1.500 V
    71    5   590.0MV      100.0MV       1.500 V
    71    6   590.0MV      100.0MV       1.500 V
    71    7   590.0MV      100.0MV       1.500 V
    71    9   660.0MV      100.0MV       1.500 V
    71   10   620.0MV      100.0MV       1.500 V
    71   13   590.0MV      100.0MV       1.500 V
    71   14   590.0MV      100.0MV       1.500 V
    71   15   590.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.840 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.850 V	2.200 V	
1441	4	2.850 V	2.200 V	
1447	5	2.850 V	2.200 V	
1453	6	2.850 V	2.200 V	
1459	7	2.850 V	2.200 V	
1465	13	2.850 V	2.200 V	
1471	14	2.830 V	2.200 V	
1477	15	2.840 V	2.200 V	
1486	9	2.830 V	2.200 V	
1495	10	2.830 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   104.0MV                   400.0MV
  1617    2   110.0MV                   400.0MV
  1623    3   94.00MV                   400.0MV
  1629    4   94.00MV                   400.0MV
  1635    5   92.00MV                   400.0MV
  1641    6   94.00MV                   400.0MV
  1647    7   92.00MV                   400.0MV
  1653   13   96.00MV                   400.0MV
  1659   14   118.0MV                   400.0MV
  1665   15   110.0MV                   400.0MV
  1674    9   138.0MV                   400.0MV
  1683   10   124.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.290 V	3.700 V	
1429	2	4.280 V	3.700 V	
1435	3	4.300 V	3.700 V	
1441	4	4.300 V	3.700 V	
1447	5	4.300 V	3.700 V	
1453	6	4.300 V	3.700 V	
1459	7	4.300 V	3.700 V	
1465	13	4.300 V	3.700 V	
1471	14	4.270 V	3.700 V	
1477	15	4.280 V	3.700 V	
1486	9	4.310 V	3.700 V	
1495	10	4.300 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	26.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	118.0MV		400.0MV
1617	2	130.0MV		400.0MV
1623	3	104.0MV		400.0MV
1629	4	102.0MV		400.0MV
1635	5	102.0MV		400.0MV
1641	6	104.0MV		400.0MV
1647	7	100.0MV		400.0MV
1653	13	104.0MV		400.0MV
1659	14	138.0MV		400.0MV
1665	15	130.0MV		400.0MV
1674	9	136.0MV		400.0MV
1683	10	124.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.800 V      5.200 V
  1429    2   5.790 V      5.200 V
  1435    3   5.820 V      5.200 V
  1441    4   5.820 V      5.200 V
  1447    5   5.820 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.820 V      5.200 V
  1465   13   5.820 V      5.200 V
  1471   14   5.780 V      5.200 V
  1477   15   5.790 V      5.200 V
  1486    9   5.820 V      5.200 V
  1495   10   5.810 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   126.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   106.0MV                   400.0MV
  1629    4   104.0MV                   400.0MV
  1635    5   104.0MV                   400.0MV
  1641    6   106.0MV                   400.0MV
  1647    7   100.0MV                   400.0MV
  1653   13   106.0MV                   400.0MV
  1659   14   144.0MV                   400.0MV
  1665   15   136.0MV                   400.0MV
  1674    9   140.0MV                   400.0MV
  1683   10   130.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      12

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 -55C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -710.0MV     -1.500 V      -100.0MV
    61   12  -710.0MV     -1.500 V      -100.0MV
    71    1   600.0MV      100.0MV       1.500 V
    71    2   610.0MV      100.0MV       1.500 V
    71    3   600.0MV      100.0MV       1.500 V
    71    4   610.0MV      100.0MV       1.500 V
    71    5   610.0MV      100.0MV       1.500 V
    71    6   610.0MV      100.0MV       1.500 V
    71    7   610.0MV      100.0MV       1.500 V
    71    9   680.0MV      100.0MV       1.500 V
    71   10   640.0MV      100.0MV       1.500 V
    71   13   600.0MV      100.0MV       1.500 V
    71   14   610.0MV      100.0MV       1.500 V
    71   15   610.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	28.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.850 V	2.200 V	
1429	2	2.840 V	2.200 V	
1435	3	2.860 V	2.200 V	
1441	4	2.860 V	2.200 V	
1447	5	2.860 V	2.200 V	
1453	6	2.860 V	2.200 V	
1459	7	2.860 V	2.200 V	
1465	13	2.870 V	2.200 V	
1471	14	2.850 V	2.200 V	
1477	15	2.850 V	2.200 V	
1486	9	2.850 V	2.200 V	
1495	10	2.850 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   98.00MV                   400.0MV
  1617    2   104.0MV                   400.0MV
  1623    3   88.00MV                   400.0MV
  1629    4   88.00MV                   400.0MV
  1635    5   86.00MV                   400.0MV
  1641    6   88.00MV                   400.0MV
  1647    7   84.00MV                   400.0MV
  1653   13   86.00MV                   400.0MV
  1659   14   104.0MV                   400.0MV
  1665   15   98.00MV                   400.0MV
  1674    9   126.0MV                   400.0MV
  1683   10   112.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.440 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.310 V	3.700 V	
1429	2	4.290 V	3.700 V	
1435	3	4.320 V	3.700 V	
1441	4	4.320 V	3.700 V	
1447	5	4.320 V	3.700 V	
1453	6	4.310 V	3.700 V	
1459	7	4.310 V	3.700 V	
1465	13	4.330 V	3.700 V	
1471	14	4.290 V	3.700 V	
1477	15	4.300 V	3.700 V	
1486	9	4.320 V	3.700 V	
1495	10	4.320 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	24.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	108.0MV		400.0MV
1617	2	120.0MV		400.0MV
1623	3	98.00MV		400.0MV
1629	4	96.00MV		400.0MV
1635	5	94.00MV		400.0MV
1641	6	96.00MV		400.0MV
1647	7	92.00MV		400.0MV
1653	13	96.00MV		400.0MV
1659	14	122.0MV		400.0MV
1665	15	114.0MV		400.0MV
1674	9	126.0MV		400.0MV
1683	10	112.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.820 V      5.200 V
  1429    2   5.800 V      5.200 V
  1435    3   5.830 V      5.200 V
  1441    4   5.830 V      5.200 V
  1447    5   5.830 V      5.200 V
  1453    6   5.820 V      5.200 V
  1459    7   5.830 V      5.200 V
  1465   13   5.840 V      5.200 V
  1471   14   5.810 V      5.200 V
  1477   15   5.810 V      5.200 V
  1486    9   5.840 V      5.200 V
  1495   10   5.830 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   400.0MV
  1617    2   130.0MV                   400.0MV
  1623    3   98.00MV                   400.0MV
  1629    4   98.00MV                   400.0MV
  1635    5   96.00MV                   400.0MV
  1641    6   98.00MV                   400.0MV
  1647    7   92.00MV                   400.0MV
  1653   13   98.00MV                   400.0MV
  1659   14   130.0MV                   400.0MV
  1665   15   128.0MV                   400.0MV
  1674    9   130.0MV                   400.0MV
  1683   10   118.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   1.000NA                   4.000UA
  1801   16   1.000NA                   4.000UA


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

Post Burn-In Test Results at 25°C

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       1

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
```

1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.480 V	
1429	2	2.800 V	2.480 V	
1435	3	2.820 V	2.480 V	
1441	4	2.820 V	2.480 V	
1447	5	2.820 V	2.480 V	
1453	6	2.820 V	2.480 V	
1459	7	2.820 V	2.480 V	
1465	13	2.820 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.800 V	2.480 V	
1486	9	2.800 V	2.480 V	
1495	10	2.790 V	2.480 V	

VOL1 TEST
VCC= 3
VOL LIMIT 100.0E-03

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   124.0MV                   260.0MV
  1617    2   134.0MV                   260.0MV
  1623    3   112.0MV                   260.0MV
  1629    4   114.0MV                   260.0MV
  1635    5   112.0MV                   260.0MV
  1641    6   112.0MV                   260.0MV
  1647    7   110.0MV                   260.0MV
  1653   13   112.0MV                   260.0MV
  1659   14   128.0MV                   260.0MV
  1665   15   130.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   150.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
  1391    9   4.450 V      4.400 V
  1400   10   4.440 V      4.400 V
```

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

INST #  PIN   MEASURED        LT           GT
  1423    1   4.250 V      3.980 V
  1429    2   4.230 V      3.980 V
  1435    3   4.270 V      3.980 V
  1441    4   4.270 V      3.980 V
  1447    5   4.270 V      3.980 V
  1453    6   4.270 V      3.980 V
  1459    7   4.270 V      3.980 V
  1465   13   4.270 V      3.980 V
  1471   14   4.240 V      3.980 V
  1477   15   4.240 V      3.980 V
  1486    9   4.270 V      3.980 V
  1495   10   4.270 V      3.980 V

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

INST #  PIN   MEASURED        LT           GT
  1516    1   26.00MV                  100.0MV
  1522    2   26.00MV                  100.0MV
  1528    3   26.00MV                  100.0MV
  1534    4   26.00MV                  100.0MV
  1540    5   26.00MV                  100.0MV
  1546    6   26.00MV                  100.0MV
  1552    7   26.00MV                  100.0MV
  1558   13   26.00MV                  100.0MV
  1564   14   26.00MV                  100.0MV
  1570   15   26.00MV                  100.0MV
  1579    9   28.00MV                  100.0MV
  1588   10   28.00MV                  100.0MV

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

INST #  PIN   MEASURED        LT           GT
  1611    1   142.0MV                  260.0MV
  1617    2   160.0MV                  260.0MV
  1623    3   126.0MV                  260.0MV
  1629    4   128.0MV                  260.0MV
  1635    5   122.0MV                  260.0MV
  1641    6   124.0MV                  260.0MV
  1647    7   122.0MV                  260.0MV
  1653   13   126.0MV                  260.0MV
  1659   14   152.0MV                  260.0MV
  1665   15   152.0MV                  260.0MV
  1674    9   160.0MV                  260.0MV
  1683   10   152.0MV                  260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------


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

```
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.760 V      5.480 V
  1429    2   5.740 V      5.480 V
  1435    3   5.780 V      5.480 V
  1441    4   5.780 V      5.480 V
  1447    5   5.780 V      5.480 V
  1453    6   5.780 V      5.480 V
  1459    7   5.780 V      5.480 V
  1465   13   5.780 V      5.480 V
  1471   14   5.750 V      5.480 V
  1477   15   5.750 V      5.480 V
  1486    9   5.780 V      5.480 V
  1495   10   5.780 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

```
INST #  PIN   MEASURED        LT            GT
  1611    1   150.0MV                   260.0MV
  1617    2   170.0MV                   260.0MV
  1623    3   128.0MV                   260.0MV
  1629    4   128.0MV                   260.0MV
  1635    5   126.0MV                   260.0MV
  1641    6   128.0MV                   260.0MV
  1647    7   124.0MV                   260.0MV
  1653   13   130.0MV                   260.0MV
  1659   14   166.0MV                   260.0MV
  1665   15   160.0MV                   260.0MV
  1674    9   164.0MV                   260.0MV
  1683   10   158.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                  4.000UA
  1801   16   10.00NA                  4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       2

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.850 V	2.480 V	
1471	14	2.830 V	2.480 V	
1477	15	2.830 V	2.480 V	
1486	9	2.830 V	2.480 V	
1495	10	2.820 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   110.0MV                   260.0MV
  1617    2   120.0MV                   260.0MV
  1623    3   102.0MV                   260.0MV
  1629    4   100.0MV                   260.0MV
  1635    5   100.0MV                   260.0MV
  1641    6   98.00MV                   260.0MV
  1647    7   98.00MV                   260.0MV
  1653   13   98.00MV                   260.0MV
  1659   14   116.0MV                   260.0MV
  1665   15   114.0MV                   260.0MV
  1674    9   148.0MV                   260.0MV
  1683   10   130.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.280 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.290 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.290 V	3.980 V	
1465	13	4.300 V	3.980 V	
1471	14	4.270 V	3.980 V	
1477	15	4.270 V	3.980 V	
1486	9	4.300 V	3.980 V	
1495	10	4.290 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	28.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	128.0MV		260.0MV
1617	2	146.0MV		260.0MV
1623	3	116.0MV		260.0MV
1629	4	114.0MV		260.0MV
1635	5	110.0MV		260.0MV
1641	6	114.0MV		260.0MV
1647	7	110.0MV		260.0MV
1653	13	112.0MV		260.0MV
1659	14	140.0MV		260.0MV
1665	15	136.0MV		260.0MV
1674	9	150.0MV		260.0MV
1683	10	132.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.790 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.810 V      5.480 V
  1471   14   5.770 V      5.480 V
  1477   15   5.780 V      5.480 V
  1486    9   5.810 V      5.480 V
  1495   10   5.800 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   24.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   260.0MV
  1617    2   156.0MV                   260.0MV
  1623    3   118.0MV                   260.0MV
  1629    4   116.0MV                   260.0MV
  1635    5   114.0MV                   260.0MV
  1641    6   116.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   116.0MV                   260.0MV
  1659   14   156.0MV                   260.0MV
  1665   15   144.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   140.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   22.00NA                   4.000UA
  1801   16   22.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       3

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   570.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.830 V	2.480 V	
1477	15	2.830 V	2.480 V	
1486	9	2.840 V	2.480 V	
1495	10	2.830 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   108.0MV                   260.0MV
  1617    2   118.0MV                   260.0MV
  1623    3   98.00MV                   260.0MV
  1629    4   100.0MV                   260.0MV
  1635    5   96.00MV                   260.0MV
  1641    6   98.00MV                   260.0MV
  1647    7   94.00MV                   260.0MV
  1653   13   98.00MV                   260.0MV
  1659   14   114.0MV                   260.0MV
  1665   15   112.0MV                   260.0MV
  1674    9   144.0MV                   260.0MV
  1683   10   126.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.260 V	3.980 V	
1435	3	4.290 V	3.980 V	
1441	4	4.290 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.290 V	3.980 V	
1459	7	4.290 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.270 V	3.980 V	
1477	15	4.270 V	3.980 V	
1486	9	4.310 V	3.980 V	
1495	10	4.300 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	28.00MV		100.0MV
1540	5	24.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	26.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	126.0MV		260.0MV
1617	2	142.0MV		260.0MV
1623	3	114.0MV		260.0MV
1629	4	112.0MV		260.0MV
1635	5	108.0MV		260.0MV
1641	6	110.0MV		260.0MV
1647	7	106.0MV		260.0MV
1653	13	112.0MV		260.0MV
1659	14	136.0MV		260.0MV
1665	15	134.0MV		260.0MV
1674	9	144.0MV		260.0MV
1683	10	130.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.810 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.810 V      5.480 V
  1465   13   5.810 V      5.480 V
  1471   14   5.780 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.820 V      5.480 V
  1495   10   5.810 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   26.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   136.0MV                   260.0MV
  1617    2   154.0MV                   260.0MV
  1623    3   116.0MV                   260.0MV
  1629    4   114.0MV                   260.0MV
  1635    5   110.0MV                   260.0MV
  1641    6   112.0MV                   260.0MV
  1647    7   108.0MV                   260.0MV
  1653   13   116.0MV                   260.0MV
  1659   14   146.0MV                   260.0MV
  1665   15   144.0MV                   260.0MV
  1674    9   150.0MV                   260.0MV
  1683   10   136.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       4

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	24.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.820 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   112.0MV                   260.0MV
  1617    2   122.0MV                   260.0MV
  1623    3   104.0MV                   260.0MV
  1629    4   104.0MV                   260.0MV
  1635    5   102.0MV                   260.0MV
  1641    6   102.0MV                   260.0MV
  1647    7   100.0MV                   260.0MV
  1653   13   102.0MV                   260.0MV
  1659   14   120.0MV                   260.0MV
  1665   15   116.0MV                   260.0MV
  1674    9   152.0MV                   260.0MV
  1683   10   136.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.290 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	28.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	28.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	132.0MV		260.0MV
1617	2	144.0MV		260.0MV
1623	3	116.0MV		260.0MV
1629	4	116.0MV		260.0MV
1635	5	114.0MV		260.0MV
1641	6	116.0MV		260.0MV
1647	7	112.0MV		260.0MV
1653	13	116.0MV		260.0MV
1659	14	142.0MV		260.0MV
1665	15	138.0MV		260.0MV
1674	9	152.0MV		260.0MV
1683	10	138.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.770 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.800 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   24.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   260.0MV
  1617    2   156.0MV                   260.0MV
  1623    3   120.0MV                   260.0MV
  1629    4   118.0MV                   260.0MV
  1635    5   116.0MV                   260.0MV
  1641    6   118.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   120.0MV                   260.0MV
  1659   14   154.0MV                   260.0MV
  1665   15   146.0MV                   260.0MV
  1674    9   158.0MV                   260.0MV
  1683   10   144.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       5

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	24.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   24.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   122.0MV                   260.0MV
  1623    3   106.0MV                   260.0MV
  1629    4   104.0MV                   260.0MV
  1635    5   104.0MV                   260.0MV
  1641    6   104.0MV                   260.0MV
  1647    7   102.0MV                   260.0MV
  1653   13   106.0MV                   260.0MV
  1659   14   122.0MV                   260.0MV
  1665   15   118.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   138.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.260 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	24.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	134.0MV		260.0MV
1617	2	146.0MV		260.0MV
1623	3	118.0MV		260.0MV
1629	4	116.0MV		260.0MV
1635	5	116.0MV		260.0MV
1641	6	116.0MV		260.0MV
1647	7	114.0MV		260.0MV
1653	13	120.0MV		260.0MV
1659	14	146.0MV		260.0MV
1665	15	142.0MV		260.0MV
1674	9	152.0MV		260.0MV
1683	10	140.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.760 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   24.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   158.0MV                   260.0MV
  1623    3   120.0MV                   260.0MV
  1629    4   120.0MV                   260.0MV
  1635    5   118.0MV                   260.0MV
  1641    6   118.0MV                   260.0MV
  1647    7   116.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   156.0MV                   260.0MV
  1665   15   152.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   146.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       6

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   560.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.820 V	2.480 V	
1459	7	2.820 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.810 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.810 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   24.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   24.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   124.0MV                   260.0MV
  1623    3   106.0MV                   260.0MV
  1629    4   106.0MV                   260.0MV
  1635    5   106.0MV                   260.0MV
  1641    6   106.0MV                   260.0MV
  1647    7   106.0MV                   260.0MV
  1653   13   104.0MV                   260.0MV
  1659   14   122.0MV                   260.0MV
  1665   15   116.0MV                   260.0MV
  1674    9   154.0MV                   260.0MV
  1683   10   140.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.260 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.270 V	3.980 V	
1459	7	4.270 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.250 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	24.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	28.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	132.0MV		260.0MV
1617	2	146.0MV		260.0MV
1623	3	118.0MV		260.0MV
1629	4	118.0MV		260.0MV
1635	5	116.0MV		260.0MV
1641	6	118.0MV		260.0MV
1647	7	116.0MV		260.0MV
1653	13	118.0MV		260.0MV
1659	14	150.0MV		260.0MV
1665	15	136.0MV		260.0MV
1674	9	154.0MV		260.0MV
1683	10	140.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.770 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.790 V      5.480 V
  1453    6   5.780 V      5.480 V
  1459    7   5.780 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.790 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   24.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   24.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   26.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   158.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   122.0MV                   260.0MV
  1635    5   120.0MV                   260.0MV
  1641    6   122.0MV                   260.0MV
  1647    7   118.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   164.0MV                   260.0MV
  1665   15   146.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   146.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       7

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   24.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   24.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   118.0MV                   260.0MV
  1623    3   104.0MV                   260.0MV
  1629    4   102.0MV                   260.0MV
  1635    5   102.0MV                   260.0MV
  1641    6   102.0MV                   260.0MV
  1647    7   98.00MV                   260.0MV
  1653   13   104.0MV                   260.0MV
  1659   14   126.0MV                   260.0MV
  1665   15   116.0MV                   260.0MV
  1674    9   154.0MV                   260.0MV
  1683   10   134.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

```
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   4.270 V      3.980 V
  1429    2   4.260 V      3.980 V
  1435    3   4.290 V      3.980 V
  1441    4   4.290 V      3.980 V
  1447    5   4.290 V      3.980 V
  1453    6   4.280 V      3.980 V
  1459    7   4.290 V      3.980 V
  1465   13   4.280 V      3.980 V
  1471   14   4.250 V      3.980 V
  1477   15   4.260 V      3.980 V
  1486    9   4.290 V      3.980 V
  1495   10   4.290 V      3.980 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   130.0MV                   260.0MV
  1617    2   144.0MV                   260.0MV
  1623    3   114.0MV                   260.0MV
  1629    4   116.0MV                   260.0MV
  1635    5   112.0MV                   260.0MV
  1641    6   114.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   118.0MV                   260.0MV
  1659   14   152.0MV                   260.0MV
  1665   15   140.0MV                   260.0MV
  1674    9   152.0MV                   260.0MV
  1683   10   138.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.800 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   138.0MV                   260.0MV
  1617    2   154.0MV                   260.0MV
  1623    3   118.0MV                   260.0MV
  1629    4   118.0MV                   260.0MV
  1635    5   114.0MV                   260.0MV
  1641    6   118.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   162.0MV                   260.0MV
  1665   15   146.0MV                   260.0MV
  1674    9   158.0MV                   260.0MV
  1683   10   144.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       8

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   560.0MV      100.0MV       1.500 V

 ----------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ----------------------------------------------


 ----------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ----------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.810 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.830 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.810 V	2.480 V	
1486	9	2.810 V	2.480 V	
1495	10	2.800 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   24.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   124.0MV                   260.0MV
  1623    3   108.0MV                   260.0MV
  1629    4   108.0MV                   260.0MV
  1635    5   106.0MV                   260.0MV
  1641    6   108.0MV                   260.0MV
  1647    7   106.0MV                   260.0MV
  1653   13   108.0MV                   260.0MV
  1659   14   120.0MV                   260.0MV
  1665   15   120.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   142.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.260 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.270 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.260 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.280 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	28.00MV		100.0MV
1528	3	24.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	134.0MV		260.0MV
1617	2	148.0MV		260.0MV
1623	3	120.0MV		260.0MV
1629	4	120.0MV		260.0MV
1635	5	118.0MV		260.0MV
1641	6	120.0MV		260.0MV
1647	7	120.0MV		260.0MV
1653	13	120.0MV		260.0MV
1659	14	142.0MV		260.0MV
1665	15	140.0MV		260.0MV
1674	9	154.0MV		260.0MV
1683	10	144.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.770 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.790 V      5.480 V
  1447    5   5.790 V      5.480 V
  1453    6   5.780 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.760 V      5.480 V
  1486    9   5.790 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   160.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   124.0MV                   260.0MV
  1635    5   122.0MV                   260.0MV
  1641    6   124.0MV                   260.0MV
  1647    7   120.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   152.0MV                   260.0MV
  1665   15   150.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   148.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       9

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   560.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.830 V	2.480 V	
1453	6	2.830 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.830 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   116.0MV                   260.0MV
  1617    2   122.0MV                   260.0MV
  1623    3   106.0MV                   260.0MV
  1629    4   106.0MV                   260.0MV
  1635    5   104.0MV                   260.0MV
  1641    6   104.0MV                   260.0MV
  1647    7   104.0MV                   260.0MV
  1653   13   106.0MV                   260.0MV
  1659   14   116.0MV                   260.0MV
  1665   15   118.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   138.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.260 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.290 V	3.980 V	
1471	14	4.270 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	28.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	24.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	134.0MV		260.0MV
1617	2	146.0MV		260.0MV
1623	3	120.0MV		260.0MV
1629	4	118.0MV		260.0MV
1635	5	116.0MV		260.0MV
1641	6	116.0MV		260.0MV
1647	7	112.0MV		260.0MV
1653	13	118.0MV		260.0MV
1659	14	136.0MV		260.0MV
1665	15	140.0MV		260.0MV
1674	9	154.0MV		260.0MV
1683	10	138.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.750 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.790 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.770 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   158.0MV                   260.0MV
  1623    3   122.0MV                   260.0MV
  1629    4   120.0MV                   260.0MV
  1635    5   118.0MV                   260.0MV
  1641    6   120.0MV                   260.0MV
  1647    7   116.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   144.0MV                   260.0MV
  1665   15   150.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   148.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      10

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   540.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.840 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.830 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   122.0MV                   260.0MV
  1623    3   106.0MV                   260.0MV
  1629    4   104.0MV                   260.0MV
  1635    5   104.0MV                   260.0MV
  1641    6   102.0MV                   260.0MV
  1647    7   100.0MV                   260.0MV
  1653   13   104.0MV                   260.0MV
  1659   14   120.0MV                   260.0MV
  1665   15   120.0MV                   260.0MV
  1674    9   156.0MV                   260.0MV
  1683   10   138.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

```
  1391    9   4.450 V      4.400 V
  1400   10   4.440 V      4.400 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   4.270 V      3.980 V
  1429    2   4.260 V      3.980 V
  1435    3   4.290 V      3.980 V
  1441    4   4.280 V      3.980 V
  1447    5   4.290 V      3.980 V
  1453    6   4.280 V      3.980 V
  1459    7   4.290 V      3.980 V
  1465   13   4.290 V      3.980 V
  1471   14   4.260 V      3.980 V
  1477   15   4.260 V      3.980 V
  1486    9   4.290 V      3.980 V
  1495   10   4.280 V      3.980 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   24.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   24.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   132.0MV                   260.0MV
  1617    2   144.0MV                   260.0MV
  1623    3   118.0MV                   260.0MV
  1629    4   114.0MV                   260.0MV
  1635    5   114.0MV                   260.0MV
  1641    6   114.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   118.0MV                   260.0MV
  1659   14   142.0MV                   260.0MV
  1665   15   140.0MV                   260.0MV
  1674    9   154.0MV                   260.0MV
  1683   10   140.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.800 V      5.480 V
  1471   14   5.760 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   24.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   26.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   142.0MV                   260.0MV
  1617    2   156.0MV                   260.0MV
  1623    3   120.0MV                   260.0MV
  1629    4   120.0MV                   260.0MV
  1635    5   116.0MV                   260.0MV
  1641    6   116.0MV                   260.0MV
  1647    7   114.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   152.0MV                   260.0MV
  1665   15   150.0MV                   260.0MV
  1674    9   162.0MV                   260.0MV
  1683   10   148.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      11

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   550.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.820 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.830 V	2.480 V	
1465	13	2.840 V	2.480 V	
1471	14	2.820 V	2.480 V	
1477	15	2.820 V	2.480 V	
1486	9	2.820 V	2.480 V	
1495	10	2.810 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   114.0MV                   260.0MV
  1617    2   122.0MV                   260.0MV
  1623    3   104.0MV                   260.0MV
  1629    4   106.0MV                   260.0MV
  1635    5   104.0MV                   260.0MV
  1641    6   104.0MV                   260.0MV
  1647    7   102.0MV                   260.0MV
  1653   13   104.0MV                   260.0MV
  1659   14   116.0MV                   260.0MV
  1665   15   120.0MV                   260.0MV
  1674    9   154.0MV                   260.0MV
  1683   10   138.0MV                   260.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.260 V	3.980 V	
1429	2	4.250 V	3.980 V	
1435	3	4.280 V	3.980 V	
1441	4	4.280 V	3.980 V	
1447	5	4.280 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.280 V	3.980 V	
1465	13	4.280 V	3.980 V	
1471	14	4.270 V	3.980 V	
1477	15	4.260 V	3.980 V	
1486	9	4.290 V	3.980 V	
1495	10	4.280 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	24.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	134.0MV		260.0MV
1617	2	146.0MV		260.0MV
1623	3	120.0MV		260.0MV
1629	4	116.0MV		260.0MV
1635	5	116.0MV		260.0MV
1641	6	116.0MV		260.0MV
1647	7	112.0MV		260.0MV
1653	13	118.0MV		260.0MV
1659	14	136.0MV		260.0MV
1665	15	142.0MV		260.0MV
1674	9	154.0MV		260.0MV
1683	10	140.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.780 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.790 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.790 V      5.480 V
  1459    7   5.790 V      5.480 V
  1465   13   5.790 V      5.480 V
  1471   14   5.770 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.800 V      5.480 V
  1495   10   5.790 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   140.0MV                   260.0MV
  1617    2   156.0MV                   260.0MV
  1623    3   120.0MV                   260.0MV
  1629    4   120.0MV                   260.0MV
  1635    5   118.0MV                   260.0MV
  1641    6   120.0MV                   260.0MV
  1647    7   116.0MV                   260.0MV
  1653   13   122.0MV                   260.0MV
  1659   14   146.0MV                   260.0MV
  1665   15   150.0MV                   260.0MV
  1674    9   160.0MV                   260.0MV
  1683   10   148.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   10.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      12

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +25C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -660.0MV     -1.500 V      -100.0MV
    61   12  -660.0MV     -1.500 V      -100.0MV
    71    1   540.0MV      100.0MV       1.500 V
    71    2   550.0MV      100.0MV       1.500 V
    71    3   550.0MV      100.0MV       1.500 V
    71    4   550.0MV      100.0MV       1.500 V
    71    5   550.0MV      100.0MV       1.500 V
    71    6   550.0MV      100.0MV       1.500 V
    71    7   550.0MV      100.0MV       1.500 V
    71    9   610.0MV      100.0MV       1.500 V
    71   10   580.0MV      100.0MV       1.500 V
    71   13   550.0MV      100.0MV       1.500 V
    71   14   550.0MV      100.0MV       1.500 V
    71   15   550.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.480

INST #	PIN	MEASURED	LT	GT
1423	1	2.830 V	2.480 V	
1429	2	2.820 V	2.480 V	
1435	3	2.830 V	2.480 V	
1441	4	2.840 V	2.480 V	
1447	5	2.840 V	2.480 V	
1453	6	2.840 V	2.480 V	
1459	7	2.840 V	2.480 V	
1465	13	2.850 V	2.480 V	
1471	14	2.840 V	2.480 V	
1477	15	2.830 V	2.480 V	
1486	9	2.830 V	2.480 V	
1495	10	2.820 V	2.480 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

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

INST #  PIN   MEASURED        LT            GT
  1611    1   110.0MV                   260.0MV
  1617    2   118.0MV                   260.0MV
  1623    3   102.0MV                   260.0MV
  1629    4   100.0MV                   260.0MV
  1635    5   100.0MV                   260.0MV
  1641    6   98.00MV                   260.0MV
  1647    7   98.00MV                   260.0MV
  1653   13   100.0MV                   260.0MV
  1659   14   108.0MV                   260.0MV
  1665   15   112.0MV                   260.0MV
  1674    9   148.0MV                   260.0MV
  1683   10   128.0MV                   260.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.980

INST #	PIN	MEASURED	LT	GT
1423	1	4.270 V	3.980 V	
1429	2	4.260 V	3.980 V	
1435	3	4.290 V	3.980 V	
1441	4	4.290 V	3.980 V	
1447	5	4.290 V	3.980 V	
1453	6	4.280 V	3.980 V	
1459	7	4.290 V	3.980 V	
1465	13	4.300 V	3.980 V	
1471	14	4.280 V	3.980 V	
1477	15	4.270 V	3.980 V	
1486	9	4.300 V	3.980 V	
1495	10	4.300 V	3.980 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	28.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	28.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	30.00MV		100.0MV
1588	10	26.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 260.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	126.0MV		260.0MV
1617	2	140.0MV		260.0MV
1623	3	116.0MV		260.0MV
1629	4	112.0MV		260.0MV
1635	5	112.0MV		260.0MV
1641	6	112.0MV		260.0MV
1647	7	108.0MV		260.0MV
1653	13	112.0MV		260.0MV
1659	14	128.0MV		260.0MV
1665	15	132.0MV		260.0MV
1674	9	148.0MV		260.0MV
1683	10	130.0MV		260.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

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

INST #  PIN   MEASURED        LT            GT
  1423    1   5.790 V      5.480 V
  1429    2   5.760 V      5.480 V
  1435    3   5.800 V      5.480 V
  1441    4   5.800 V      5.480 V
  1447    5   5.800 V      5.480 V
  1453    6   5.800 V      5.480 V
  1459    7   5.800 V      5.480 V
  1465   13   5.810 V      5.480 V
  1471   14   5.790 V      5.480 V
  1477   15   5.770 V      5.480 V
  1486    9   5.810 V      5.480 V
  1495   10   5.800 V      5.480 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   26.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  260.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   134.0MV                   260.0MV
  1617    2   152.0MV                   260.0MV
  1623    3   118.0MV                   260.0MV
  1629    4   116.0MV                   260.0MV
  1635    5   114.0MV                   260.0MV
  1641    6   116.0MV                   260.0MV
  1647    7   112.0MV                   260.0MV
  1653   13   116.0MV                   260.0MV
  1659   14   136.0MV                   260.0MV
  1665   15   146.0MV                   260.0MV
  1674    9   154.0MV                   260.0MV
  1683   10   138.0MV                   260.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -100.0NA       100.0NA
  1736   12       0 A     -100.0NA       100.0NA
  1748   11  -4.000NA     -100.0NA       100.0NA
  1755   12  -4.000NA     -100.0NA       100.0NA

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

INST #  PIN   MEASURED        LT            GT
  1794   16   11.00NA                   4.000UA
  1801   16   10.00NA                   4.000UA


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

Post Burn-In Test Results at +125°C

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 1

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-600.0MV	-1.500 V	-100.0MV
61	12	-600.0MV	-1.500 V	-100.0MV
71	1	490.0MV	100.0MV	1.500 V
71	2	490.0MV	100.0MV	1.500 V
71	3	490.0MV	100.0MV	1.500 V
71	4	490.0MV	100.0MV	1.500 V
71	5	490.0MV	100.0MV	1.500 V
71	6	490.0MV	100.0MV	1.500 V
71	7	490.0MV	100.0MV	1.500 V
71	9	550.0MV	100.0MV	1.500 V
71	10	520.0MV	100.0MV	1.500 V
71	13	490.0MV	100.0MV	1.500 V
71	14	490.0MV	100.0MV	1.500 V
71	15	490.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.980 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.960 V	1.900 V	
1400	10	1.960 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	28.00MV		100.0MV

1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.790 V	2.200 V	
1429	2	2.780 V	2.200 V	
1435	3	2.800 V	2.200 V	
1441	4	2.800 V	2.200 V	
1447	5	2.800 V	2.200 V	
1453	6	2.790 V	2.200 V	
1459	7	2.800 V	2.200 V	
1465	13	2.800 V	2.200 V	
1471	14	2.780 V	2.200 V	
1477	15	2.780 V	2.200 V	
1486	9	2.770 V	2.200 V	
1495	10	2.760 V	2.200 V	

VOL1 TEST
VCC= 3
VOL LIMIT 100.0E-03

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   144.0MV                   400.0MV
  1617    2   152.0MV                   400.0MV
  1623    3   134.0MV                   400.0MV
  1629    4   134.0MV                   400.0MV
  1635    5   134.0MV                   400.0MV
  1641    6   134.0MV                   400.0MV
  1647    7   132.0MV                   400.0MV
  1653   13   134.0MV                   400.0MV
  1659   14   148.0MV                   400.0MV
  1665   15   148.0MV                   400.0MV
  1674    9   196.0MV                   400.0MV
  1683   10   178.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V
```

```
 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT           GT
  1423    1   4.220 V      3.700 V
  1429    2   4.210 V      3.700 V
  1435    3   4.230 V      3.700 V
  1441    4   4.230 V      3.700 V
  1447    5   4.230 V      3.700 V
  1453    6   4.220 V      3.700 V
  1459    7   4.230 V      3.700 V
  1465   13   4.230 V      3.700 V
  1471   14   4.210 V      3.700 V
  1477   15   4.210 V      3.700 V
  1486    9   4.240 V      3.700 V
  1495   10   4.230 V      3.700 V

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

INST #  PIN   MEASURED        LT           GT
  1516    1   26.00MV                  100.0MV
  1522    2   28.00MV                  100.0MV
  1528    3   26.00MV                  100.0MV
  1534    4   28.00MV                  100.0MV
  1540    5   26.00MV                  100.0MV
  1546    6   26.00MV                  100.0MV
  1552    7   28.00MV                  100.0MV
  1558   13   26.00MV                  100.0MV
  1564   14   26.00MV                  100.0MV
  1570   15   26.00MV                  100.0MV
  1579    9   28.00MV                  100.0MV
  1588   10   30.00MV                  100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ---------------------------------------

INST #  PIN   MEASURED        LT           GT
  1611    1   172.0MV                  400.0MV
  1617    2   180.0MV                  400.0MV
  1623    3   156.0MV                  400.0MV
  1629    4   154.0MV                  400.0MV
  1635    5   152.0MV                  400.0MV
  1641    6   152.0MV                  400.0MV
  1647    7   150.0MV                  400.0MV
  1653   13   154.0MV                  400.0MV
  1659   14   176.0MV                  400.0MV
  1665   15   176.0MV                  400.0MV
  1674    9   198.0MV                  400.0MV
  1683   10   182.0MV                  400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------


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

```
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.720 V      5.200 V
  1429    2   5.710 V      5.200 V
  1435    3   5.740 V      5.200 V
  1441    4   5.740 V      5.200 V
  1447    5   5.740 V      5.200 V
  1453    6   5.730 V      5.200 V
  1459    7   5.740 V      5.200 V
  1465   13   5.740 V      5.200 V
  1471   14   5.710 V      5.200 V
  1477   15   5.710 V      5.200 V
  1486    9   5.740 V      5.200 V
  1495   10   5.740 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
            VOL2 LIMIT  400.0E-03
 ----------------------------------------
```

```
INST #  PIN   MEASURED        LT            GT
  1611    1   182.0MV                   400.0MV
  1617    2   194.0MV                   400.0MV
  1623    3   162.0MV                   400.0MV
  1629    4   160.0MV                   400.0MV
  1635    5   156.0MV                   400.0MV
  1641    6   158.0MV                   400.0MV
  1647    7   156.0MV                   400.0MV
  1653   13   162.0MV                   400.0MV
  1659   14   188.0MV                   400.0MV
  1665   15   190.0MV                   400.0MV
  1674    9   206.0MV                   400.0MV
  1683   10   192.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       2

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	30.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.820 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.830 V	2.200 V	
1471	14	2.810 V	2.200 V	
1477	15	2.810 V	2.200 V	
1486	9	2.810 V	2.200 V	
1495	10	2.800 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   126.0MV                   400.0MV
  1617    2   136.0MV                   400.0MV
  1623    3   120.0MV                   400.0MV
  1629    4   118.0MV                   400.0MV
  1635    5   118.0MV                   400.0MV
  1641    6   118.0MV                   400.0MV
  1647    7   114.0MV                   400.0MV
  1653   13   118.0MV                   400.0MV
  1659   14   130.0MV                   400.0MV
  1665   15   132.0MV                   400.0MV
  1674    9   178.0MV                   400.0MV
  1683   10   152.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.240 V	3.700 V	
1477	15	4.240 V	3.700 V	
1486	9	4.270 V	3.700 V	
1495	10	4.260 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	28.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	30.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	150.0MV		400.0MV
1617	2	164.0MV		400.0MV
1623	3	140.0MV		400.0MV
1629	4	136.0MV		400.0MV
1635	5	136.0MV		400.0MV
1641	6	136.0MV		400.0MV
1647	7	132.0MV		400.0MV
1653	13	136.0MV		400.0MV
1659	14	156.0MV		400.0MV
1665	15	158.0MV		400.0MV
1674	9	180.0MV		400.0MV
1683	10	158.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.770 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.780 V      5.200 V
  1471   14   5.750 V      5.200 V
  1477   15   5.740 V      5.200 V
  1486    9   5.780 V      5.200 V
  1495   10   5.770 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   26.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   162.0MV                   400.0MV
  1617    2   176.0MV                   400.0MV
  1623    3   146.0MV                   400.0MV
  1629    4   142.0MV                   400.0MV
  1635    5   140.0MV                   400.0MV
  1641    6   142.0MV                   400.0MV
  1647    7   138.0MV                   400.0MV
  1653   13   142.0MV                   400.0MV
  1659   14   168.0MV                   400.0MV
  1665   15   170.0MV                   400.0MV
  1674    9   190.0MV                   400.0MV
  1683   10   166.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 3

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-600.0MV	-1.500 V	-100.0MV
61	12	-600.0MV	-1.500 V	-100.0MV
71	1	490.0MV	100.0MV	1.500 V
71	2	490.0MV	100.0MV	1.500 V
71	3	490.0MV	100.0MV	1.500 V
71	4	490.0MV	100.0MV	1.500 V
71	5	490.0MV	100.0MV	1.500 V
71	6	490.0MV	100.0MV	1.500 V
71	7	490.0MV	100.0MV	1.500 V
71	9	540.0MV	100.0MV	1.500 V
71	10	510.0MV	100.0MV	1.500 V
71	13	490.0MV	100.0MV	1.500 V
71	14	480.0MV	100.0MV	1.500 V
71	15	490.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.970 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.820 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.820 V	2.200 V	
1465	13	2.820 V	2.200 V	
1471	14	2.810 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.810 V	2.200 V	
1495	10	2.800 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   124.0MV                   400.0MV
  1617    2   134.0MV                   400.0MV
  1623    3   118.0MV                   400.0MV
  1629    4   116.0MV                   400.0MV
  1635    5   114.0MV                   400.0MV
  1641    6   114.0MV                   400.0MV
  1647    7   110.0MV                   400.0MV
  1653   13   116.0MV                   400.0MV
  1659   14   126.0MV                   400.0MV
  1665   15   130.0MV                   400.0MV
  1674    9   174.0MV                   400.0MV
  1683   10   148.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.260 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.260 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.240 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.280 V	3.700 V	
1495	10	4.270 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	24.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	28.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	30.00MV		100.0MV
1588	10	30.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	150.0MV		400.0MV
1617	2	164.0MV		400.0MV
1623	3	136.0MV		400.0MV
1629	4	134.0MV		400.0MV
1635	5	132.0MV		400.0MV
1641	6	130.0MV		400.0MV
1647	7	128.0MV		400.0MV
1653	13	134.0MV		400.0MV
1659	14	150.0MV		400.0MV
1665	15	158.0MV		400.0MV
1674	9	174.0MV		400.0MV
1683	10	154.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.770 V      5.200 V
  1441    4   5.770 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.770 V      5.200 V
  1459    7   5.770 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.750 V      5.200 V
  1477   15   5.740 V      5.200 V
  1486    9   5.780 V      5.200 V
  1495   10   5.780 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   162.0MV                   400.0MV
  1617    2   178.0MV                   400.0MV
  1623    3   140.0MV                   400.0MV
  1629    4   140.0MV                   400.0MV
  1635    5   136.0MV                   400.0MV
  1641    6   136.0MV                   400.0MV
  1647    7   132.0MV                   400.0MV
  1653   13   140.0MV                   400.0MV
  1659   14   162.0MV                   400.0MV
  1665   15   172.0MV                   400.0MV
  1674    9   184.0MV                   400.0MV
  1683   10   164.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 4

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-600.0MV	-1.500 V	-100.0MV
61	12	-600.0MV	-1.500 V	-100.0MV
71	1	480.0MV	100.0MV	1.500 V
71	2	490.0MV	100.0MV	1.500 V
71	3	490.0MV	100.0MV	1.500 V
71	4	490.0MV	100.0MV	1.500 V
71	5	480.0MV	100.0MV	1.500 V
71	6	480.0MV	100.0MV	1.500 V
71	7	480.0MV	100.0MV	1.500 V
71	9	540.0MV	100.0MV	1.500 V
71	10	510.0MV	100.0MV	1.500 V
71	13	480.0MV	100.0MV	1.500 V
71	14	480.0MV	100.0MV	1.500 V
71	15	480.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.960 V	1.900 V	
1400	10	1.960 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT

1516	1	28.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.820 V	2.200 V	
1471	14	2.810 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   132.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   124.0MV                   400.0MV
  1629    4   122.0MV                   400.0MV
  1635    5   120.0MV                   400.0MV
  1641    6   120.0MV                   400.0MV
  1647    7   118.0MV                   400.0MV
  1653   13   122.0MV                   400.0MV
  1659   14   132.0MV                   400.0MV
  1665   15   136.0MV                   400.0MV
  1674    9   182.0MV                   400.0MV
  1683   10   158.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

```
  1391    9   4.450 V      4.400 V
  1400   10   4.450 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   4.230 V      3.700 V
  1429    2   4.220 V      3.700 V
  1435    3   4.250 V      3.700 V
  1441    4   4.250 V      3.700 V
  1447    5   4.250 V      3.700 V
  1453    6   4.250 V      3.700 V
  1459    7   4.250 V      3.700 V
  1465   13   4.260 V      3.700 V
  1471   14   4.240 V      3.700 V
  1477   15   4.230 V      3.700 V
  1486    9   4.270 V      3.700 V
  1495   10   4.250 V      3.700 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   156.0MV                   400.0MV
  1617    2   170.0MV                   400.0MV
  1623    3   142.0MV                   400.0MV
  1629    4   140.0MV                   400.0MV
  1635    5   136.0MV                   400.0MV
  1641    6   138.0MV                   400.0MV
  1647    7   134.0MV                   400.0MV
  1653   13   138.0MV                   400.0MV
  1659   14   156.0MV                   400.0MV
  1665   15   162.0MV                   400.0MV
  1674    9   184.0MV                   400.0MV
  1683   10   164.0MV                   400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.740 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   24.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   166.0MV                   400.0MV
  1617    2   182.0MV                   400.0MV
  1623    3   146.0MV                   400.0MV
  1629    4   144.0MV                   400.0MV
  1635    5   142.0MV                   400.0MV
  1641    6   142.0MV                   400.0MV
  1647    7   140.0MV                   400.0MV
  1653   13   144.0MV                   400.0MV
  1659   14   168.0MV                   400.0MV
  1665   15   172.0MV                   400.0MV
  1674    9   192.0MV                   400.0MV
  1683   10   174.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       5

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   490.0MV      100.0MV       1.500 V
    71   14   490.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   134.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   124.0MV                   400.0MV
  1629    4   124.0MV                   400.0MV
  1635    5   120.0MV                   400.0MV
  1641    6   122.0MV                   400.0MV
  1647    7   120.0MV                   400.0MV
  1653   13   124.0MV                   400.0MV
  1659   14   136.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   184.0MV                   400.0MV
  1683   10   164.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.230 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.230 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	28.00MV		100.0MV
1534	4	28.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	24.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	158.0MV		400.0MV
1617	2	168.0MV		400.0MV
1623	3	142.0MV		400.0MV
1629	4	140.0MV		400.0MV
1635	5	138.0MV		400.0MV
1641	6	142.0MV		400.0MV
1647	7	138.0MV		400.0MV
1653	13	142.0MV		400.0MV
1659	14	160.0MV		400.0MV
1665	15	164.0MV		400.0MV
1674	9	186.0MV		400.0MV
1683	10	166.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.740 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   24.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   168.0MV                   400.0MV
  1617    2   182.0MV                   400.0MV
  1623    3   146.0MV                   400.0MV
  1629    4   144.0MV                   400.0MV
  1635    5   142.0MV                   400.0MV
  1641    6   146.0MV                   400.0MV
  1647    7   142.0MV                   400.0MV
  1653   13   148.0MV                   400.0MV
  1659   14   172.0MV                   400.0MV
  1665   15   178.0MV                   400.0MV
  1674    9   194.0MV                   400.0MV
  1683   10   176.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11   1.000NA     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       6

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -610.0MV     -1.500 V      -100.0MV
    61   12  -610.0MV     -1.500 V      -100.0MV
    71    1   500.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   500.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   500.0MV      100.0MV       1.500 V
    71    6   500.0MV      100.0MV       1.500 V
    71    7   500.0MV      100.0MV       1.500 V
    71    9   550.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   490.0MV      100.0MV       1.500 V
    71   14   500.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.800 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.800 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   130.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   120.0MV                   400.0MV
  1629    4   122.0MV                   400.0MV
  1635    5   122.0MV                   400.0MV
  1641    6   122.0MV                   400.0MV
  1647    7   120.0MV                   400.0MV
  1653   13   120.0MV                   400.0MV
  1659   14   130.0MV                   400.0MV
  1665   15   134.0MV                   400.0MV
  1674    9   180.0MV                   400.0MV
  1683   10   162.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.230 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.240 V	3.700 V	
1459	7	4.240 V	3.700 V	
1465	13	4.250 V	3.700 V	
1471	14	4.240 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.260 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	28.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	28.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	24.00MV		100.0MV
1570	15	28.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	154.0MV		400.0MV
1617	2	166.0MV		400.0MV
1623	3	138.0MV		400.0MV
1629	4	140.0MV		400.0MV
1635	5	138.0MV		400.0MV
1641	6	138.0MV		400.0MV
1647	7	138.0MV		400.0MV
1653	13	136.0MV		400.0MV
1659	14	154.0MV		400.0MV
1665	15	160.0MV		400.0MV
1674	9	180.0MV		400.0MV
1683	10	164.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.750 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.750 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   164.0MV                   400.0MV
  1617    2   180.0MV                   400.0MV
  1623    3   144.0MV                   400.0MV
  1629    4   144.0MV                   400.0MV
  1635    5   144.0MV                   400.0MV
  1641    6   144.0MV                   400.0MV
  1647    7   140.0MV                   400.0MV
  1653   13   142.0MV                   400.0MV
  1659   14   164.0MV                   400.0MV
  1665   15   172.0MV                   400.0MV
  1674    9   188.0MV                   400.0MV
  1683   10   172.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       7

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   480.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.960 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.980 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.820 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.820 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   130.0MV                   400.0MV
  1617    2   136.0MV                   400.0MV
  1623    3   120.0MV                   400.0MV
  1629    4   120.0MV                   400.0MV
  1635    5   116.0MV                   400.0MV
  1641    6   120.0MV                   400.0MV
  1647    7   116.0MV                   400.0MV
  1653   13   122.0MV                   400.0MV
  1659   14   132.0MV                   400.0MV
  1665   15   136.0MV                   400.0MV
  1674    9   182.0MV                   400.0MV
  1683   10   158.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.440 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.260 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.260 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.240 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.260 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	24.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	30.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	154.0MV		400.0MV
1617	2	164.0MV		400.0MV
1623	3	140.0MV		400.0MV
1629	4	134.0MV		400.0MV
1635	5	134.0MV		400.0MV
1641	6	138.0MV		400.0MV
1647	7	132.0MV		400.0MV
1653	13	140.0MV		400.0MV
1659	14	156.0MV		400.0MV
1665	15	162.0MV		400.0MV
1674	9	182.0MV		400.0MV
1683	10	162.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.770 V      5.200 V
  1441    4   5.770 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.750 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   164.0MV                   400.0MV
  1617    2   178.0MV                   400.0MV
  1623    3   144.0MV                   400.0MV
  1629    4   140.0MV                   400.0MV
  1635    5   138.0MV                   400.0MV
  1641    6   142.0MV                   400.0MV
  1647    7   136.0MV                   400.0MV
  1653   13   146.0MV                   400.0MV
  1659   14   166.0MV                   400.0MV
  1665   15   176.0MV                   400.0MV
  1674    9   190.0MV                   400.0MV
  1683   10   172.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       8

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   550.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   490.0MV      100.0MV       1.500 V
    71   14   490.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	28.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.790 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.800 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.800 V	2.200 V	
1459	7	2.800 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.780 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.780 V	2.200 V	
1495	10	2.780 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   28.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   134.0MV                   400.0MV
  1617    2   144.0MV                   400.0MV
  1623    3   126.0MV                   400.0MV
  1629    4   126.0MV                   400.0MV
  1635    5   126.0MV                   400.0MV
  1641    6   124.0MV                   400.0MV
  1647    7   122.0MV                   400.0MV
  1653   13   124.0MV                   400.0MV
  1659   14   144.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   184.0MV                   400.0MV
  1683   10   166.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.230 V	3.700 V	
1429	2	4.220 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.250 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.240 V	3.700 V	
1459	7	4.240 V	3.700 V	
1465	13	4.240 V	3.700 V	
1471	14	4.210 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.250 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	28.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	158.0MV		400.0MV
1617	2	172.0MV		400.0MV
1623	3	144.0MV		400.0MV
1629	4	144.0MV		400.0MV
1635	5	144.0MV		400.0MV
1641	6	142.0MV		400.0MV
1647	7	140.0MV		400.0MV
1653	13	144.0MV		400.0MV
1659	14	176.0MV		400.0MV
1665	15	164.0MV		400.0MV
1674	9	184.0MV		400.0MV
1683	10	170.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.980 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.730 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.750 V      5.200 V
  1441    4   5.750 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.750 V      5.200 V
  1459    7   5.750 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.720 V      5.200 V
  1477   15   5.720 V      5.200 V
  1486    9   5.760 V      5.200 V
  1495   10   5.750 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   28.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   168.0MV                   400.0MV
  1617    2   184.0MV                   400.0MV
  1623    3   150.0MV                   400.0MV
  1629    4   148.0MV                   400.0MV
  1635    5   146.0MV                   400.0MV
  1641    6   148.0MV                   400.0MV
  1647    7   144.0MV                   400.0MV
  1653   13   150.0MV                   400.0MV
  1659   14   186.0MV                   400.0MV
  1665   15   178.0MV                   400.0MV
  1674    9   194.0MV                   400.0MV
  1683   10   178.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N       9

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   490.0MV      100.0MV       1.500 V
    71   14   490.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	28.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	28.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	32.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.790 V	2.200 V	
1435	3	2.810 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.790 V	2.200 V	
1486	9	2.790 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   134.0MV                   400.0MV
  1617    2   140.0MV                   400.0MV
  1623    3   124.0MV                   400.0MV
  1629    4   124.0MV                   400.0MV
  1635    5   122.0MV                   400.0MV
  1641    6   120.0MV                   400.0MV
  1647    7   120.0MV                   400.0MV
  1653   13   122.0MV                   400.0MV
  1659   14   134.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   184.0MV                   400.0MV
  1683   10   162.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

```
  1391    9   4.450 V      4.400 V
  1400   10   4.440 V      4.400 V

 ----------------------------------------
            VOH2 TEST
            VCC=    4.500
            VOH2 LIMIT  3.700
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   4.230 V      3.700 V
  1429    2   4.220 V      3.700 V
  1435    3   4.250 V      3.700 V
  1441    4   4.250 V      3.700 V
  1447    5   4.250 V      3.700 V
  1453    6   4.250 V      3.700 V
  1459    7   4.250 V      3.700 V
  1465   13   4.250 V      3.700 V
  1471   14   4.230 V      3.700 V
  1477   15   4.220 V      3.700 V
  1486    9   4.260 V      3.700 V
  1495   10   4.260 V      3.700 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=    4.500
            VOL2 LIMIT  400.0E-03
 ----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   158.0MV                   400.0MV
  1617    2   170.0MV                   400.0MV
  1623    3   142.0MV                   400.0MV
  1629    4   142.0MV                   400.0MV
  1635    5   138.0MV                   400.0MV
  1641    6   140.0MV                   400.0MV
  1647    7   138.0MV                   400.0MV
  1653   13   140.0MV                   400.0MV
  1659   14   158.0MV                   400.0MV
  1665   15   162.0MV                   400.0MV
  1674    9   184.0MV                   400.0MV
  1683   10   166.0MV                   400.0MV

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        6
        VIH=    4.200      VIL=     1.800
 ------------------------------------------------
```

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.970 V      5.900 V
  1346    4   5.980 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.980 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ---------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
---------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.740 V      5.200 V
  1429    2   5.720 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.760 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.750 V      5.200 V
  1459    7   5.760 V      5.200 V
  1465   13   5.760 V      5.200 V
  1471   14   5.740 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ---------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   168.0MV                   400.0MV
  1617    2   182.0MV                   400.0MV
  1623    3   146.0MV                   400.0MV
  1629    4   146.0MV                   400.0MV
  1635    5   144.0MV                   400.0MV
  1641    6   142.0MV                   400.0MV
  1647    7   140.0MV                   400.0MV
  1653   13   146.0MV                   400.0MV
  1659   14   168.0MV                   400.0MV
  1665   15   176.0MV                   400.0MV
  1674    9   192.0MV                   400.0MV
  1683   10   174.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12   1.000NA     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      10

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   480.0MV      100.0MV       1.500 V
    71    2   480.0MV      100.0MV       1.500 V
    71    3   480.0MV      100.0MV       1.500 V
    71    4   480.0MV      100.0MV       1.500 V
    71    5   480.0MV      100.0MV       1.500 V
    71    6   480.0MV      100.0MV       1.500 V
    71    7   480.0MV      100.0MV       1.500 V
    71    9   540.0MV      100.0MV       1.500 V
    71   10   510.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   480.0MV      100.0MV       1.500 V
    71   15   480.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.970 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	28.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	28.00MV	100.0MV
1564	14	26.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.980 V	2.900 V	
1364	7	2.980 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.970 V	2.900 V	
1382	15	2.970 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.820 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.820 V	2.200 V	
1459	7	2.820 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   130.0MV                   400.0MV
  1617    2   138.0MV                   400.0MV
  1623    3   120.0MV                   400.0MV
  1629    4   118.0MV                   400.0MV
  1635    5   120.0MV                   400.0MV
  1641    6   120.0MV                   400.0MV
  1647    7   118.0MV                   400.0MV
  1653   13   122.0MV                   400.0MV
  1659   14   134.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   182.0MV                   400.0MV
  1683   10   160.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.440 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.260 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.230 V	3.700 V	
1477	15	4.220 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	28.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	26.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	26.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	30.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	154.0MV		400.0MV
1617	2	166.0MV		400.0MV
1623	3	140.0MV		400.0MV
1629	4	136.0MV		400.0MV
1635	5	136.0MV		400.0MV
1641	6	136.0MV		400.0MV
1647	7	132.0MV		400.0MV
1653	13	140.0MV		400.0MV
1659	14	160.0MV		400.0MV
1665	15	164.0MV		400.0MV
1674	9	184.0MV		400.0MV
1683	10	164.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.980 V      5.900 V
  1334    2   5.980 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.980 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.980 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 ----------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
----------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.760 V      5.200 V
  1441    4   5.770 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.770 V      5.200 V
  1459    7   5.770 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.740 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.770 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   24.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 ----------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   162.0MV                   400.0MV
  1617    2   180.0MV                   400.0MV
  1623    3   142.0MV                   400.0MV
  1629    4   142.0MV                   400.0MV
  1635    5   140.0MV                   400.0MV
  1641    6   140.0MV                   400.0MV
  1647    7   136.0MV                   400.0MV
  1653   13   144.0MV                   400.0MV
  1659   14   172.0MV                   400.0MV
  1665   15   178.0MV                   400.0MV
  1674    9   192.0MV                   400.0MV
  1683   10   176.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

STAT1 11-13-18 12:37
TEST PROGRAM C4060 S/N 11

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C

CONTINUITY TEST

INST #	PIN	MEASURED	LT	GT
61	11	-610.0MV	-1.500 V	-100.0MV
61	12	-610.0MV	-1.500 V	-100.0MV
71	1	490.0MV	100.0MV	1.500 V
71	2	500.0MV	100.0MV	1.500 V
71	3	490.0MV	100.0MV	1.500 V
71	4	500.0MV	100.0MV	1.500 V
71	5	490.0MV	100.0MV	1.500 V
71	6	500.0MV	100.0MV	1.500 V
71	7	500.0MV	100.0MV	1.500 V
71	9	550.0MV	100.0MV	1.500 V
71	10	520.0MV	100.0MV	1.500 V
71	13	500.0MV	100.0MV	1.500 V
71	14	500.0MV	100.0MV	1.500 V
71	15	500.0MV	100.0MV	1.500 V

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 2
VIH= 1.500 VIL= 500.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 2
VIH= 1.800 VIL= 200.0E-03

VOH1 TEST
VCC= 2
VOH LIMIT 1.900

INST #	PIN	MEASURED	LT	GT
1328	1	1.970 V	1.900 V	
1334	2	1.970 V	1.900 V	
1340	3	1.970 V	1.900 V	
1346	4	1.970 V	1.900 V	
1352	5	1.970 V	1.900 V	
1358	6	1.970 V	1.900 V	
1364	7	1.970 V	1.900 V	
1370	13	1.970 V	1.900 V	
1376	14	1.970 V	1.900 V	
1382	15	1.970 V	1.900 V	
1391	9	1.970 V	1.900 V	
1400	10	1.960 V	1.900 V	

VOL1 TEST
VCC= 2
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT

1516	1	26.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	28.00MV	100.0MV
1534	4	26.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	28.00MV	100.0MV
1579	9	34.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.970 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.980 V	2.900 V	
1346	4	2.970 V	2.900 V	
1352	5	2.970 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.980 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.800 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.820 V	2.200 V	
1441	4	2.810 V	2.200 V	
1447	5	2.810 V	2.200 V	
1453	6	2.810 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.810 V	2.200 V	
1471	14	2.800 V	2.200 V	
1477	15	2.800 V	2.200 V	
1486	9	2.800 V	2.200 V	
1495	10	2.790 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   28.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 -------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   130.0MV                   400.0MV
  1617    2   136.0MV                   400.0MV
  1623    3   122.0MV                   400.0MV
  1629    4   120.0MV                   400.0MV
  1635    5   118.0MV                   400.0MV
  1641    6   120.0MV                   400.0MV
  1647    7   116.0MV                   400.0MV
  1653   13   122.0MV                   400.0MV
  1659   14   132.0MV                   400.0MV
  1665   15   138.0MV                   400.0MV
  1674    9   180.0MV                   400.0MV
  1683   10   158.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.240 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.250 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.250 V	3.700 V	
1453	6	4.250 V	3.700 V	
1459	7	4.250 V	3.700 V	
1465	13	4.260 V	3.700 V	
1471	14	4.240 V	3.700 V	
1477	15	4.230 V	3.700 V	
1486	9	4.260 V	3.700 V	
1495	10	4.250 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	24.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	28.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	28.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	26.00MV		100.0MV
1579	9	28.00MV		100.0MV
1588	10	30.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	152.0MV		400.0MV
1617	2	164.0MV		400.0MV
1623	3	138.0MV		400.0MV
1629	4	138.0MV		400.0MV
1635	5	134.0MV		400.0MV
1641	6	134.0MV		400.0MV
1647	7	132.0MV		400.0MV
1653	13	140.0MV		400.0MV
1659	14	156.0MV		400.0MV
1665	15	164.0MV		400.0MV
1674	9	178.0MV		400.0MV
1683	10	162.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.980 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.970 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.750 V      5.200 V
  1429    2   5.730 V      5.200 V
  1435    3   5.770 V      5.200 V
  1441    4   5.770 V      5.200 V
  1447    5   5.760 V      5.200 V
  1453    6   5.760 V      5.200 V
  1459    7   5.770 V      5.200 V
  1465   13   5.770 V      5.200 V
  1471   14   5.750 V      5.200 V
  1477   15   5.730 V      5.200 V
  1486    9   5.770 V      5.200 V
  1495   10   5.760 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   24.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   162.0MV                   400.0MV
  1617    2   178.0MV                   400.0MV
  1623    3   144.0MV                   400.0MV
  1629    4   142.0MV                   400.0MV
  1635    5   138.0MV                   400.0MV
  1641    6   140.0MV                   400.0MV
  1647    7   136.0MV                   400.0MV
  1653   13   144.0MV                   400.0MV
  1659   14   164.0MV                   400.0MV
  1665   15   178.0MV                   400.0MV
  1674    9   186.0MV                   400.0MV
  1683   10   170.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       0 A                   160.0UA


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

```
STAT1               11-13-18  12:37
TEST PROGRAM   C4060         S/N      12

DDS-101-09-A PN 54HC4060 ELECTRICAL TEST SEQ 14 +125C


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

INST #  PIN   MEASURED        LT            GT
    61   11  -600.0MV     -1.500 V      -100.0MV
    61   12  -600.0MV     -1.500 V      -100.0MV
    71    1   490.0MV      100.0MV       1.500 V
    71    2   490.0MV      100.0MV       1.500 V
    71    3   490.0MV      100.0MV       1.500 V
    71    4   490.0MV      100.0MV       1.500 V
    71    5   490.0MV      100.0MV       1.500 V
    71    6   490.0MV      100.0MV       1.500 V
    71    7   490.0MV      100.0MV       1.500 V
    71    9   550.0MV      100.0MV       1.500 V
    71   10   520.0MV      100.0MV       1.500 V
    71   13   480.0MV      100.0MV       1.500 V
    71   14   490.0MV      100.0MV       1.500 V
    71   15   490.0MV      100.0MV       1.500 V

 ------------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=        2
        VIH=    1.500      VIL=     500.0E-03
 ------------------------------------------------


 ------------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        2
        VIH=    1.800      VIL=     200.0E-03
 ------------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   1.970 V      1.900 V
  1334    2   1.970 V      1.900 V
  1340    3   1.970 V      1.900 V
  1346    4   1.970 V      1.900 V
  1352    5   1.970 V      1.900 V
  1358    6   1.970 V      1.900 V
  1364    7   1.970 V      1.900 V
  1370   13   1.970 V      1.900 V
  1376   14   1.970 V      1.900 V
  1382   15   1.970 V      1.900 V
  1391    9   1.960 V      1.900 V
  1400   10   1.970 V      1.900 V

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

INST #  PIN   MEASURED        LT            GT
```

1516	1	28.00MV	100.0MV
1522	2	26.00MV	100.0MV
1528	3	26.00MV	100.0MV
1534	4	28.00MV	100.0MV
1540	5	26.00MV	100.0MV
1546	6	26.00MV	100.0MV
1552	7	26.00MV	100.0MV
1558	13	26.00MV	100.0MV
1564	14	28.00MV	100.0MV
1570	15	26.00MV	100.0MV
1579	9	32.00MV	100.0MV
1588	10	30.00MV	100.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 3
VIH= 2.100 VIL= 900.0E-03

FUNCTIONAL TEST
FULL PATTERN
VCC= 3
VIH= 2.400 VIL= 600.0E-03

VOH1 TEST
VCC= 3
VOH LIMIT 2.900

INST #	PIN	MEASURED	LT	GT
1328	1	2.980 V	2.900 V	
1334	2	2.970 V	2.900 V	
1340	3	2.970 V	2.900 V	
1346	4	2.980 V	2.900 V	
1352	5	2.980 V	2.900 V	
1358	6	2.970 V	2.900 V	
1364	7	2.970 V	2.900 V	
1370	13	2.970 V	2.900 V	
1376	14	2.980 V	2.900 V	
1382	15	2.980 V	2.900 V	
1391	9	2.970 V	2.900 V	
1400	10	2.970 V	2.900 V	

VOH2 TEST
VCC= 3
VOH2 LIMIT 2.200

INST #	PIN	MEASURED	LT	GT
1423	1	2.810 V	2.200 V	
1429	2	2.800 V	2.200 V	
1435	3	2.820 V	2.200 V	
1441	4	2.820 V	2.200 V	
1447	5	2.820 V	2.200 V	
1453	6	2.820 V	2.200 V	
1459	7	2.810 V	2.200 V	
1465	13	2.830 V	2.200 V	
1471	14	2.820 V	2.200 V	
1477	15	2.810 V	2.200 V	
1486	9	2.810 V	2.200 V	
1495	10	2.800 V	2.200 V	

VOL1 TEST

```
            VCC=        3
            VOL LIMIT   100.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1516    1   26.00MV                   100.0MV
  1522    2   26.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   28.00MV                   100.0MV
  1540    5   26.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   28.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   28.00MV                   100.0MV
  1570   15   26.00MV                   100.0MV
  1579    9   30.00MV                   100.0MV
  1588   10   30.00MV                   100.0MV

 ------------------------------------
            VOL2 TEST
            VCC=        3
            VOL2 LIMIT  400.0E-03
 ------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   124.0MV                   400.0MV
  1617    2   134.0MV                   400.0MV
  1623    3   116.0MV                   400.0MV
  1629    4   118.0MV                   400.0MV
  1635    5   114.0MV                   400.0MV
  1641    6   114.0MV                   400.0MV
  1647    7   112.0MV                   400.0MV
  1653   13   114.0MV                   400.0MV
  1659   14   124.0MV                   400.0MV
  1665   15   130.0MV                   400.0MV
  1674    9   172.0MV                   400.0MV
  1683   10   146.0MV                   400.0MV

 ---------------------------------------------
        FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
        OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
        VCC=    4.500
        VIH=    3.150      VIL=     1.350
 ---------------------------------------------


 ---------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=    4.500
        VIH=    3.600      VIL=     800.0E-03
 ---------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   4.450 V      4.400 V
  1334    2   4.450 V      4.400 V
  1340    3   4.450 V      4.400 V
  1346    4   4.450 V      4.400 V
  1352    5   4.450 V      4.400 V
  1358    6   4.450 V      4.400 V
  1364    7   4.450 V      4.400 V
  1370   13   4.450 V      4.400 V
  1376   14   4.450 V      4.400 V
  1382   15   4.450 V      4.400 V
```

1391	9	4.450 V	4.400 V
1400	10	4.450 V	4.400 V

VOH2 TEST
VCC= 4.500
VOH2 LIMIT 3.700

INST #	PIN	MEASURED	LT	GT
1423	1	4.250 V	3.700 V	
1429	2	4.230 V	3.700 V	
1435	3	4.260 V	3.700 V	
1441	4	4.260 V	3.700 V	
1447	5	4.260 V	3.700 V	
1453	6	4.260 V	3.700 V	
1459	7	4.260 V	3.700 V	
1465	13	4.270 V	3.700 V	
1471	14	4.260 V	3.700 V	
1477	15	4.250 V	3.700 V	
1486	9	4.280 V	3.700 V	
1495	10	4.270 V	3.700 V	

VOL1 TEST
VCC= 4.500
VOL LIMIT 100.0E-03

INST #	PIN	MEASURED	LT	GT
1516	1	26.00MV		100.0MV
1522	2	26.00MV		100.0MV
1528	3	24.00MV		100.0MV
1534	4	26.00MV		100.0MV
1540	5	26.00MV		100.0MV
1546	6	26.00MV		100.0MV
1552	7	26.00MV		100.0MV
1558	13	26.00MV		100.0MV
1564	14	28.00MV		100.0MV
1570	15	28.00MV		100.0MV
1579	9	30.00MV		100.0MV
1588	10	28.00MV		100.0MV

VOL2 TEST
VCC= 4.500
VOL2 LIMIT 400.0E-03

INST #	PIN	MEASURED	LT	GT
1611	1	148.0MV		400.0MV
1617	2	162.0MV		400.0MV
1623	3	134.0MV		400.0MV
1629	4	134.0MV		400.0MV
1635	5	130.0MV		400.0MV
1641	6	132.0MV		400.0MV
1647	7	128.0MV		400.0MV
1653	13	132.0MV		400.0MV
1659	14	148.0MV		400.0MV
1665	15	154.0MV		400.0MV
1674	9	174.0MV		400.0MV
1683	10	152.0MV		400.0MV

FUNCTIONAL TEST (OSCIN, MR) THRESHOLD)
OSC1, OSC2, Q4 OUTPUTS TOGGLE PATTERN
VCC= 6
VIH= 4.200 VIL= 1.800

```
 ------------------------------------------
        FUNCTIONAL TEST
        FULL PATTERN
        VCC=        6
        VIH=        5      VIL=     1.200
 ------------------------------------------


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

INST #  PIN   MEASURED        LT            GT
  1328    1   5.970 V      5.900 V
  1334    2   5.970 V      5.900 V
  1340    3   5.980 V      5.900 V
  1346    4   5.970 V      5.900 V
  1352    5   5.970 V      5.900 V
  1358    6   5.970 V      5.900 V
  1364    7   5.970 V      5.900 V
  1370   13   5.970 V      5.900 V
  1376   14   5.980 V      5.900 V
  1382   15   5.970 V      5.900 V
  1391    9   5.970 V      5.900 V
  1400   10   5.970 V      5.900 V

 --------------------------------------
            VOH2 TEST
            VCC=        6
            VOH2 LIMIT  5.200
--------------------------------------

INST #  PIN   MEASURED        LT            GT
  1423    1   5.760 V      5.200 V
  1429    2   5.740 V      5.200 V
  1435    3   5.770 V      5.200 V
  1441    4   5.770 V      5.200 V
  1447    5   5.770 V      5.200 V
  1453    6   5.770 V      5.200 V
  1459    7   5.770 V      5.200 V
  1465   13   5.780 V      5.200 V
  1471   14   5.760 V      5.200 V
  1477   15   5.740 V      5.200 V
  1486    9   5.780 V      5.200 V
  1495   10   5.780 V      5.200 V

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

INST #  PIN   MEASURED        LT            GT
  1516    1   28.00MV                   100.0MV
  1522    2   28.00MV                   100.0MV
  1528    3   26.00MV                   100.0MV
  1534    4   26.00MV                   100.0MV
  1540    5   28.00MV                   100.0MV
  1546    6   26.00MV                   100.0MV
  1552    7   26.00MV                   100.0MV
  1558   13   26.00MV                   100.0MV
  1564   14   26.00MV                   100.0MV
  1570   15   28.00MV                   100.0MV
  1579    9   28.00MV                   100.0MV
  1588   10   28.00MV                   100.0MV

 --------------------------------------
            VOL2 TEST
            VCC=        6
```

```
            VOL2 LIMIT  400.0E-03
 -------------------------------------

INST #  PIN   MEASURED        LT            GT
  1611    1   158.0MV                   400.0MV
  1617    2   176.0MV                   400.0MV
  1623    3   140.0MV                   400.0MV
  1629    4   138.0MV                   400.0MV
  1635    5   136.0MV                   400.0MV
  1641    6   136.0MV                   400.0MV
  1647    7   132.0MV                   400.0MV
  1653   13   138.0MV                   400.0MV
  1659   14   156.0MV                   400.0MV
  1665   15   168.0MV                   400.0MV
  1674    9   182.0MV                   400.0MV
  1683   10   160.0MV                   400.0MV

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

INST #  PIN   MEASURED        LT            GT
  1729   11       0 A     -1.000UA       1.000UA
  1736   12       0 A     -1.000UA       1.000UA
  1748   11  -4.000NA     -1.000UA       1.000UA
  1755   12  -4.000NA     -1.000UA       1.000UA

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

INST #  PIN   MEASURED        LT            GT
  1794   16       0 A                   160.0UA
  1801   16       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-101-09-W
Date: June 27, 2018
Part Number: 54HC4060
Part Type: CMOS LOGIC MICROCIRCUIT
Lot: Lot# 200207 D/C: 1810 WFR# 48
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-101-09-W

Summary

Eight (8) CMOS Logic Microcircuit P/N: 54HC4060 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-101-09-W
SEM EXAMINATION

TTL Job No.	Part Number	Part Type	Date
DDS-101-09-W	54HC4060	CMOS Logic Microcircuit	June 4, 2018
Lot Date Code: WFR# 48 Lot# 200207 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**

Technician Stamp: TTL

TANDEX TEST LABS TTL Job # DDS-101-09-W

Photodocumentation

TANDEX TEST LABS TTL Job # DDS-101-09-W

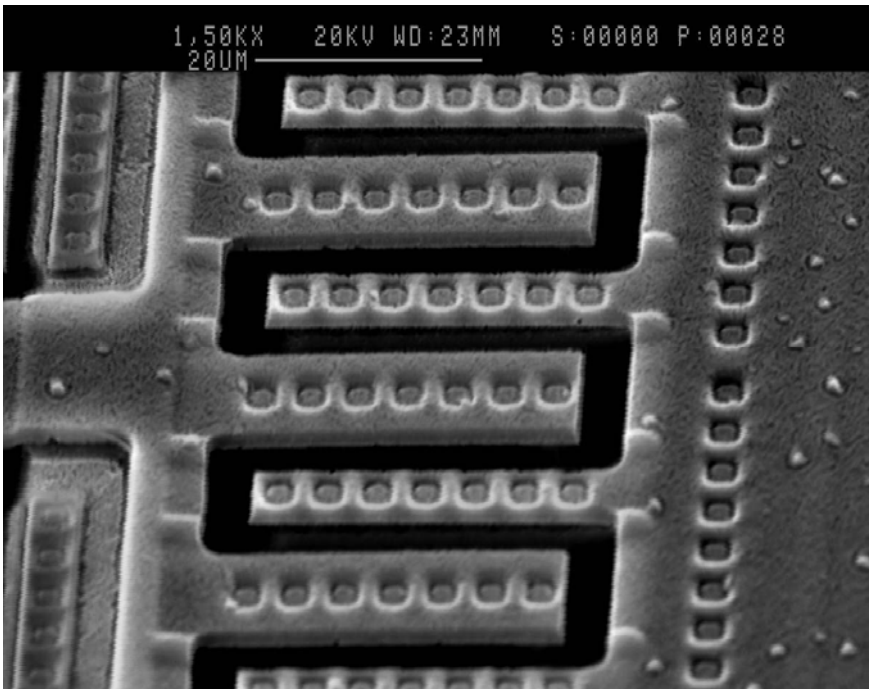

Fig: 1

Mag: 1,500X

S/N: 7

Description: SEM photograph of general metallization.

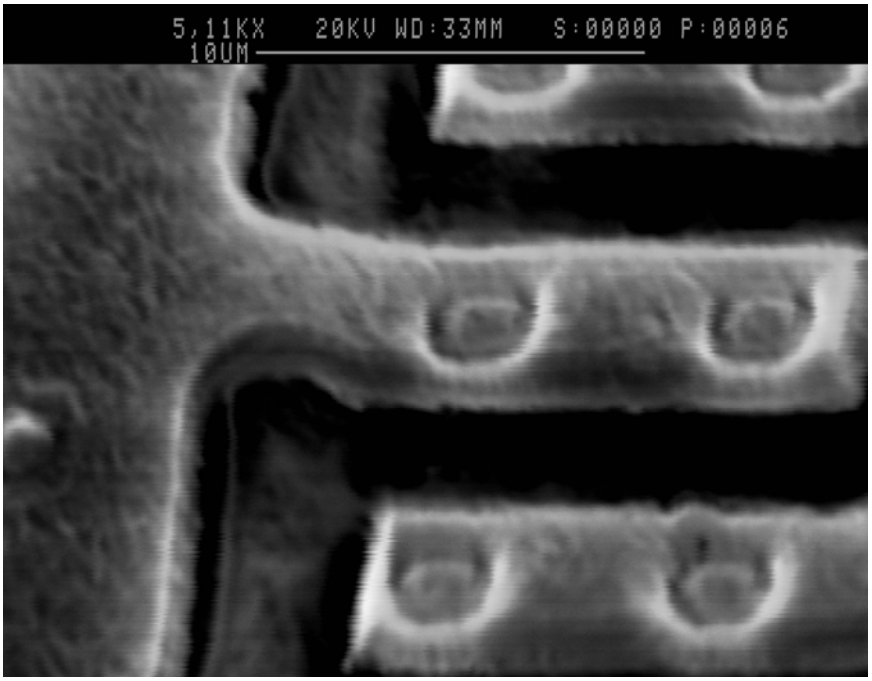

Fig: 2

Mag: 5,110X

S/N: 7

Description: SEM photograph of metallization typical step.

Note: Minor glass remaining on the die surface.

TANDEX TEST LABS TTL Job # DDS-101-09-W

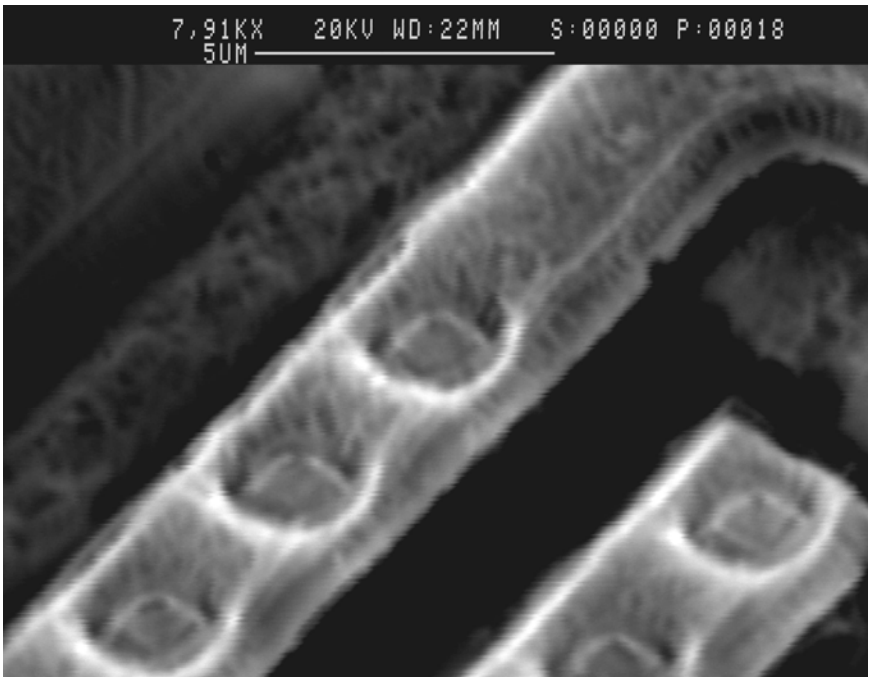

Fig: 3

Mag: 7,910X

S/N: 7

Description: SEM photograph of typical contact window device rotated 90°.

TANDEX TEST LABS, INC.
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http://www.tandexlabs.com
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 27, 2018	
TEST REPORT:	DDS-101-09-W	QUANTITY REQUIRED:	8
P.O. NUMBER:	SS139	QUANTITY PROCESSED:	8
DESCRIPTION:	CMOS LOGIC MICROCIRCUIT	QUANTITY PASSED:	8
PART NUMBER(S):	54HC4060	QUANTITY FAILED:	0
MFG PART NUMBER	54HC4060	QUANTITY SHIPPING:	8
LOT / DATE CODE:	LOT# 200207 WFR# 48 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