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### MIL PRF 38534 CLASS H TRAVELLER

Customer:SiS	Cust PO#:54C14 QUAL	Cust Spec:Man Data Sheet
LQH #:015	Bonding Diagram#: DBD040	SO:20337
Device:54C14	Device IIL:9041	
Bond Wire:Au	Package Style:16 PIN DIL	Package IIL:8053
Die Attach Type:Ag	Lid Style: Ceramic LID	Lid IIL:6316

SEQ	OPERATION/PS	CONDITIONS	QTY	ACCEPT	REJ.	DATE	SIG.	COMMENTS
1	100% Die Visual PS0001	MIL STD 883 TM 2010	15	15		30/8/23	DPB	Equipment #:1
2	Die Attach PS0002	Cure Epoxy 1Hr @150°C Oven Temp Check:152°C	15	15		31/8/23	DPB	Equipment #:8
3	Wire Bond PS 00003	Wire Type: Au Diameter: 1 Mils	15	15		31/8/23	DPB	Equipment #:7
4	Internal Visual PS0001	MIL STD 883 TM 2010	15	15		1/9/23	SE	Equipment #:1
5	Lid Seal PS 00004	Cure Epoxy 1Hr @150°C	15	15		1/9/23	SR	Equipment #:8 Oven Temp Check:151°C
6	100% Electrical Test +25°C	Manufacturers Datasheet	10	10		4/9/23	DPB	Equipment #:12 Program# 54C14
7	100% Electrical Test -55°C	Manufacturers Datasheet	10	10		4/9/23	DPB	Equipment #:12 Program# 54C14

ALL ELECTRICAL TEST RESULTS ARE SUPPLIED ELECTRONICALLY



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SEQ	OPERATION/PS	CONDITIONS	QTY	ACCEPT	REJ.	DATE	SIG.	COMMENTS
8	100% Electrical Test +125°C	Manufacturers Datasheet	10	10		4/9/23	DPB	Equipment #:12 Program# 54C14
9	Bond Pull Test Bake PS 00005	MIL STD 883 TM2011 1hr 300°C bake	10	10		6/9/23	DPB	Equipment #:8 Oven Temp Check# 301°C
10	Bond Pull Test PS 00006	MIL STD 883 TM2011 Attach Electronic Results to Folder	10	10		6/9/23	DPB	Equipment #:15 BPR:0033
11	Final QA PS 00001	Check Test Records and Documentation	10	10		7/9/23	DSB	
12	Dispatch goods and Electronic Records to customer		1	1		7/9/23	RB	
13								
14								

ALL ELECTRICAL TEST RESULTS ARE SUPPLIED ELECTRONICALLY

**Data**

Device #	Result	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	IDD at VDD=
Unit		V	V	V	V	V	V	V	V	V	V	V	V	nA
Lower limit		-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	0.000
Upper limit		-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	1000.000
1	Pass	-0.59	-0.60	-0.59	-0.60	-0.59	-0.60	-0.60	-0.59	-0.60	-0.59	-0.60	-0.59	12.41
2	Pass	-0.59	-0.61	-0.60	-0.61	-0.60	-0.61	-0.61	-0.60	-0.61	-0.60	-0.61	-0.60	12.84
3	Pass	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.61	-0.60	-0.60	-0.60	-0.60	-0.60	12.24
4	Pass	-0.60	-0.60	-0.60	-0.61	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	12.59
5	Pass	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	13.30
6	Pass	-0.59	-0.61	-0.60	-0.61	-0.59	-0.61	-0.61	-0.60	-0.61	-0.60	-0.61	-0.60	12.51
7	Pass	-0.60	-0.61	-0.60	-0.61	-0.60	-0.61	-0.61	-0.60	-0.61	-0.60	-0.61	-0.60	11.50
8	Pass	-0.60	-0.61	-0.60	-0.61	-0.60	-0.61	-0.61	-0.60	-0.61	-0.60	-0.61	-0.60	11.11
9	Pass	-0.60	-0.61	-0.60	-0.61	-0.60	-0.61	-0.61	-0.60	-0.61	-0.60	-0.61	-0.60	12.00
10	Pass	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	12.46

Cust Spec :MAN. Data Sheet

LQH #:015

TEMP =25°C

DEVICE: 54C14



IDD at VDD=	4.1 Fail in line	2 Loop count	5.1 Fail in line	2 Loop count	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=15V	L at VDD=15V	L at VDD=15V	L at VDD=15V
uA					mV	mV	mV	mV	mV	mV	V	V	V	V
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.000	400.000	400.000	400.000	400.000	400.000	400.000	1.500	1.500	1.500	1.500
0.87	0.00	0.00	0.00	0.00	143.00	143.50	143.50	144.50	142.50	143.50	0.36	0.36	0.36	0.36
0.07	0.00	0.00	0.00	0.00	152.00	153.00	155.50	156.00	154.50	154.00	0.38	0.38	0.38	0.38
0.88	0.00	0.00	0.00	0.00	143.50	145.50	145.00	143.50	143.50	142.50	0.36	0.36	0.36	0.36
0.61	0.00	0.00	0.00	0.00	148.00	147.50	147.00	147.00	148.50	147.50	0.37	0.37	0.37	0.37
0.87	0.00	0.00	0.00	0.00	139.50	140.50	142.00	142.00	141.00	141.00	0.35	0.35	0.36	0.36
0.01	0.00	0.00	0.00	0.00	165.00	164.50	165.00	165.00	164.50	166.00	0.40	0.40	0.40	0.40
0.09	0.00	0.00	0.00	0.00	153.50	154.00	156.00	156.00	155.00	154.50	0.38	0.38	0.38	0.38
0.08	0.00	0.00	0.00	0.00	153.50	152.00	154.00	154.00	153.50	151.50	0.38	0.38	0.38	0.38
0.33	0.00	0.00	0.00	0.00	150.50	150.00	152.50	149.50	149.00	148.50	0.37	0.37	0.37	0.37
0.75	0.00	0.00	0.00	0.00	146.50	145.50	145.00	144.50	145.00	145.00	0.37	0.37	0.37	0.36

L at VDD=15V	L at VDD=15V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	PH at VDD=15	
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
0.000	0.000	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	2.500	2.500	2.500	2.500	2.500	2.500	13.500
1.500	1.500	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	15.000
0.36	0.36	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.37	4.36	4.35	4.36	4.36	4.36	14.47
0.38	0.38	4.81	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.35	4.34	4.34	4.35	4.35	4.35	14.46
0.36	0.36	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.37	4.37	4.37	4.38	4.38	4.38	14.47
0.37	0.37	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.37	4.37	4.36	4.36	4.37	4.37	14.47
0.35	0.35	4.82	4.82	4.82	4.81	4.82	4.82	4.82	4.82	4.40	4.39	4.38	4.38	4.39	4.40	14.49
0.40	0.40	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.29	4.29	4.30	4.29	4.29	4.29	14.43
0.38	0.38	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.33	4.32	4.32	4.32	4.32	4.33	14.45
0.38	0.38	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.32	4.32	4.32	4.32	4.32	4.33	14.45
0.37	0.37	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.36	4.36	4.36	4.36	4.36	4.36	14.47
0.36	0.37	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.35	4.36	4.35	4.36	4.36	4.36	14.46

V	V	V	V	V	nA	nA	nA	nA	nA	nA	nA	nA	nA	nA
13.500	13.500	13.500	13.500	13.500	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000
15.000	15.000	15.000	15.000	15.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
14.47	14.46	14.46	14.46	14.47	-0.66	-0.48	-0.30	-0.24	-0.16	-0.35	0.03	-0.04	0.03	0.04
14.45	14.45	14.45	14.45	14.46	-0.45	-0.42	-0.36	-0.49	-0.22	-0.33	0.26	-0.02	-0.14	-0.08
14.47	14.47	14.47	14.47	14.48	-0.72	-0.50	-0.29	-0.25	-0.12	-0.37	0.23	0.06	0.08	0.08
14.47	14.47	14.47	14.47	14.47	-0.41	-0.35	-0.38	-0.50	-0.33	-0.28	0.34	-0.01	-0.16	-0.13
14.48	14.48	14.47	14.48	14.49	-0.30	-0.09	-0.10	-0.45	-0.47	-0.57	0.51	0.29	0.14	-0.20
14.43	14.43	14.42	14.42	14.42	0.12	0.24	-0.09	-0.86	-0.96	-0.71	0.98	0.56	-0.06	-0.59
14.44	14.44	14.44	14.44	14.45	-0.05	0.62	0.56	-0.35	-1.20	-1.32	1.20	1.13	0.48	-0.44
14.44	14.44	14.44	14.45	14.45	-0.50	-0.45	-0.37	-0.41	-0.13	-0.27	0.17	-0.05	-0.08	-0.06
14.46	14.46	14.46	14.46	14.47	-0.74	0.28	0.61	0.26	-0.31	-1.27	0.24	0.90	0.87	0.26
14.46	14.46	14.46	14.46	14.47	-0.32	-0.12	-0.09	-0.40	-0.45	-0.59	0.46	0.24	0.09	-0.18



steresis (1)	steresis (1)	steresis (1)	steresis (1)	steresis (1)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
0.300	0.300	0.300	0.300	0.300	6.800	6.800	6.800	6.800	6.800	6.800	6.800	4.000	4.000	4.000	4.000
3.600	3.600	3.600	3.600	3.600	10.800	10.800	10.800	10.800	10.800	10.800	10.800	7.400	7.400	7.400	7.400
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.70	1.70	1.70	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.50	9.00	9.00	9.00	9.00	9.00	9.00	9.10	5.10	5.10	5.10	5.10
1.70	1.70	1.70	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.60	9.00	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.10	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10





**Data**

Device #	Result	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	IDD at VDD=
Unit		V	V	V	V	V	V	V	V	V	V	V	V	V	nA
Lower limit		-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	0.000
Upper limit		-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	1000.000
1	Pass	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	11.12
2	Pass	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	-0.66	-0.68	11.92
3	Pass	-0.69	-0.66	-0.69	-0.67	-0.69	-0.67	-0.67	-0.67	-0.70	-0.67	-0.70	-0.66	-0.69	12.95
4	Pass	-0.69	-0.66	-0.69	-0.65	-0.69	-0.65	-0.65	-0.65	-0.70	-0.65	-0.70	-0.65	-0.70	12.78
5	Pass	-0.60	-0.62	-0.60	-0.62	-0.60	-0.62	-0.62	-0.62	-0.60	-0.62	-0.60	-0.62	-0.60	12.12
6	Pass	-0.69	-0.68	-0.69	-0.67	-0.69	-0.68	-0.68	-0.68	-0.69	-0.67	-0.69	-0.67	-0.69	13.01
7	Pass	-0.68	-0.65	-0.68	-0.65	-0.69	-0.66	-0.66	-0.66	-0.68	-0.65	-0.68	-0.65	-0.68	11.79
8	Pass	-0.60	-0.62	-0.60	-0.62	-0.60	-0.62	-0.62	-0.62	-0.60	-0.62	-0.60	-0.61	-0.60	12.69
9	Pass	-0.69	-0.68	-0.69	-0.67	-0.69	-0.67	-0.67	-0.67	-0.69	-0.67	-0.69	-0.67	-0.69	12.43
10	Pass	-0.69	-0.67	-0.69	-0.66	-0.69	-0.66	-0.66	-0.66	-0.69	-0.66	-0.69	-0.66	-0.69	11.98

Cust Spec :MAN. Data Sheet

LQH #:015

TEMP =-55°C

DEVICE: 54C14



IDD at VDD=	4.1 Fail in line	2 Loop count	5.1 Fail in line	2 Loop count	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=15V	L at VDD=15V	L at VDD=15V	L at VDD=15V
uA					mV	mV	mV	mV	mV	mV	V	V	V	V
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.000	400.000	400.000	400.000	400.000	400.000	400.000	1.500	1.500	1.500	1.500
0.01	0.00	0.00	0.00	0.00	126.00	127.50	129.50	127.50	127.00	127.50	0.31	0.31	0.31	0.31
0.00	0.00	0.00	0.00	0.00	126.50	125.00	126.00	125.50	125.00	125.00	0.31	0.31	0.31	0.31
0.00	0.00	0.00	0.00	0.00	121.00	122.00	124.50	123.50	121.00	122.00	0.30	0.30	0.30	0.30
0.23	0.00	0.00	0.00	0.00	111.50	113.00	112.00	111.00	112.50	112.50	0.28	0.28	0.28	0.28
0.00	0.00	0.00	0.00	0.00	162.50	161.00	161.00	160.50	162.50	162.50	0.39	0.39	0.39	0.39
0.01	0.00	0.00	0.00	0.00	133.00	132.50	133.00	132.50	133.50	134.00	0.32	0.32	0.32	0.32
0.30	0.00	0.00	0.00	0.00	116.00	117.50	118.00	115.50	116.00	115.50	0.29	0.29	0.29	0.29
0.05	0.00	0.00	0.00	0.00	151.00	151.00	151.50	153.00	151.50	151.50	0.37	0.37	0.37	0.37
0.00	0.00	0.00	0.00	0.00	123.50	124.00	124.50	124.50	124.50	125.00	0.30	0.30	0.30	0.30
0.16	0.00	0.00	0.00	0.00	118.50	119.00	119.50	118.50	119.00	118.00	0.29	0.29	0.29	0.29

L at VDD=15V	L at VDD=15V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	PH at VDD=15V
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
0.000	0.000	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	2.500	2.500	2.500	2.500	2.500	2.500
1.500	1.500	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	15.000
0.31	0.31	4.84	4.84	4.83	4.83	4.84	4.83	4.45	4.45	4.44	4.45	4.45	4.45	4.45	14.53
0.31	0.31	4.84	4.83	4.83	4.83	4.84	4.84	4.45	4.45	4.45	4.45	4.45	4.46	4.46	14.53
0.30	0.30	4.84	4.84	4.84	4.84	4.84	4.84	4.48	4.47	4.47	4.47	4.47	4.47	4.47	14.55
0.28	0.28	4.85	4.85	4.85	4.85	4.85	4.85	4.51	4.51	4.50	4.50	4.50	4.50	4.51	14.57
0.39	0.39	4.79	4.79	4.79	4.80	4.79	4.79	4.30	4.30	4.31	4.31	4.30	4.30	4.30	14.43
0.32	0.32	4.83	4.83	4.83	4.83	4.83	4.83	4.43	4.44	4.44	4.44	4.44	4.43	4.44	14.52
0.29	0.29	4.85	4.85	4.85	4.85	4.85	4.85	4.49	4.50	4.49	4.50	4.50	4.50	4.50	14.56
0.37	0.37	4.81	4.81	4.81	4.81	4.81	4.81	4.35	4.35	4.35	4.35	4.35	4.36	4.36	14.46
0.30	0.30	4.84	4.84	4.84	4.84	4.84	4.84	4.48	4.48	4.48	4.48	4.48	4.48	4.48	14.55
0.29	0.29	4.85	4.85	4.85	4.85	4.85	4.85	4.50	4.50	4.49	4.49	4.50	4.49	4.49	14.56

V	V	V	V	V	μA	μA	μA	μA	μA	μA	μA	μA	μA	μA
13.500	13.500	13.500	13.500	13.500	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000
15.000	15.000	15.000	15.000	15.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
14.53	14.52	14.52	14.53	14.53	0.01	0.05	0.03	-0.08	-0.15	-0.05	0.06	-0.02	-0.08	-0.23
14.53	14.53	14.53	14.54	14.54	0.04	0.09	0.10	0.02	-0.00	-0.01	0.02	-0.14	-0.16	-0.17
14.55	14.54	14.54	14.55	14.55	0.24	0.23	0.18	-0.01	-0.04	0.07	-0.03	-0.12	-0.21	-0.29
14.57	14.56	14.56	14.56	14.57	0.09	0.14	0.10	-0.05	-0.02	0.05	-0.07	-0.24	-0.30	-0.39
14.44	14.43	14.43	14.43	14.43	-1.19	-0.62	-0.35	-0.09	0.33	0.27	-2.74	-0.78	-0.10	0.09
14.52	14.52	14.52	14.52	14.52	0.09	0.10	0.24	0.15	-0.02	-0.03	-0.17	-0.27	-0.20	-0.30
14.56	14.56	14.55	14.56	14.56	-0.74	0.35	0.26	0.08	-0.08	-0.06	1.37	-0.09	-0.24	-0.41
14.46	14.46	14.46	14.46	14.46	0.11	0.16	0.11	-0.08	-0.13	-0.16	-0.26	-0.23	-0.15	-0.30
14.55	14.55	14.55	14.55	14.55	0.18	0.19	0.13	0.02	-0.10	0.03	-0.13	-0.25	-0.35	-0.41
14.56	14.56	14.56	14.56	14.56	0.27	0.17	0.24	0.04	0.01	0.08	-0.12	-0.28	-0.29	-0.31

ut current hig	ut current hig	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	Thres. volt.(1	steresis (1)
nA	nA	V	V	V	V	V	V	V	V	V	V	V	V	V	V
-100.000	-100.000	2.200	2.200	2.200	2.200	2.200	2.200	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.300
100.000	100.000	3.600	3.600	3.600	3.600	3.600	3.600	2.800	2.800	2.800	2.800	2.800	2.800	2.800	3.600
-0.16	-0.14	3.40	3.40	3.30	3.40	3.40	3.30	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
-0.16	-0.18	3.40	3.30	3.30	3.30	3.30	3.30	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
-0.33	-0.19	3.30	3.40	3.30	3.40	3.30	3.30	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.60
-0.29	-0.25	3.30	3.30	3.30	3.30	3.30	3.30	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.60
-0.27	-0.14	3.40	3.40	3.40	3.40	3.40	3.40	1.70	1.70	1.70	1.70	1.70	1.70	1.80	1.70
-0.30	-0.27	3.40	3.40	3.40	3.40	3.40	3.40	1.70	1.70	1.70	1.70	1.70	1.70	1.80	1.70
-0.32	-0.18	3.30	3.30	3.30	3.30	3.30	3.30	1.70	1.70	1.70	1.70	1.70	1.70	1.80	1.60
-0.31	-0.21	3.40	3.40	3.40	3.40	3.40	3.40	1.70	1.70	1.70	1.70	1.70	1.70	1.80	1.70
-0.28	-0.23	3.40	3.40	3.40	3.40	3.40	3.40	1.70	1.80	1.70	1.80	1.80	1.80	1.80	1.70
-0.25	-0.20	3.30	3.30	3.30	3.30	3.30	3.30	1.70	1.70	1.70	1.70	1.70	1.70	1.80	1.60

steresis (1)	steresis (1)	steresis (1)	steresis (1)	steresis (1)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
0.300	0.300	0.300	0.300	0.300	6.800	6.800	6.800	6.800	6.800	6.800	6.800	4.000	4.000	4.000	4.000
3.600	3.600	3.600	3.600	3.600	10.800	10.800	10.800	10.800	10.800	10.800	10.800	7.400	7.400	7.400	7.400
1.70	1.60	1.70	1.70	1.60	9.00	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10
1.70	1.60	1.70	1.60	1.60	9.00	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.70	1.70	1.70	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.70	1.70	1.70	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.50	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.70	1.70	1.70	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.20	5.20	5.20
1.60	1.70	1.60	1.60	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.50	9.00	9.00	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10

hres. volt.(2)	hres. volt.(2)	steresis (2)	steresis (2)	steresis (2)	steresis (2)	steresis (2)	steresis (2)	MEAS6
V	V	V	V	V	V	V	V	
4.000	4.000	1.600	1.600	1.600	1.600	1.600	1.600	
7.400	7.400	10.800	10.800	10.800	10.800	10.800	10.800	
5.10	5.10	3.90	4.00	4.00	4.00	4.00	4.00	
5.10	5.10	3.90	3.90	4.00	4.00	4.00	4.00	
5.10	5.10	3.90	4.00	4.00	4.00	4.00	4.00	
5.10	5.10	3.90	3.90	3.90	3.90	3.90	3.90	
5.10	5.20	3.90	3.90	3.90	3.90	4.00	3.90	
5.20	5.20	3.90	3.90	3.90	3.90	3.90	3.90	
5.10	5.10	3.90	3.90	3.90	3.90	3.90	3.90	
5.20	5.20	4.00	3.90	3.90	3.90	3.90	3.90	
5.20	5.20	4.00	3.90	3.90	3.90	3.90	3.90	
5.10	5.10	3.90	3.90	4.00	4.00	4.00	4.00	



**Data**

Device #	Result	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	ontinuity test	IDD at VDD=
Unit		V	V	V	V	V	V	V	V	V	V	V	V	V	nA
Lower limit		-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	0.000
Upper limit		-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	-0.300	1000.000
1	Pass	-0.44	-0.47	-0.44	-0.47	-0.44	-0.47	-0.47	-0.44	-0.47	-0.44	-0.47	-0.44	-0.44	12.17
2	Pass	-0.59	-0.61	-0.60	-0.61	-0.59	-0.61	-0.61	-0.59	-0.61	-0.59	-0.61	-0.61	-0.59	10.84
3	Pass	-0.58	-0.59	-0.58	-0.59	-0.58	-0.59	-0.60	-0.58	-0.60	-0.58	-0.59	-0.58	-0.59	9.17
4	Pass	-0.58	-0.59	-0.58	-0.59	-0.58	-0.59	-0.59	-0.58	-0.59	-0.58	-0.59	-0.59	-0.58	4.01
5	Pass	-0.48	-0.51	-0.48	-0.51	-0.48	-0.51	-0.51	-0.48	-0.51	-0.48	-0.51	-0.48	-0.48	12.99
6	Pass	-0.45	-0.48	-0.45	-0.48	-0.45	-0.48	-0.48	-0.45	-0.48	-0.45	-0.48	-0.45	-0.45	13.37
7	Pass	-0.47	-0.50	-0.47	-0.50	-0.47	-0.50	-0.50	-0.47	-0.50	-0.47	-0.50	-0.47	-0.47	12.40
8	Pass	-0.46	-0.49	-0.46	-0.49	-0.46	-0.49	-0.50	-0.46	-0.49	-0.46	-0.49	-0.49	-0.46	13.95
9	Pass	-0.59	-0.60	-0.59	-0.60	-0.59	-0.60	-0.60	-0.59	-0.60	-0.59	-0.60	-0.60	-0.59	12.25
10	Pass	-0.48	-0.50	-0.48	-0.50	-0.48	-0.50	-0.51	-0.48	-0.50	-0.48	-0.50	-0.48	-0.48	13.25

Cust Spec :MAN. Data Sheet

LQH #:015

TEMP =125°C

DEVICE: 54C14



IDD at VDD=	4.1 Fail in line	2 Loop count	5.1 Fail in line	2 Loop count	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=5V	L at VDD=15V	L at VDD=15V	L at VDD=15V	L at VDD=15V
uA					mV	mV	mV	mV	mV	mV	mV	V	V	V	V
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.000	400.000	400.000	400.000	400.000	400.000	400.000	400.000	1.500	1.500	1.500	1.500
2.71	0.00	0.00	0.00	0.00	197.50	198.00	200.00	198.50	198.00	196.50	196.50	0.51	0.51	0.51	0.51
0.06	0.00	0.00	0.00	0.00	154.00	155.00	155.00	156.00	155.00	156.00	156.00	0.38	0.38	0.38	0.38
0.99	0.00	0.00	0.00	0.00	148.00	150.00	149.50	148.00	148.00	147.00	147.00	0.37	0.37	0.38	0.37
1.01	0.00	0.00	0.00	0.00	149.50	149.50	151.00	149.50	149.00	148.00	148.00	0.37	0.38	0.38	0.38
2.19	0.00	0.00	0.00	0.00	185.00	185.00	186.00	185.00	185.50	184.50	184.50	0.47	0.47	0.47	0.47
2.07	0.00	0.00	0.00	0.00	199.00	198.50	201.00	200.00	199.00	199.50	199.50	0.51	0.51	0.51	0.51
2.32	0.00	0.00	0.00	0.00	182.00	184.50	187.00	187.00	183.50	183.50	183.50	0.47	0.47	0.48	0.47
0.13	0.00	0.00	0.00	0.00	218.00	217.50	216.50	218.00	218.00	218.00	218.00	0.53	0.53	0.53	0.53
0.08	0.00	0.00	0.00	0.00	154.00	155.50	157.00	157.50	155.50	156.00	156.00	0.38	0.38	0.39	0.39
0.49	0.00	0.00	0.00	0.00	197.50	199.00	201.00	200.50	198.50	198.50	198.50	0.50	0.50	0.50	0.50

L at VDD=15V	L at VDD=15V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	at VDD=5V	PH at VDD=15V
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
0.000	0.000	4.600	4.600	4.600	4.600	4.600	4.600	4.600	2.500	2.500	2.500	2.500	2.500	2.500	13.500
1.500	1.500	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	15.000
0.51	0.51	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.14	4.14	4.13	4.14	4.14	4.14	14.32
0.38	0.38	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.34	4.34	4.34	4.34	4.35	4.34	14.45
0.37	0.37	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.35	4.35	4.35	4.36	4.36	4.36	14.46
0.37	0.38	4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.35	4.35	4.35	4.35	4.35	4.35	14.46
0.47	0.47	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.20	4.20	4.21	4.21	4.21	4.20	14.36
0.50	0.51	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.16	4.16	4.15	4.15	4.16	4.16	14.33
0.47	0.47	4.77	4.77	4.76	4.76	4.77	4.77	4.77	4.22	4.21	4.20	4.20	4.21	4.22	14.37
0.53	0.54	4.73	4.73	4.74	4.73	4.73	4.73	4.73	4.07	4.08	4.08	4.08	4.07	4.08	14.28
0.39	0.39	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.33	4.32	4.31	4.31	4.32	4.32	14.44
0.50	0.50	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.15	4.14	4.13	4.13	4.13	4.14	14.33

V	V	V	V	V	μA	μA	μA	μA	μA	μA	μA	μA	μA	μA
13.500	13.500	13.500	13.500	13.500	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000	-100.000
15.000	15.000	15.000	15.000	15.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
14.31	14.31	14.31	14.31	14.32	-0.37	-0.57	-0.65	-1.20	-0.49	-0.94	1.89	0.39	0.16	0.48
14.45	14.45	14.45	14.45	14.46	4.23	2.26	1.88	1.31	1.98	3.55	-0.38	-0.37	-0.30	-0.24
14.46	14.45	14.45	14.46	14.46	-0.03	-0.01	0.00	-0.09	-0.22	-0.32	0.28	0.04	0.01	0.02
14.45	14.45	14.45	14.46	14.46	0.09	-0.03	0.08	0.05	-0.14	-0.56	0.39	0.05	0.08	0.20
14.35	14.35	14.35	14.35	14.36	-0.29	-0.34	-0.12	-0.29	-0.46	-0.49	0.76	0.33	0.28	0.31
14.33	14.33	14.32	14.33	14.33	-0.30	-0.34	-0.15	0.06	-0.47	-0.59	0.91	0.31	0.47	0.51
14.36	14.35	14.35	14.35	14.37	-1.03	-0.16	-0.13	-0.57	-0.37	-0.14	0.93	0.49	0.30	-0.03
14.28	14.28	14.28	14.28	14.28	-0.63	-0.06	-0.04	-0.49	-0.49	-0.60	0.36	0.48	0.48	0.23
14.44	14.43	14.43	14.44	14.44	-0.21	-0.10	-0.06	-0.28	-0.33	-0.37	0.33	0.35	0.26	0.21
14.32	14.31	14.31	14.32	14.32	-0.49	-0.03	0.06	-0.50	-0.43	-0.28	0.80	0.47	0.24	0.12



steresis (1)	steresis (1)	steresis (1)	steresis (1)	steresis (1)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	Thres. volt.(2)	
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
0.300	0.300	0.300	0.300	0.300	6.800	6.800	6.800	6.800	6.800	6.800	6.800	4.000	4.000	4.000	4.000
3.600	3.600	3.600	3.600	3.600	10.800	10.800	10.800	10.800	10.800	10.800	10.800	7.400	7.400	7.400	7.400
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.70	1.70	1.70	1.70	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.00	9.00	9.00	9.00	5.20	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.60	9.00	9.00	9.00	9.10	9.10	9.10	9.10	5.10	5.20	5.20	5.10
1.60	1.60	1.60	1.60	1.60	9.10	9.10	9.10	9.10	9.10	9.10	9.10	5.20	5.20	5.20	5.20
1.60	1.60	1.60	1.60	1.60	9.00	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10
1.60	1.60	1.60	1.60	1.60	9.00	9.10	9.10	9.10	9.10	9.10	9.10	5.10	5.10	5.10	5.10

hres. volt.(2)	hres. volt.(2)	steresis (2)	steresis (2)	steresis (2)	steresis (2)	steresis (2)	steresis (2)	MEAS6
V	V	V	V	V	V	V	V	
4.000	4.000	1.600	1.600	1.600	1.600	1.600	1.600	
7.400	7.400	10.800	10.800	10.800	10.800	10.800	10.800	
5.10	5.10	3.90	3.90	3.90	3.90	3.90	3.90	
5.20	5.20	3.90	3.90	3.90	3.90	3.90	3.90	
5.10	5.10	3.90	3.90	3.90	3.90	3.90	3.90	
5.10	5.10	3.90	3.90	3.90	3.90	3.90	3.90	
5.10	5.10	3.80	3.90	3.90	3.90	3.90	3.90	
5.20	5.20	3.80	3.80	3.80	3.90	3.90	3.90	
5.10	5.20	3.90	3.80	3.80	4.00	4.00	3.90	
5.20	5.20	3.90	3.90	3.90	3.90	3.90	3.90	
5.10	5.10	3.90	4.00	4.00	4.00	4.00	4.00	
5.10	5.10	3.90	4.00	4.00	4.00	4.00	4.00	

<b>Part #</b>	54C14	<b>Date</b>	6 <sup>th</sup> September 2023
<b>Sample Qty</b>	5	<b>Bond Type</b>	Ball
<b>Wire Size</b>	25μ	<b>Wire Type</b>	Au
<b>Min allowable strength</b>	2.5gm	<b>BPR</b>	0033
<b>Customer</b>	SiS	<b>Customer PO- SO</b>	PO INTERNAL_2337
<b>Batch #</b>	LQH0015	<b>Equipment</b>	XYZTEC

SN: 11			SN: 12			SN: 13			SN: 14			SN: 15					
#	F	C	#	F	C	#	F	C	#	F	C	#	F	C	#	F	C
1	5.55	8	3	7.23	8	5	5.44	8	7	4.66	8	9	6.7	8			
2	5.23	8	4	6.45	8	6	6.57	8	8	5.62	8	10	5.94	8			

F=Pull Strength in gms C=Failure Code

### CODES

1. No Wire Break
2. Bond lift from Die
3. Bond lift from Post
4. Wire breaks at Heal
5. Die Metallisation delaminates
6. No Connection
7. Wire Breaks from Die
8. Bond Breaks at span