

RELIABILITY TEST REPORT

TEST REPORT

Company : RAIO TECHNOLOGY INC.
 Model Name : RA8806
 Date Received : 2008.01.21
 Date Tested : 2008.01.25

TESTING LABORATORY IS ACCREDITED BY:

IEC/IECQ 17025 certificate of independent test laboratory approval

Certificate No. : T1091

ISO 17025 accredited in respect of laboratory is approved by TAF

Certificate No. : L0835-060321

ISO 9001 certificate is approved by TUV CERT certification body of TUV NORD Cert GmbH

WE HEREBY CERTIFY THAT:

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

	Name	Signature	Date
Test Engineer	Jay Fang	Reliability Test Engineer <i>Jay Fang</i>	2008/01/21
Section Manager	Kosa Lin	Reliability Test Engineer <i>Kosa Lin</i>	2008/01/25

Note :

1. This report will be invalid if reproduced in whole or in part.
2. This report refers only to the specimen(s) submitted to test, and is invalid if used separately.
3. This report is ONLY valid with the examination seal and signature of this institute.
4. The tested specimen(s) will only be preserved for thirty days from the date issued, if not collected by the applicant.



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No.:T1091

Report No. : HS0801210029A

Report No. : RAC9700295-E

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RELIABILITY TEST REPORT

Applicant/Department: RAIO TECHNOLOGY INC.	
Product	: RA8806
Testing Item	: LATCH-UP
Package/Pin Count	: LQFP-100
Test Condition	: JEDEC STANDARD NO.78 MARCH 1997
Failure Criteria	< 25mA 10mA + I normal
	> 25mA 1.4 x I normal
Trigger Current	: 50mA ~300mA (\pm), Step: 50mA (\pm)
V_{supply} OVER VOLTAGE TEST	: 5V~8V(+), Step: 0.5V(+)



LATCH-UP Testing Report

Test Equipment:

KEYTEK ZAPMASTER #5-6349

Environmental Condition of Laboratory:

Temperature: 25°C±5°C
 Humidity: 55%±10% RH

Test Condition:

POSITIVE I
 NEGATIVE I
 V_{supply} OVER VOLTAGE TEST

Test Result:

TRIGGER MODEL	TEST PIN	SAMPLE SIZE	TRIGGER SOURCE INDUCE LATCH-UP	IT CLASS: <u>3</u>
+IT	I/P	3	PASS	NOTE: CLASS1: +IT:0mA~39mA -IT:0mA~ -39mA CLASS2: +IT: 40mA~+99mA -IT: -40mA~-99mA CLASS3: +IT: ≥ 100mA -IT: ≤ -100mA
	O/P		PASS	
	I/O		PASS	
-IT	I/P	3	PASS	
	O/P		PASS	
	I/O		PASS	
V_{supply} OVER VOLTAGE TEST	VDD	3	PASS	

ALL:5-17,21-22,25-32,35-44,46-51,82-100
 I/O:37-44
 I/P:25-28,30-32,35-36,47-50,82-89,98-100

O/P:5-17,21-22,29,46,51,90-97
 VDD:1,19-20,24,34
 VSS:2,18,23,33

POSITIVE I									
(UNIT::mA)									
Test Pin	TRIGGER CURRENT	#1	#2	#3	Test Pin	TRIGGER CURRENT	#1	#2	#3
5	PASS	PASS	PASS	PASS	41	PASS	PASS	PASS	PASS
6	PASS	PASS	PASS	PASS	42	PASS	PASS	PASS	PASS
7	PASS	PASS	PASS	PASS	43	PASS	PASS	PASS	PASS
8	PASS	PASS	PASS	PASS	44	PASS	PASS	PASS	PASS
9	PASS	PASS	PASS	PASS	46	PASS	PASS	PASS	PASS
10	PASS	PASS	PASS	PASS	47	PASS	PASS	PASS	PASS
11	PASS	PASS	PASS	PASS	48	PASS	PASS	PASS	PASS
12	PASS	PASS	PASS	PASS	49	PASS	PASS	PASS	PASS
13	PASS	PASS	PASS	PASS	50	PASS	PASS	PASS	PASS
14	PASS	PASS	PASS	PASS	51	PASS	PASS	PASS	PASS
15	PASS	PASS	PASS	PASS	82	PASS	PASS	PASS	PASS
16	PASS	PASS	PASS	PASS	83	PASS	PASS	PASS	PASS
17	PASS	PASS	PASS	PASS	84	PASS	PASS	PASS	PASS
21	PASS	PASS	PASS	PASS	85	PASS	PASS	PASS	PASS
22	PASS	PASS	PASS	PASS	86	PASS	PASS	PASS	PASS
25	PASS	PASS	PASS	PASS	87	PASS	PASS	PASS	PASS
26	PASS	PASS	PASS	PASS	88	PASS	PASS	PASS	PASS
27	PASS	PASS	PASS	PASS	89	PASS	PASS	PASS	PASS
28	PASS	PASS	PASS	PASS	90	PASS	PASS	PASS	PASS
29	PASS	PASS	PASS	PASS	91	PASS	PASS	PASS	PASS
30	PASS	PASS	PASS	PASS	92	PASS	PASS	PASS	PASS
31	PASS	PASS	PASS	PASS	93	PASS	PASS	PASS	PASS
32	PASS	PASS	PASS	PASS	94	PASS	PASS	PASS	PASS
35	PASS	PASS	PASS	PASS	95	PASS	PASS	PASS	PASS
36	PASS	PASS	PASS	PASS	96	PASS	PASS	PASS	PASS
37	PASS	PASS	PASS	PASS	97	PASS	PASS	PASS	PASS
38	PASS	PASS	PASS	PASS	98	PASS	PASS	PASS	PASS
39	PASS	PASS	PASS	PASS	99	PASS	PASS	PASS	PASS
40	PASS	PASS	PASS	PASS	100	PASS	PASS	PASS	PASS

NEGATIVE I									
(UNIT::mA)									
Test Pin	TRIGGER CURRENT	#1	#2	#3	Test Pin	TRIGGER CURRENT	#1	#2	#3
5	PASS	PASS	PASS	PASS	41	PASS	PASS	PASS	PASS
6	PASS	PASS	PASS	PASS	42	PASS	PASS	PASS	PASS
7	PASS	PASS	PASS	PASS	43	PASS	PASS	PASS	PASS
8	PASS	PASS	PASS	PASS	44	PASS	PASS	PASS	PASS
9	PASS	PASS	PASS	PASS	46	PASS	PASS	PASS	PASS
10	PASS	PASS	PASS	PASS	47	PASS	PASS	PASS	PASS
11	PASS	PASS	PASS	PASS	48	PASS	PASS	PASS	PASS
12	PASS	PASS	PASS	PASS	49	PASS	PASS	PASS	PASS
13	PASS	PASS	PASS	PASS	50	PASS	PASS	PASS	PASS
14	PASS	PASS	PASS	PASS	51	PASS	PASS	PASS	PASS
15	PASS	PASS	PASS	PASS	82	PASS	PASS	PASS	PASS
16	PASS	PASS	PASS	PASS	83	PASS	PASS	PASS	PASS
17	PASS	PASS	PASS	PASS	84	PASS	PASS	PASS	PASS
21	PASS	PASS	PASS	PASS	85	PASS	PASS	PASS	PASS
22	PASS	PASS	PASS	PASS	86	PASS	PASS	PASS	PASS
25	PASS	PASS	PASS	PASS	87	PASS	PASS	PASS	PASS
26	PASS	PASS	PASS	PASS	88	PASS	PASS	PASS	PASS
27	PASS	PASS	PASS	PASS	89	PASS	PASS	PASS	PASS
28	PASS	PASS	PASS	PASS	90	PASS	PASS	PASS	PASS
29	PASS	PASS	PASS	PASS	91	PASS	PASS	PASS	PASS
30	PASS	PASS	PASS	PASS	92	PASS	PASS	PASS	PASS
31	PASS	PASS	PASS	PASS	93	PASS	PASS	PASS	PASS
32	PASS	PASS	PASS	PASS	94	PASS	PASS	PASS	PASS
35	PASS	PASS	PASS	PASS	95	PASS	PASS	PASS	PASS
36	PASS	PASS	PASS	PASS	96	PASS	PASS	PASS	PASS
37	PASS	PASS	PASS	PASS	97	PASS	PASS	PASS	PASS
38	PASS	PASS	PASS	PASS	98	PASS	PASS	PASS	PASS
39	PASS	PASS	PASS	PASS	99	PASS	PASS	PASS	PASS
40	PASS	PASS	PASS	PASS	100	PASS	PASS	PASS	PASS

V_{supply} OVERVOLTAGE TEST (UNIT: V)				
Test pin	TRIGGER VOLTAGE	#1	#2	#3
	1	PASS	PASS	PASS
	19	PASS	PASS	PASS
	20	PASS	PASS	PASS
	24	PASS	PASS	PASS
	34	PASS	PASS	PASS