

Company



RELIABILITY TEST REPORT TEST REPORT

: RAIO TECHNOLOGY INC.

Model Name : <u>RA8806</u>

Date Received : <u>2008.01.21</u>

Date Tested : <u>2008.01.29</u>

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 Jay Jang	2008/01/21
Section Manager	Kosa Lin	Reliability Test Engineer Kosa Lin	2008/01/29

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.



Integrated Service Technology Inc. Reliability Engineering Division 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-578-2266, Fax: 886-3-5634868 http://www.istgroup.com



Report No. : <u>HS0801210029A</u> Report No. : <u>RAC9700250-E</u> Page 1 of 7

RELIABILITY TEST REPORT

Applicant/Department: RAIO TECHNOLOGY INC.				
Product	: RA8806			
Testing Item	: ESD-HBM	Package/Pin Count: LQFP-100		
Test Method	: MIL-STD-883G Method 3015.7			
Failure Criteria	: FOR V CHANGE AT 1µA ±30%			
Test Voltage	: 1000V ~3000V (±), Step : 1000V (±) 3500V ~8000V (±), Step : 500V (±)			



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ESD-HBM Testing Report

Test Equipment:

KEYTEK ZAPMASTER #7-6386

Environmental Condition of Laboratory:

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

Test Condition:

VSS (+) VSS (-) VDD (+) VDD (-) VDD - VSS (+) VDD - VSS (-)

Test Result:

MODEL: HBM	ESD SENSIT	TIVITY PASS : <u>±8000V</u>	V CLASS: <u>3B</u>
PIN COMBINATION	SAMPLE SIZE	PASSED VOLTS	NOTE: FOR EIAJ TEST NO
VSS (+)	2	+8000V	CLASSIFICATION
VSS (-)	2	-8000V	CLASS 0: < 250V CLASS 1A: 250V TO 499V
VDD (+)	2	+8000V	CLASS 1B: 500V TO 999V CLASS 1C: 1000V TO 1999V
VDD (-)	2	-8000V	CLASS 2: 2000V TO 3999V
VDD – VSS (+)	2	+8000V	CLASS 3A: 4000V TO 7999V CLASS 3B: \geq 8000V
VDD – VSS (-)	2	-8000V	
ALL:5-17,21-22,25-32,35-44,46-51,8 I/O:37-44 I/P:25-28,30-32,35-36,47-50,82-89,98		O/P:5-17,21-22,29,46 VDD:1,19-20,24,34 VSS:2,18,23,33	51,90-97





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





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



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



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



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	VDD - VSS(+) (UNIT: V)			
Test FAIL Pin VOLTAGE	#1	#2		
1	PASS	PASS		
19	PASS	PASS		
20	PASS	PASS		
24	PASS	PASS		
34	PASS	PASS		

	VDD - VSS(-) (UNIT: V)			
Test FAIL Pin VOLTAGE	#1	#2		
1	PASS	PASS		
19	PASS	PASS		
20	PASS	PASS		
24	PASS	PASS		
34	PASS	PASS		