

# RELIABILITY TEST REPORT

## TEST REPORT

Company : RAIO TECHNOLOGY INC.  
 Model Name : PM8808  
 Date Received : 2009.12.23  
 Date Tested : 2010.01.08

**TESTING LABORATORY IS ACCREDITED BY:**

IEC/IECQ 17025 certificate of independent test laboratory approval  
 Certificate No. : T1091

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>	2009/12/23
Section Manager	Even Lin	Reliability Test Engineer <i>Even Lin</i>	2010/01/08

**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 & Failure Analysis Engineering Group  
1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C.  
Tel: 886-3-578-2266, Fax: 886-3-5770988  
<http://www.istgroup.com>



**No.:T1091**  
**Revision:A**

Report No. : HS0912230062A

Report No. : RAC9804608-E

Page 1 of 4

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<b>Applicant/Department:</b> RAIO TECHNOLOGY INC.		
<b>Product</b>	: PM8808	
<b>Testing Item</b>	: LATCH-UP	<b>Package/Pin Count</b> : COB-256
<b>Test Condition</b>	: JEDEC STANDARD NO.78 MARCH 1997	
<b>Failure Criteria</b>	< 25mA 10mA + I normal	
	> 25mA 1.4 x I normal	
<b>Trigger Current</b>	: 50mA ~200mA ( $\pm$ ), Step: 50mA ( $\pm$ )	* I normal=1mA
<b>V<sub>supply</sub> OVER VOLTAGE TEST</b> : 5.5V~8.5V(+), Step: 0.5V(+)		



## LATCH-UP Testing Report

### Test Equipment:

KEYTEK ZAPMASTER #10-6094

### Environmental Condition of Laboratory:

Temperature: 25°C±5°C

Humidity: 55%±10% RH

### Test Condition:

POSITIVE I

NEGATIVE I

V<sub>supply</sub> OVER VOLTAGE TEST

### Test Result:

TRIGGER MODEL	TEST PIN	SAMPLE SIZE	TRIGGER SOURCE INDUCE LATCH-UP	IT CLASS: <u>  I  </u>
+IT	I/O	3	PASS	<b>NOTE:</b>  CLASSI: For Latch-up test at room - temperature  CLASSII: For Latch-up test at maximum-rate ambient temperature
	I/P		PASS	
	O/P		PASS	
-IT	I/O	3	PASS	
	I/P		PASS	
	O/P		PASS	
V <sub>supply</sub> OVER VOLTAGE TEST	VCC	3	PASS	

I/O:123,127-128

I/P:131,135-144,147,212,216,219-220,223-224,232,236,240

O/P:26,29-30,38,40,46,56,67-68,80,124,132,148,151-152,155-156

159-160,164,187,199,201-208,211,228,244

VCC5V:168,172,176,180,215

VSS:179,183-184,188

POSITIVE I									
(UNIT::mA)									
Test Pin	TRIGGER CURRENT	#1	#2	#3	Test Pin	TRIGGER CURRENT	#1	#2	#3
26		PASS	PASS	PASS	152		PASS	PASS	PASS
29		PASS	PASS	PASS	155		PASS	PASS	PASS
30		PASS	PASS	PASS	156		PASS	PASS	PASS
38		PASS	PASS	PASS	159		PASS	PASS	PASS
40		PASS	PASS	PASS	160		PASS	PASS	PASS
46		PASS	PASS	PASS	164		PASS	PASS	PASS
56		PASS	PASS	PASS	187		PASS	PASS	PASS
67		PASS	PASS	PASS	199		PASS	PASS	PASS
68		PASS	PASS	PASS	201		PASS	PASS	PASS
80		PASS	PASS	PASS	202		PASS	PASS	PASS
123		PASS	PASS	PASS	203		PASS	PASS	PASS
124		PASS	PASS	PASS	204		PASS	PASS	PASS
127		PASS	PASS	PASS	205		PASS	PASS	PASS
128		PASS	PASS	PASS	206		PASS	PASS	PASS
131		PASS	PASS	PASS	207		PASS	PASS	PASS
132		PASS	PASS	PASS	208		PASS	PASS	PASS
135		PASS	PASS	PASS	211		PASS	PASS	PASS
136		PASS	PASS	PASS	212		PASS	PASS	PASS
137		PASS	PASS	PASS	216		PASS	PASS	PASS
138		PASS	PASS	PASS	219		PASS	PASS	PASS
139		PASS	PASS	PASS	220		PASS	PASS	PASS
140		PASS	PASS	PASS	223		PASS	PASS	PASS
141		PASS	PASS	PASS	224		PASS	PASS	PASS
142		PASS	PASS	PASS	228		PASS	PASS	PASS
143		PASS	PASS	PASS	232		PASS	PASS	PASS
144		PASS	PASS	PASS	236		PASS	PASS	PASS
147		PASS	PASS	PASS	240		PASS	PASS	PASS
148		PASS	PASS	PASS	244		PASS	PASS	PASS
151		PASS	PASS	PASS					

NEGATIVE I									
(UNIT::mA)									
Test Pin	TRIGGER CURRENT	#1	#2	#3	Test Pin	TRIGGER CURRENT	#1	#2	#3
26		PASS	PASS	PASS	152		PASS	PASS	PASS
29		PASS	PASS	PASS	155		PASS	PASS	PASS
30		PASS	PASS	PASS	156		PASS	PASS	PASS
38		PASS	PASS	PASS	159		PASS	PASS	PASS
40		PASS	PASS	PASS	160		PASS	PASS	PASS
46		PASS	PASS	PASS	164		PASS	PASS	PASS
56		PASS	PASS	PASS	187		PASS	PASS	PASS
67		PASS	PASS	PASS	199		PASS	PASS	PASS
68		PASS	PASS	PASS	201		PASS	PASS	PASS
80		PASS	PASS	PASS	202		PASS	PASS	PASS
123		PASS	PASS	PASS	203		PASS	PASS	PASS
124		PASS	PASS	PASS	204		PASS	PASS	PASS
127		PASS	PASS	PASS	205		PASS	PASS	PASS
128		PASS	PASS	PASS	206		PASS	PASS	PASS
131		PASS	PASS	PASS	207		PASS	PASS	PASS
132		PASS	PASS	PASS	208		PASS	PASS	PASS
135		PASS	PASS	PASS	211		PASS	PASS	PASS
136		PASS	PASS	PASS	212		PASS	PASS	PASS
137		PASS	PASS	PASS	216		PASS	PASS	PASS
138		PASS	PASS	PASS	219		PASS	PASS	PASS
139		PASS	PASS	PASS	220		PASS	PASS	PASS
140		PASS	PASS	PASS	223		PASS	PASS	PASS
141		PASS	PASS	PASS	224		PASS	PASS	PASS
142		PASS	PASS	PASS	228		PASS	PASS	PASS
143		PASS	PASS	PASS	232		PASS	PASS	PASS
144		PASS	PASS	PASS	236		PASS	PASS	PASS
147		PASS	PASS	PASS	240		PASS	PASS	PASS
148		PASS	PASS	PASS	244		PASS	PASS	PASS
151		PASS	PASS	PASS					

V <sub>supply</sub> OVERVOLTAGE TEST									
(UNIT: V)									
Test pin	TRIGGER VOLTAGE	#1	#2	#3	Test pin	TRIGGER VOLTAGE	#1	#2	#3
168		PASS	PASS	PASS	182		PASS	PASS	PASS
172		PASS	PASS	PASS	215		PASS	PASS	PASS
176		PASS	PASS	PASS					