

RELIABILITY TEST REPORT

TEST REPORT

Company : RAIO TECHNOLOGY INC.
 Model Name : RA8806
 Date Received : 2008.01.21
 Date Tested : 2008.01.29

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> | 2008/01/29 |

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.



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No.:T1091

Report No. : HS0801210029A

Report No. : RAC9700250-E

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RELIABILITY TEST REPORT

| | | |
|---|---|------------------------------------|
| Applicant/Department: RAI0 TECHNOLOGY INC. | | |
| Product | : RA8806 | |
| Testing Item | : ESD-MM | Package/Pin Count: LQFP-100 |
| Test Method | : JEDEC EIA/JESD22-A115 | |
| Failure Criteria | : FOR V CHANGE AT 1 μ A \pm 30% | |
| Test Voltage | : 100V ~300V (\pm), Step : 100V (\pm) 350V ~800V (\pm), Step : 50V (\pm) | |

ESD-MM 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: MM | ESD SENSITIVITY PASS : -400V | | V CLASS: <u> C </u> |
|-----------------|-------------------------------------|--------------|--|
| PIN COMBINATION | SAMPLE SIZE | PASSED VOLTS | NOTE: FOR EIAJ TEST NO CLASSIFICATION CLASS A: < 200V CLASS B: 200V TO < 400V CLASS C: ≥ 400V |
| VSS (+) | 2 | +800V | |
| VSS (-) | 2 | -750V | |
| VDD (+) | 2 | +800V | |
| VDD (-) | 2 | -750V | |
| VDD – VSS (+) | 2 | +750V | |
| VDD – VSS (-) | 2 | -400V | |

| VSS (+) | | | | | | | |
|----------|--------------|------|------|----------|--------------|------|------|
| (UNIT:V) | | | | | | | |
| Test Pin | FAIL VOLTAGE | #1 | #2 | Test Pin | FAIL 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 |

| VSS (-) (UNIT:V) | | | | | | | |
|------------------|--------------|------|------|----------|--------------|------|------|
| Test Pin | FAIL VOLTAGE | #1 | #2 | Test Pin | FAIL 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 | -800 | 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 |

| VDD (+) (UNIT:V) | | | | | | | |
|------------------|--------------|------|------|----------|--------------|------|------|
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| 10 | | PASS | PASS | 47 | | PASS | PASS |
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| 26 | | PASS | PASS | 88 | | PASS | PASS |
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| 28 | | PASS | PASS | 90 | | PASS | PASS |
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| 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 |

| VDD (-) | | | | | | | |
|----------|--------------|------|------|----------|--------------|------|------|
| (UNIT:V) | | | | | | | |
| Test Pin | FAIL VOLTAGE | #1 | #2 | Test Pin | FAIL 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 | | -800 | 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 |
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| 22 | | PASS | PASS | 86 | | PASS | PASS |
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| 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 |

| VDD – VSS (+) | | | |
|---------------|--------------|------|------|
| (UNIT: V) | | | |
| Test Pin | FAIL VOLTAGE | #1 | #2 |
| 1 | | 800 | PASS |
| 19 | | PASS | PASS |
| 20 | | PASS | PASS |
| 24 | | PASS | PASS |
| 34 | | 800 | PASS |

| VDD – VSS (-) | | | |
|---------------|--------------|------|------|
| (UNIT: V) | | | |
| Test Pin | FAIL VOLTAGE | #1 | #2 |
| 1 | | -500 | -500 |
| 19 | | PASS | PASS |
| 20 | | -500 | -500 |
| 24 | | PASS | PASS |
| 34 | | -450 | -450 |