

EMB-QM67

Temperature/Humidity Test Report

Report NO: 11I020029

| | |
|---------|--|
| Summary | <p><input type="checkbox"/> Pass</p> <p><input type="checkbox"/> Fail</p> <p>Note : There is/are ____ defect(s) not list in the report, please check it in the DTS Website.</p> <p><input checked="" type="checkbox"/> Pass with Deviation</p> <p>Comment: <u>1,> Under PassMark Burn In Test 6.0 Pro , test COM port baud rate 115200 test fail , but change to 9600 test pass.</u> <u>2,> Under PassMark Burn In Test 6.0 Pro , test Sound item of burn -in test can not perform if no audio cable(earphone, speaker) plugged.</u></p> |
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Issue date

2011-10-17

Approval

Jansin Lee

Test Engineer

Rex Chang

Test item list

| | |
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Testing Result

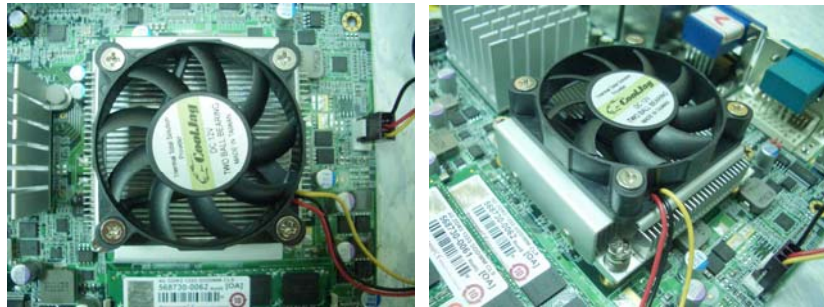
| Num | Test item list | Result | Remark |
|-----|--------------------------------------|--------|--------|
| 1 | Temp./humidity power on/off test | Pass | |
| 2 | Temperature variation operation test | Pass | |
| 3 | Cold start and hot start test | Pass | |

Configuration of EUT

Test Product: EMB-QM67 A0.2

Sample Configuration & Quantity Under Test:

1. CPU: Intel Core i7 2710QE / 2.10GHz
2. BIOS Ver. EMB-QM67 M0C 08/29/2011 16:44:43
3. Chipset: Intel QM67
4. Memory: Transcend DDR3 1333 2GB * 2 / Hynix H5TQ2G83BFR
5. USB Flash Drive: Transcend 4GB (For DOS Mode Power On/Off Test)
6. SATA HDD: Seagate 120GB ST9120823AS
7. Test Software: Windows 7 / Run PassMark Burn In Test 6.0 Pro
8. AT Power Supply: Zippy SP2-4300F
9. CPU Cooler:



Temp./humidity power on/off test

Test Date: 10-14~15-2011

Test Site: AAEON QE Dept.

Test Standard: Reference IEC 68-2-30 Testing procedures
Test Db: Damp Heat Test

Test Equipment:

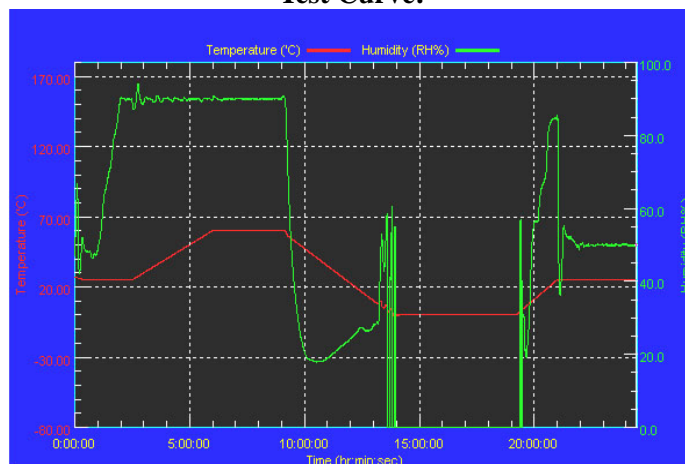
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/01/10
Serial Number: 3898

Temperature & Humidity Power On/Off Test:

Testing Specification:

| Step | Temperature (°C) | Humidity (%RH) | Duration (HH:MM) |
|------|------------------|----------------|------------------|
| 1 | 25 | 50 | 00:30 |
| 2 | 25 | 50 | 00:30 |
| 3 | 25 | 90 | 01:00 |
| 4 | 25 | 90 | 00:30 |
| 5 | 60 | 90 | 03:30 |
| 6 | 60 | 90 | 03:00 |
| 7 | 0 | 0 | 04:50 |
| 8 | 0 | 0 | 05:23 |
| 9 | 25 | 50 | 01:47 |
| 10 | 25 | 50 | 03:00 |

Test Curve:



Test Result:

| Test Method | Actual | Successful | Failure rate |
|--------------|------------|------------|--------------|
| Power On/Off | 2054/times | 2054/times | 0 % |

Note: Failure rate need to under 0.2%.

Temperature variation operation test

Test Date: 10-11~12-2011

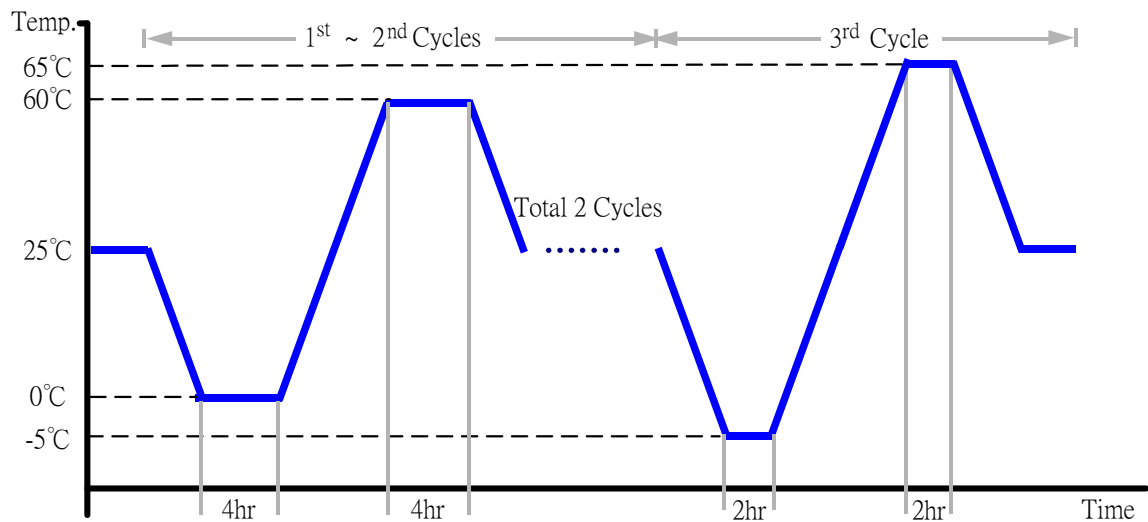
Test Site: AAEON QE Dept.

Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/01/10
Serial Number: 3898

Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0°C (1~2 cycles)
-5°C (3rd cycle)
2. Test High Temperature: 60°C (1~2 cycles)
65°C (3rd cycle)
3. Test dwell time: 4Hrs (1~2 cycles)
2Hrs (3rd cycle)
4. Temperature slope: 2°C/min
5. Test cycle: 3 cycles
6. Test Environment Curve:



Test Result:

No problem was found during the temperature variation operation test.

Cold start and hot start test

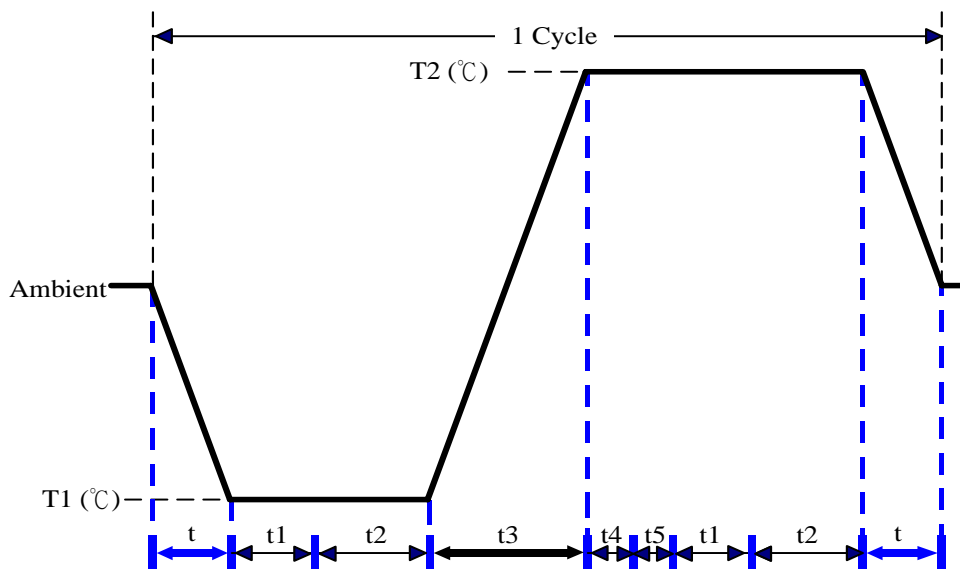
Test Date: 10-13~14-2011

Test Site: AAEON QE Dept.

Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/01/10
Serial Number: 3898

Test Condition:



| Parameters | Description |
|------------|-------------|
| T1 | -5°C |
| T2 | 65°C |
| t1 | 1 hrs |
| t2 | 2 hrs |
| t4, t5 | 30 min |
| t, t3 | 2°C/min |
| n (Cycle) | 1 |

t,t3 = temprature slope

t, t1: Power Off

t2: Power on/off test 10 times (on 2 min / off 5min)

t3,t4: Run PassMark Burn In Test

t5: Win XP Software restart test 2 times

Test Software:Windows XP

Test Result:

- a. No problem was found during the cold start test.
- b. No problem was found during the hot start test.