

GENE-QM67

PCB Rev. A0.3

Temperature/Humidity Test Report

Report NO:

Summary	<p><input checked="" 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 type="checkbox"/> Pass with Deviation</p>
---------	---

Issue date

2011-12-09

Approval

Benson Lee

Test Engineer

Changwen Zhou

Test item list

1. *Test item list* ----- 2
2. *Configuration of EUT* ----- 3
3. *Temp./humidity power on/off test* ----- 4
4. *Temperature variation operation test* ----- 5
5. *Cold start and hot start test* ----- 6

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: GENE-QM67

Sample Configuration & Quantity Under Test:

1. CPU: Intel Core™ i5-2510E Processor (3M Cache, 2.50 GHz)
2. Chipset: Mobile Intel QM67 Express Chipset
3. VGA: Intel HD Graphics 3000
4. Memory: Transcend 4G DDR3 1333 SODIMM CL9 / H5TQ2G83BFA H9C
5. BIOS Reversion: A0.6
6. CFD: Transcend / 16GB (for Power On/Off test)
7. SATA HDD: WD 500GB SATA3 WD5000AAKX
8. Test Software: Windows 7 x64 with SP1/ Run PassMark BurnInTest Pro v6.0 build 1029
9. Power Supply: FSP400-60GHN (AT-Mode)
10. Cooler:



Temp./humidity power on/off test

Test Date: 2011/11/14~15

Test Site: AAEON Taichung Internal Lab

Test Standard: Reference IEC 68-2-30 Testing procedures

Test Db: Damp Heat Test

Test Equipment: Programmable Temperature & Humidity Chamber

TERCHY. TECH. CORP.

Model: MHU-150LB

Date of Calibration: 2011/01/14

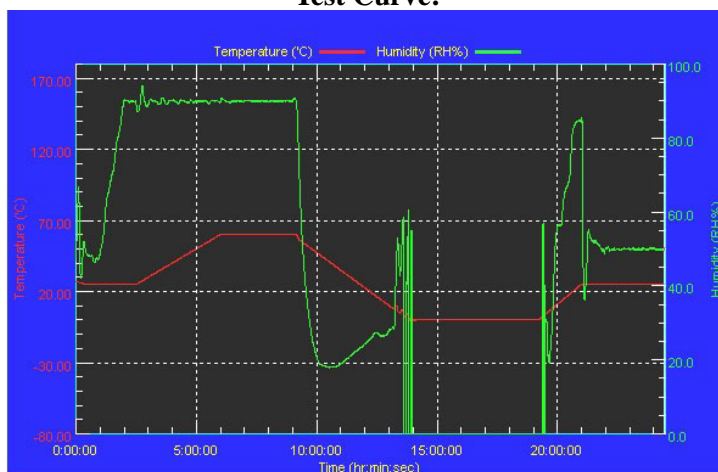
Serial Number: 961138

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:

No problem was found during the temperature & humidity power on/off test.

Test Method	Actual	Successful	Failure rate
Power On/Off	2962/times	2962/times	0 %

Note: Failure rate need to under 0.2%.

Temperature variation operation test

Test Date: 2011/11/24~25

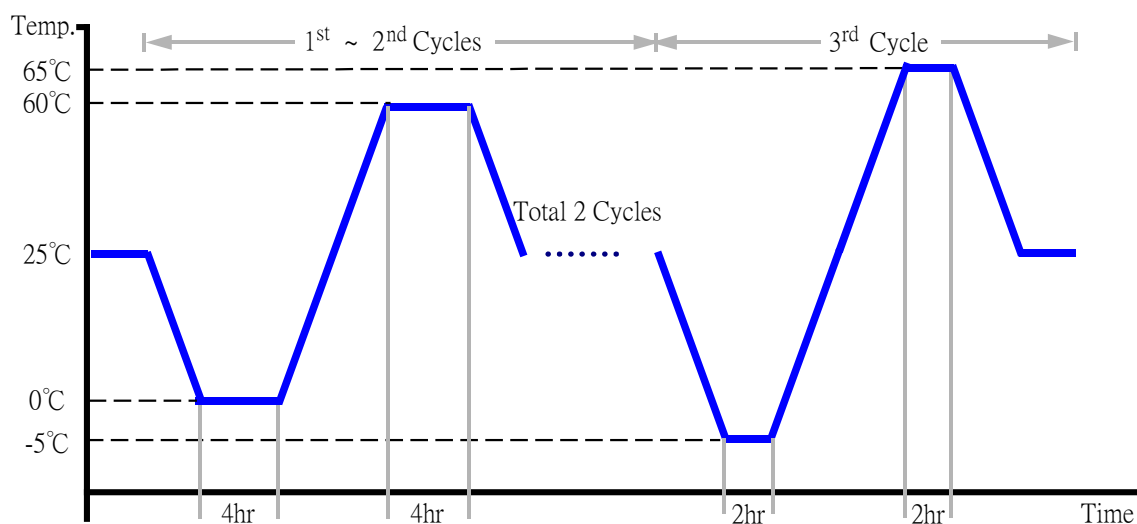
Test Site: AAEON Taichung Internal Lab

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

Test Equipment:
Programmable Temperature & Humidity Chamber
TERCHY. TECH. CORP.
Model: MHU-150LB
Date of Calibration: 2011/01/14
Serial Number: 961138

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

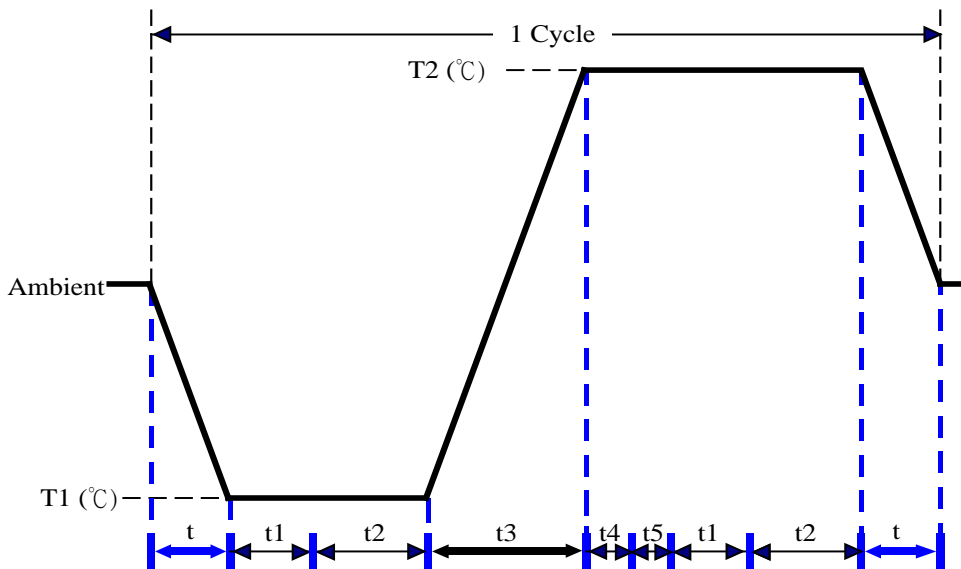
Test Date: 2011/11/11

Test Site: AAEON Taichung Internal Lab

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

Test Equipment:
Programmable Temperature & Humidity Chamber
TERCHY. TECH. CORP.
Model: MHU-150LB
Date of Calibration: 2011/01/14
Serial Number: 961138

Test Condition:



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

t, t3 = temperature slope
t, t1: Power Off
t2 Power On/Off test 10 times (On 2mins / Off 5mins)
t5: Windows soft restart test 2 times
Test software: Windows 7 Ultimate x64 Edition

Test Result:

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