

PBA-QM87

Temperature/Humidity Test Report

Report NO: 15P020010

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>Temperature variation operation test occur “The 3D test was interrupted” error. This 3D Graphics error (The 3D test was interrupted) is Intel knowing issue. Please reference the Intel release notes the Bug ID: 5557283 (Occur “The 3D test was interrupted” error when run Burnin 8.0 AC & DC.).</u></p>
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Issue date

Approval

Test Engineer

2015-05-18

KJ Wang

Jerry Chen

Test item list

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 3. *Temp./humidity power on/off test* ----- 4
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Testing Result

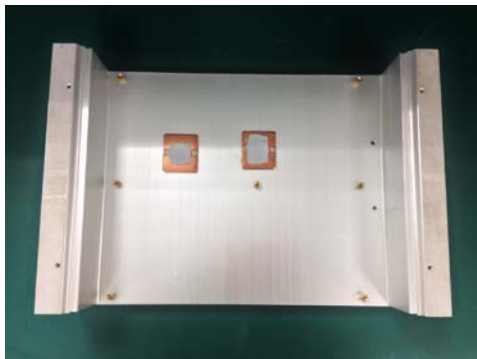
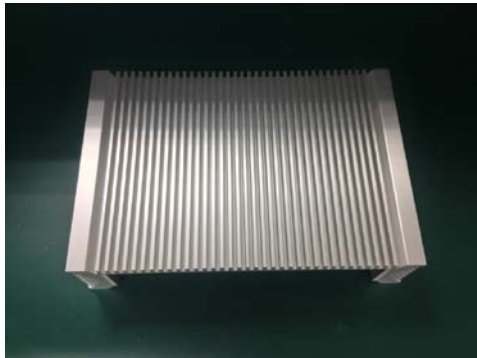
Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	
2	Temperature variation operation test	Pass	
3	Cold start and hot start test	Pass	

Configuration of EUT

Test Product: PBA-QM87 A0.2

Sample Configuration & Quantity Under Test:

1. **CPU:** Intel Core i5-4402E 1.6GHz
2. **Chipset:** Intel Haswell
3. **BIOS Ver.:** PBA-QM87 R0.2 (RM87AM02) (12/02/2014)
3. **Memory:** Transcend DDR3L 1600 2G (SEC / K4B2G0846D)
4. **USB Flash:** Apacer 4GB (For DOS Mode Power On/Off Test)
5. **2.5" SATA HDD:** Seagate / ST380815AS 80GB
6. **Test Software:** Windows 7 / Run PassMark Burn In Test 8.0 Pro
7. **Adapter:** FSP / FSP084-DMAA1 / 12V 7A MAX
8. **Photos:**



Temp./humidity power on/off test

Test Date: 05-13 ~ 14-2015

Test Site: AAEON QE Dept.

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

Test Equipment:

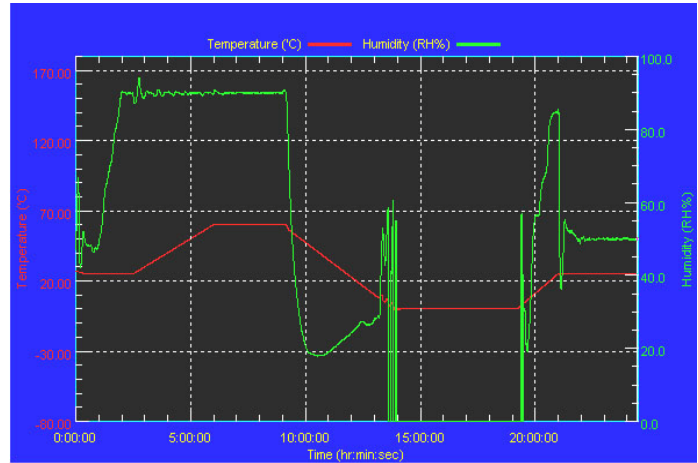
Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-B6T-150+1 N2
Date of Calibration: 06/05/'14
Serial Number: 9095KT

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	1306/times	1306/times	0 %
Note: There are two times boot is slowly, in low temperature -5°C during the power on/off test. Failure rate need to under 0%.			

Temperature variation operation test

Test Date: 05-15 ~ 18-2015

Test Site: AAEON QE Dept.

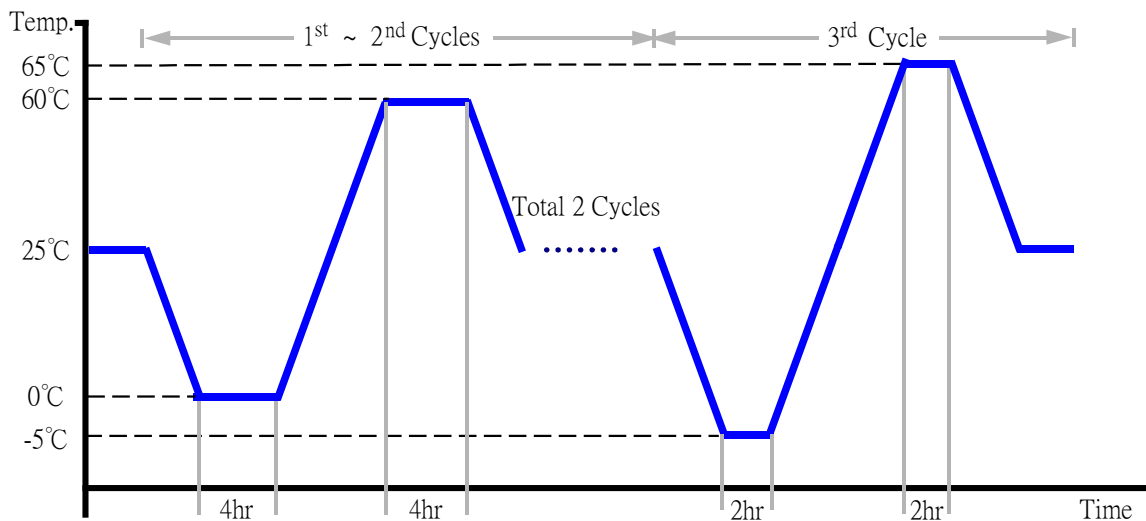
Test Standard: Refer to IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-B6T-150+1 N2
Date of Calibration: 06/05/'14
Serial Number: 9095KT

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:

We found “The 3D test was interrupted” error, when during run Burn in test 8.0.

This 3D Graphics error (The 3D test was interrupted) is Intel knowing issue.

Please reference the Intel release notes the Bug ID: 5557283 (Occur “The 3D test was interrupted” error when run Burnin 8.0 AC & DC.)

Cold start and hot start test

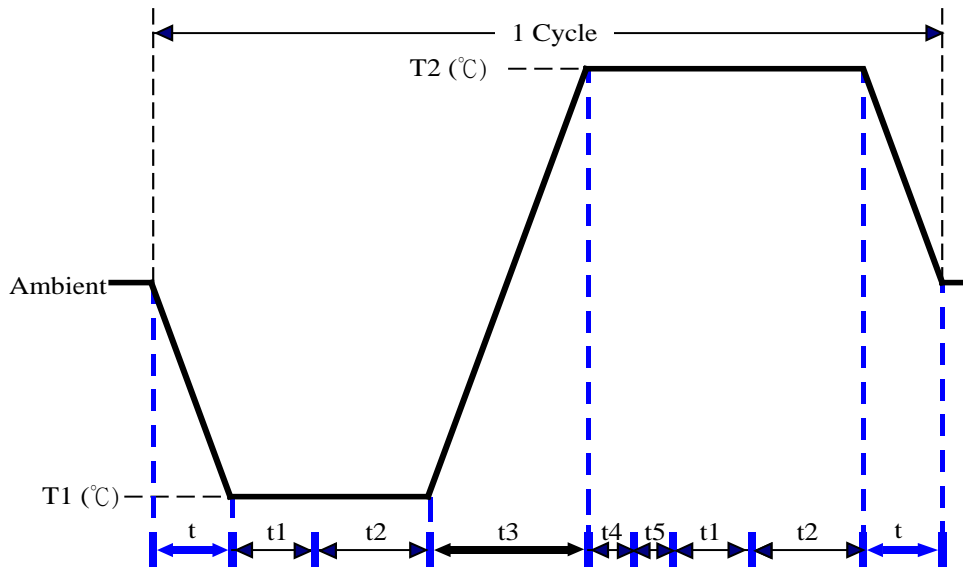
Test Date: 05-14 ~ 15-2015

Test Site: AAEON QE Dept.

Test Standard: Refer to 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-B6T-150+1 N2
Date of Calibration: 06/05/'14
Serial Number: 9095KT

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: Windows 7 Software restart test 2 times
Test Software:Windows 7

Test Result:

- a. No issues were found during the cold start test.
- b. No issues were found during the hot start test.