

IMBM-H61A

Temperature/Humidity Test Report

Report NO: 16IP090004

Test Cause
For ATRF No: QE160204 Request

Summary	<input type="checkbox"/> Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/> Pass with Deviation Comment: <u>1.Under PassMark Burn In Test 8.1 Pro, test Network set loading to 100% test failed (Error message shows "Timeout waiting for packet") , but change to 99% test pass. Please refer to for PASSMARK SOFTWARE (DTS NO. E140502QED10</u> http://www.passmark.com/forum/showthread.php?2931-How-to-test-burnin-test-with-Network
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Issue date

QE Manager

Test Engineer

2016-03-04

KJ Wang

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: IMBM-H61A R1.03

Sample Configuration & Quantity Under Test:

1. CPU: Intel Core i7-3770K / 3.4GHz
2. BIOS Ver. 0403 x64 (04/27/2013)
3. Chipset: Intel H61
4. Memory: InnoDisk 8GB * 2 / DDR3 1600 / Skhynix H5TC4G83AFR
5. USB Flash: Transcend 4GB (For DOS Mode Power On/Off Test)
6. 2.5" SATA HDD: Western Digital WD5000LPVX / 500GB
7. Test Software: Windows 7 / Run PassMark Burn In Test 8.1 Pro
8. ATX Power Supply: CWT DSA400P-C / 400W
9. CPU Cooler:



Temp./humidity power on/off test

Test Date: 03-02 ~ 03-2016

Test Site: AAEON QE Dept.

Test Standard: Refer to IEC 68-2-30 Testing procedures
 Test Db: Damp Heat Test
 Refer to IEC 68-2-1 Testing procedures
 Test Ad: Cold Test

Test Equipment:

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
 Model: THS-B6T-150+LN2
 Date of Calibration: 06/04/15
 Serial Number: 9095KT

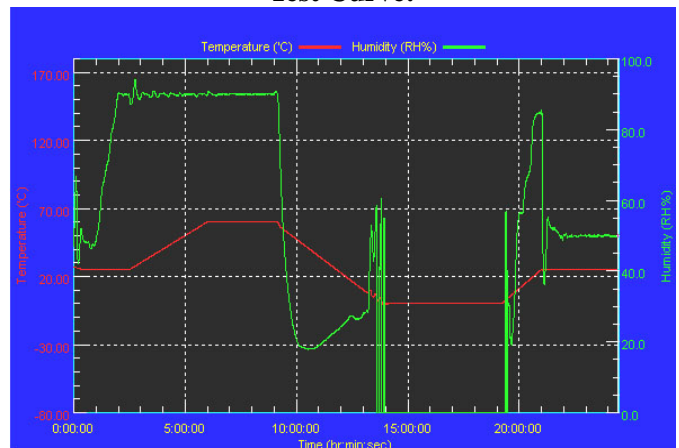
Temperature & Humidity Power On/Off Test:

1. Test High Temp./Humidity: 60°C @90% RH
2. Test Low Temperature: 0°C
3. Test Time: 24Hours / Cycle
4. Test Cycle: 1 Cycles
5. Test Software: DOS Mode / Run Boot Up Record Program ver 1.41

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:

	Actual	Successful	Failure rate	Test Result
Power On/Off	1110/times	1110/times	0 %	

Note: 1. Failure rate need to under 0%.
 2. Power on/off fixture setting: on - 40 sec / off - 40 sec

Temperature variation operation test

Test Date: 03-03 ~ 04-2016

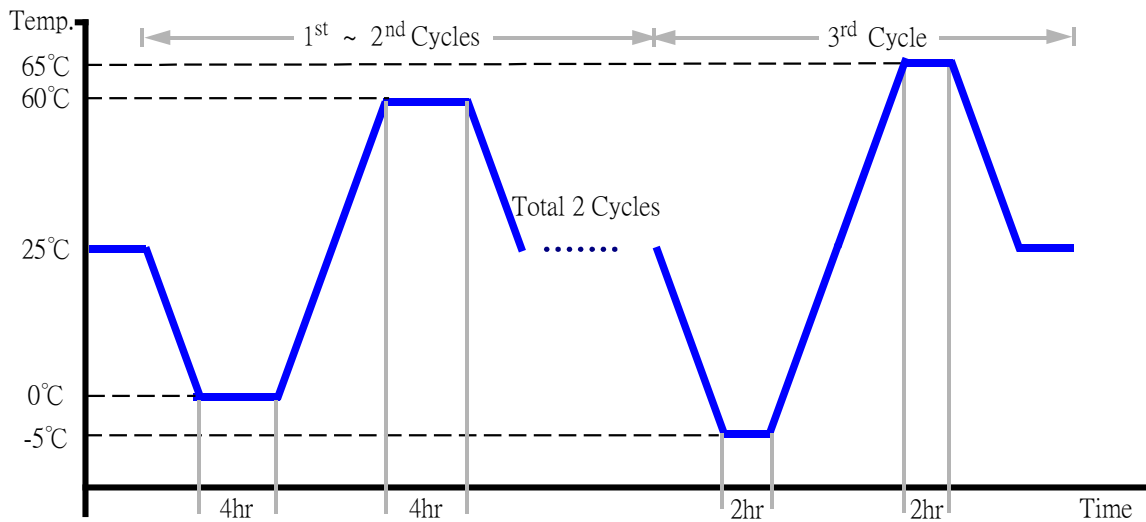
Test Site: AAEON QE Dept.

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+LN2
Date of Calibration: 06/04/15
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:

No issues were found during the temperature variation operation test.

Cold start and hot start test

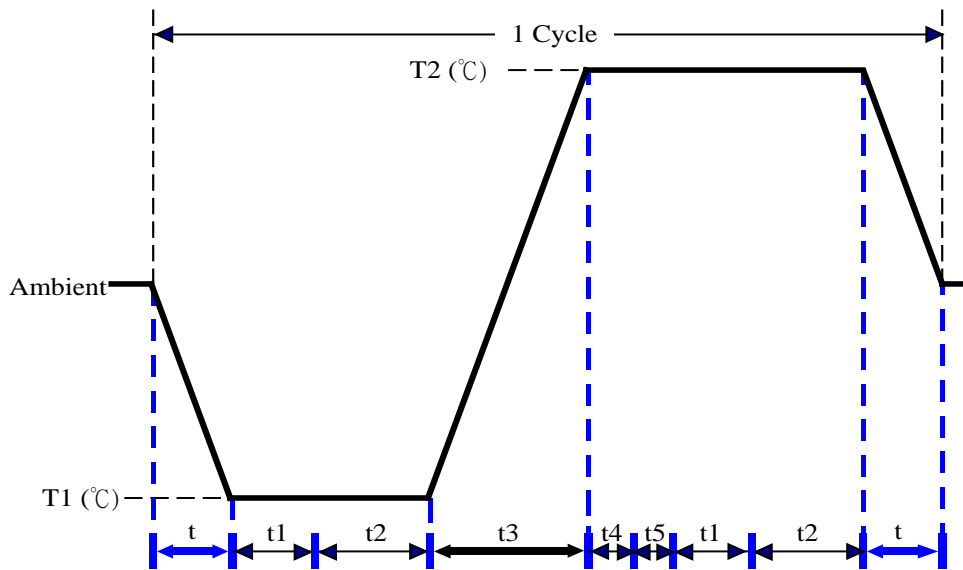
Test Date: 03-01 ~ 02-2016

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+LN2
Date of Calibration: 06/04/15
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.