

IMBM-H110A

Temperature/Humidity Test Report

Report NO: 17IP020004

| | |
|---------|---|
| 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: 1. The Network test failed when LAN load is setting on 100% under PassMark BurnInTest 8.1 Pro. The error message shows “Timeout waiting for packet”. Therefore change the LAN load 100% to 99% and test again, the test result pass. Please refer to for PASSMARK SOFTWARE explanation as below: http://www.passmark.com/forum/showthread.php?2931-How-to-test-burnin-test-with-Network</p> <p>2. The serial port tests failed when serial port baud rate is setting on 115200 under PassMark Burn In Test 8.1 Pro. Error message show “COM port detected a Receive Overrun Error”. Therefore install the serial port driver (Nuvoton / Ver. 1.0.2011.1109) and test again for temperature cycle operation test. The test result pass.</p> |
|---------|---|

Issue date

2017-03-30

QE Manager

KJ Wang

Test Engineer

Jerry Chen

Test item list

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Testing Result

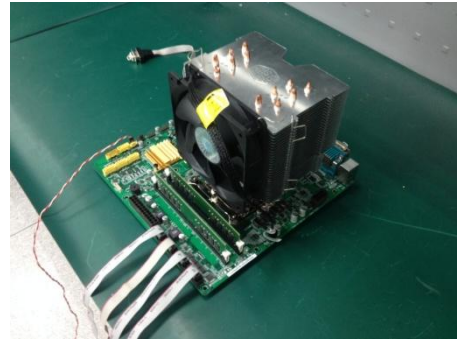
| Num | Test item list | Result | Remark |
|-----|--------------------------------------|--------|--------|
| 1 | Temp./humidity power on/off test | Pass | |
| 2 | Temperature variation operation test | Pass | |
| 3 | Cold start and hot start test | Pass | |

Configuration of EUT

Test Product: IMBM-H110A

Sample Configuration & Quantity Under Test:

1. Model name: IMBM-H110A
2. M/B Name: IMBM-H110A / Rev. 1.01
3. CPU: Intel Core i7-6700K 4 GHz
4. BIOS Ver. R0.1 (MH11AM01) (02/20/2017)
5. Chipset: Intel H110
6. Memory: innodisk / 16GB DDR4 2400 DIMM (SEC K4A8G085WB BCRC) *2
7. USB Flash: Transcend 8 GB (For DOS Mode Power On/Off Test)
8. 3.5" SATA HDD: Seagate / ST500DM002 500GB
9. Test Software: Windows 10 / Run PassMark Burn In Test 8.1 Pro
10. Power Supply: CWT / DSA400P-C
11. CPU Cooler:



Temp./humidity power on/off test

Test Date: 03-27 ~ 28-2017

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: 04/25/2016
 Due date of Calibration: 04/24/2017
 Serial Number: 6488KT

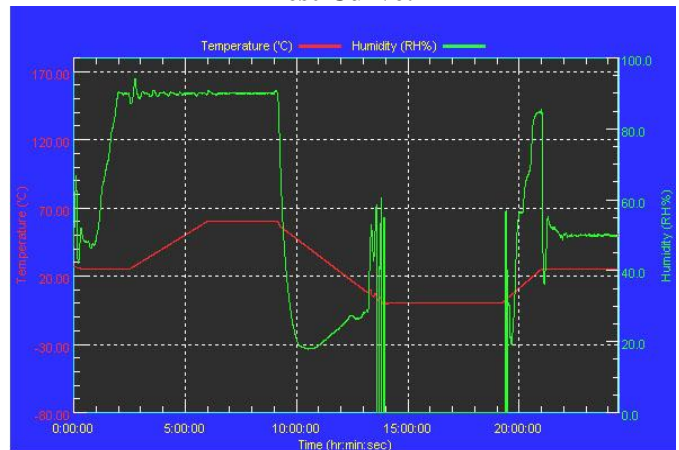
Temperature & Humidity Power On/Off Test:

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 | 1016/times | 1016/times | 0 % | Pass |

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: 03-29 ~ 30-2017

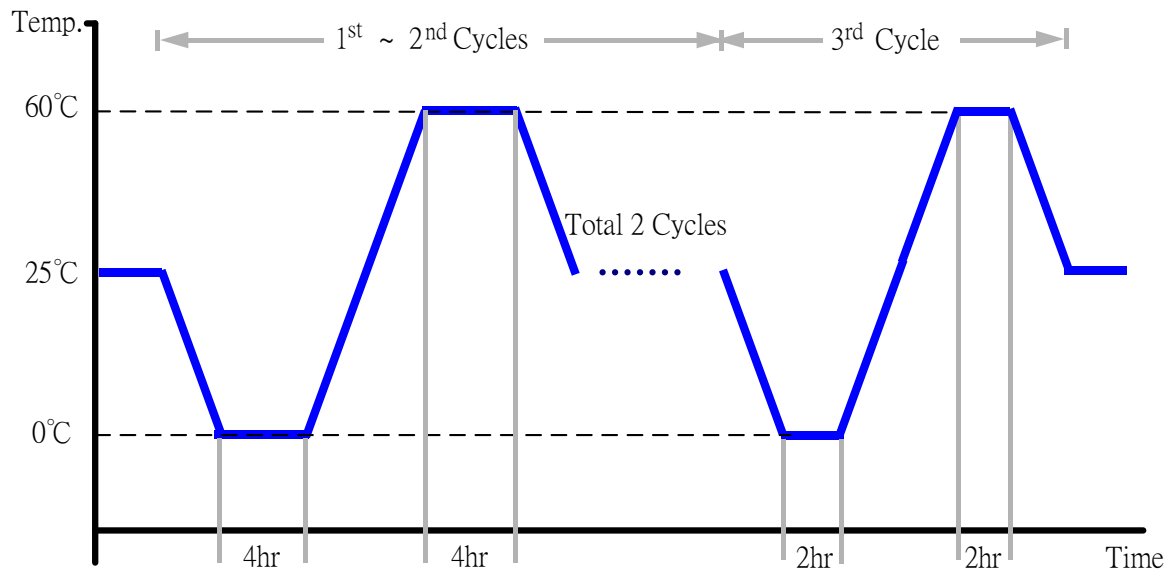
Test Site: AAEON QE Dept.

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: 04/25/2016
Due date of Calibration: 04/24/2017
Serial Number: 6488KT

Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0°C (1~3 cycles)
2. Test High Temperature: 60°C (1~3 cycles)
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

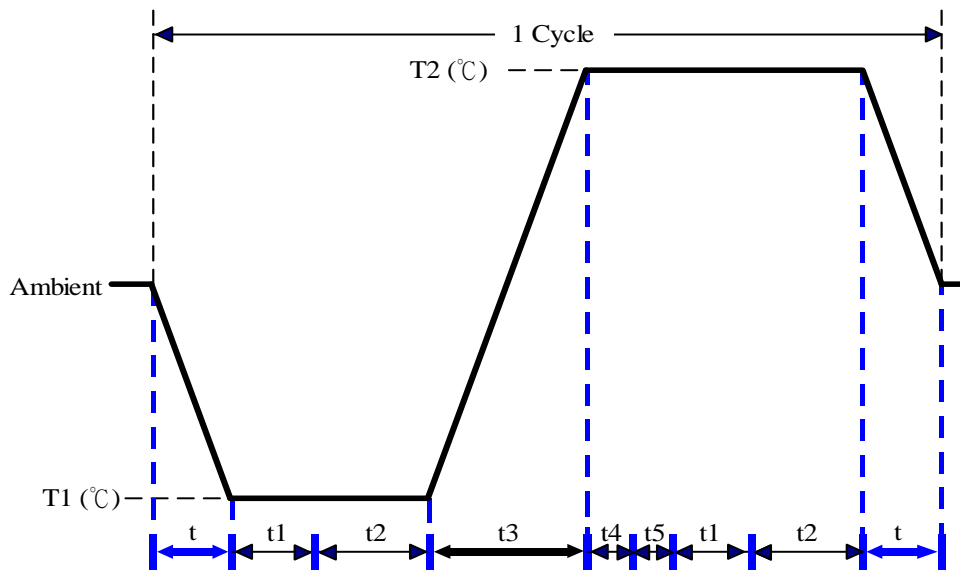
Test Date: 03-28 ~ 29-2017

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: 04/25/2016
Due date of Calibration: 04/24/2017
Serial Number: 6488KT

Test Condition:



| Parameters | Description |
|------------|-------------|
| T1 | 0°C |
| T2 | 60°C |
| t1 | 1 hrs |
| t2 | 2 hrs |
| t4, t5 | 30 min |
| t, t3 | 2°C/min |
| n (Cycle) | 1 |

- t, t3 = temperature 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. 10 Software restart test 2 times
- Test Software: Windows 10

Test Result:

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