

# EMB-B75A

Ver. A0.2

## Temperature/Humidity Test Report

Report NO: 12I020023

Summary	<p><input checked="" type="checkbox"/> <b>Pass</b></p> <p><input type="checkbox"/> <b>Fail</b></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"/> <b>Pass with Deviation</b></p> <p>Comment: _____</p>
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Issue date

2012-08-16

Approval

Tom Lin

Test Engineer

Clement Chien

# Test item list

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## Testing Result

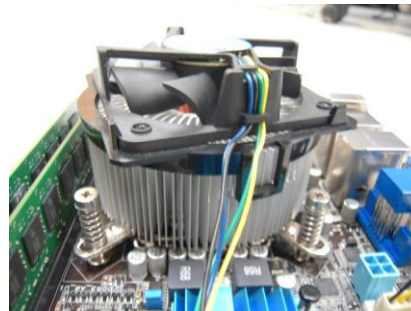
Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	
2	Temperature variation operation test	Pass	
3	Cold start and hot start test	Pass	

# Configuration of EUT

## Test Product: EMB-B75A

### Sample Configuration & Quantity Under Test:

1. CPU  
Sample 1: Intel Core i7-3770K / 3.50GHz (Bios Ver. EMB-B75A R0.8)  
Sample 2: Intel Core i5-3550 / 3.30GHz
2. Chipset: Intel Core i7-3770K / Intel Core i5-3550 + Intel B75
3. Memory  
Sample 1: Transcend 8GB DDR3 1600 CL11  
Sample 2: Transcend 4GB DDR3 1333 CL09
4. SATA HDD:  
Sample 1: Seagate Z2AL1907 3.5" 500GB  
Sample 2: Seagate Z2AL1907 3.5" 500GB
5. Test Software: Windows 7 / Run PassMark Burn In Test 7.0
6. Power Supply: ATX Power
7. CPU Fan:



# Temp./humidity power on/off test

**Test Date:** 08-09 ~ 10-2012

**Test Site:** AAEON QE Internal Lab.

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

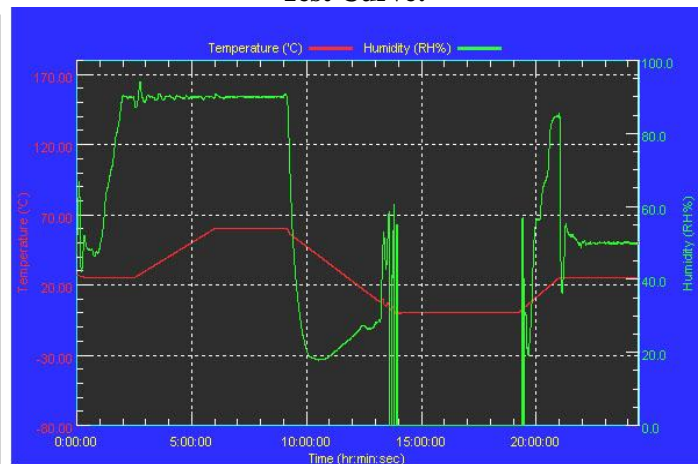
**Test Equipment:**  
Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-B6T-150+LN2  
Date of Calibration: 03/17/11  
Serial Number: 6487KT

## 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	Note
Power On/Off(Sample 1)	1326/times	1326/times	0 %	With VGA Card
Power On/Off(Sample 2)	1330/times	1330/times	0 %	

Note: Failure rate need to under 0.2%.

# Temperature variation operation test

**Test Date:** 08-11 ~ 12-2012

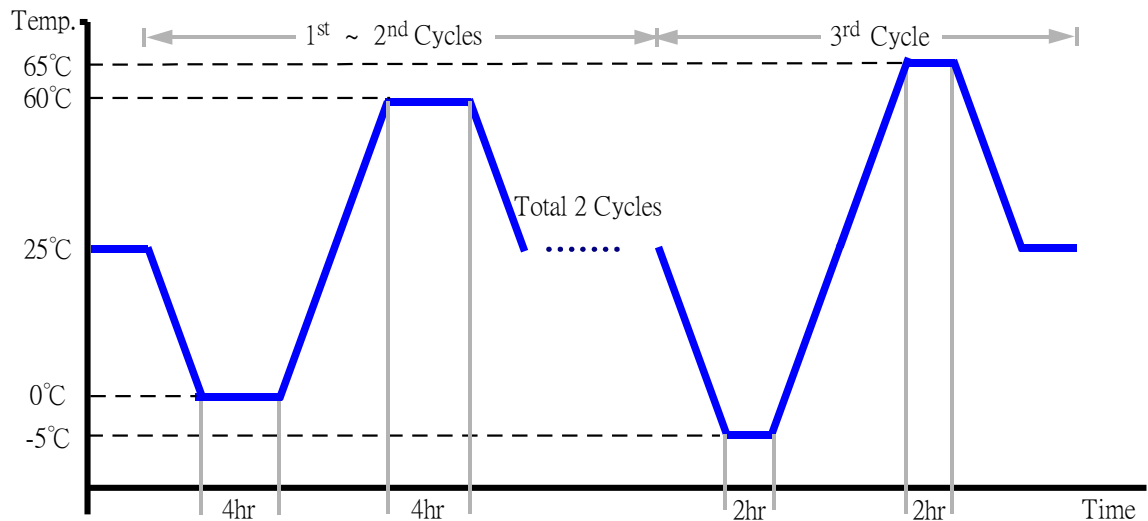
**Test Site:** AAEON QE Internal Lab.

**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: 03/17/11  
Serial Number: 6487KT

## Temperature & Humidity Cycle Test:

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



## Test Result:

No issue was found during the temperature variation operation test.

# Cold start and hot start test

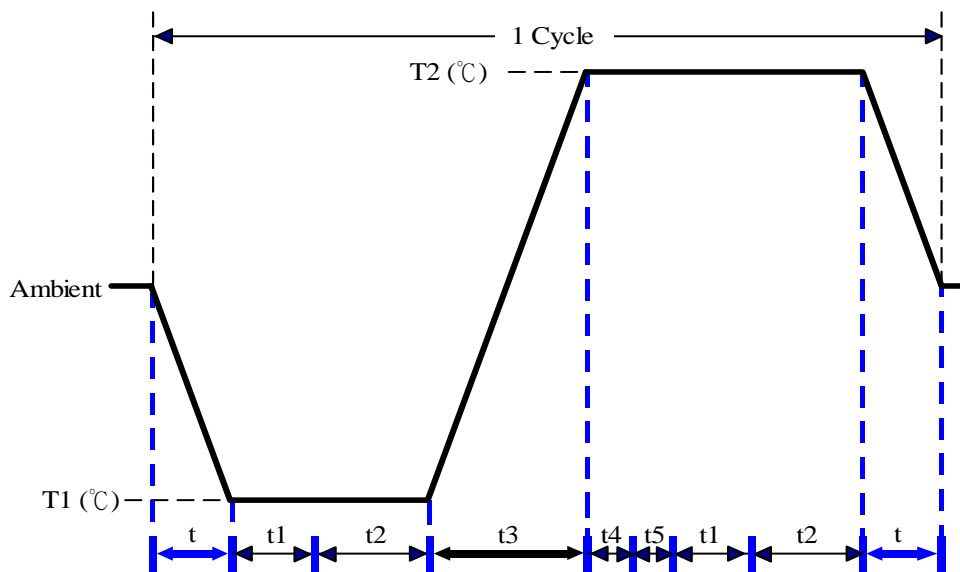
**Test Date:** 08-12 ~ 14-2012

**Test Site:** AAEON QE Internal Lab.

**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: 03/17/11  
 Serial Number: 6487KT

**Test Condition:**



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

**Test Result:**

- No issue was found during the cold start test.
- No issue was found during the hot start test.