



*Industrial Computing Platform Partner*

# **EMB-9459T**

## **Temperature/Humidity Test Report**

**Report NO: 10E020002**

Issued by: **Rex Chang** / **01/20/2010**  
\_\_\_\_\_  
Test Engineer Date

Reviewed by: **Wenyuan Yang** / **01/20/2010**  
\_\_\_\_\_  
Manager Date

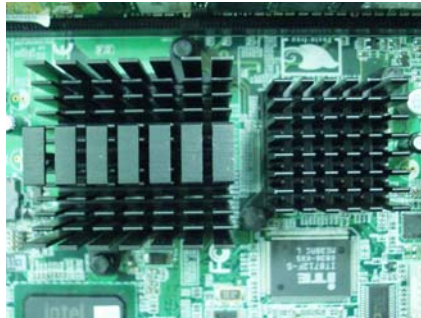
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## Test Product: EMB-9459T A2.0

### Sample Configuration & Quantity Under Test:

1. CPU: Intel Atom N270 /1. 6GHz (Bios Ver. EMB-9459T-B 1.0)
2. Chipset: Intel 945GSE / ICH7M
3. VGA: Intel 945GSE
4. Memory: Kingston 512MB / HYB18T512 (DDR2-553)
5. CFD: PQI 32MB
6. HDD: Western Digital WD800BB / 80GB
7. Test Software: Windows XP / Run PassMark Burn In Test 4.0 Pro
8. AT Power Supply: Zippy SP2-4300F
9. Heat Sink:



# Temp./humidity power on/off test

**Test Date:** 01-16~17-2010

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

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

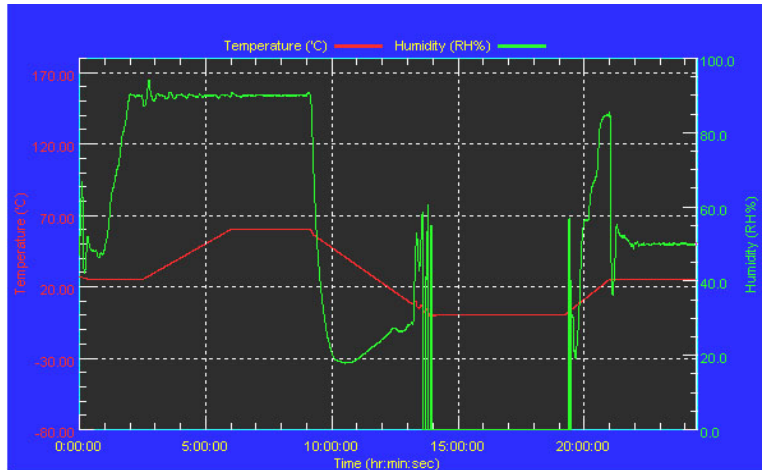
**Test Equipment:**  
Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-D4H+-100  
Date of Calibration: 11/12/09  
Serial Number: 2582

## 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 Date:** 01-15~16-2010

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

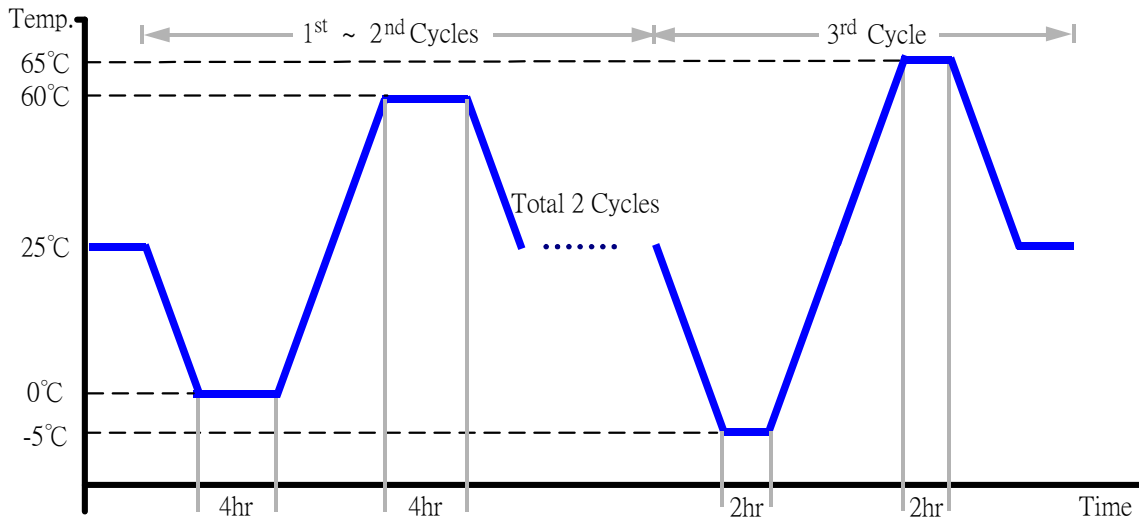
**Test Standard:** Reference IEC 68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**

Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-D4H+-100  
Date of Calibration: 11/12/09  
Serial Number: 2582

**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 (1~3 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 problem was found during the temperature variation operation test.

# Cold start and hot start test

**Test Date:** 01-18-2010

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

**Test Standard:** Reference 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-D4H+-100  
Date of Calibration: 11/12/09  
Serial Number: 2582

**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: Win XP Software restart test 2 times  
Test Software:Windows XP

**Test Result:**

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