NANOCOM-BT

Temperature/Humidity Test Report

Report NO: 14E020009

Summary	☐ **Pass** ☐ **Fail** Note : There is/are ___ defect(s) not list in the report, please check it in the DTS Website. ☑ **Pass with Deviation** **Comment:** **According to the original ITE to description of file, the serial port of transmission may occur: [Serial Communications Hardware Concepts and Hardware Overrun Errors].**

Issue date	Approval	Test Engineer
2014-10-09	**Tom Lin**	**Jerry Chen**

Test item list

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	

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Configuration of EUT

Test Product: NANOCOM-BT Ver. A0.2

Sample Configuration & Quantity Under Test:

1. CPU: Intel Atom E3845 1.91GHz

2. BIOS Ver.: NANOCOM-BT R0.7 (NCBTAM07) (08/11/2014) x64

3. Memory-On board: PROMOS / DDR3L 800MHz. 256Mx16(bit) / (V73CBG04168RAJJ11I)

4. **USB Flash:** Transcend 2GB (For DOS Mode Power On/Off Test)

5. 2.5“ SATA HDD: Toshiba / MK1676GSX 160GB

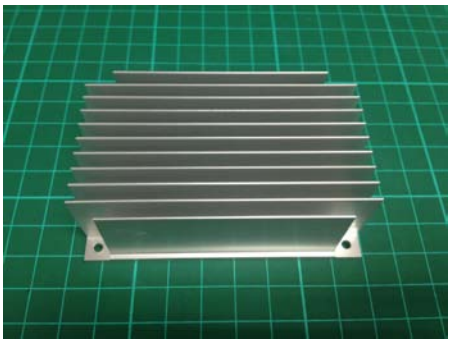
6. Test Software: Windows 8 / Run PassMark Burn In Test 7.1Pro

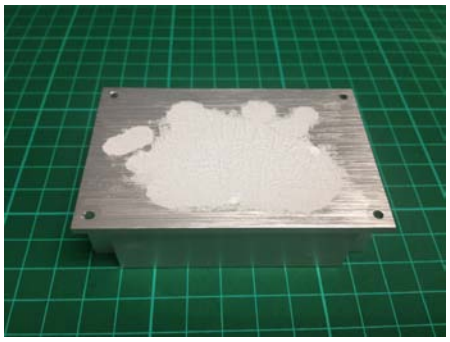
7. ATX Power Supply: CWT / SDA400P-C

8. Heat Sink / Heat-Spreader:

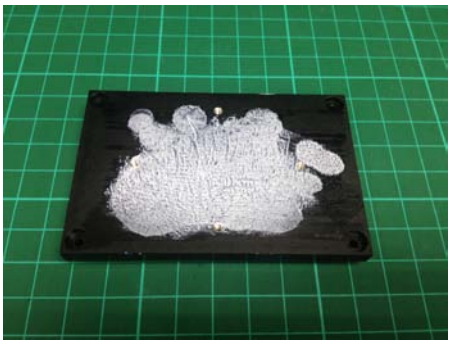
Board

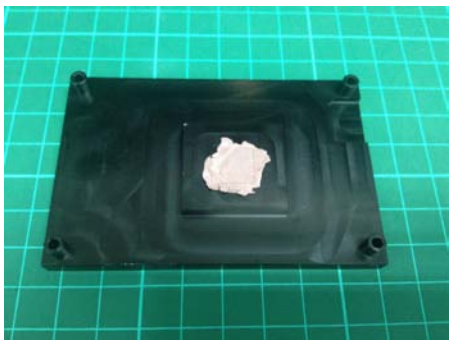
Heat sink(P/N: M16NACV010)





Heat-Spreader (P/N: M16NABT000) and Thermal Pad





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Temp./humidity power on/off test

Test Date: 10-02 ~ 03-2014

Test Site: AAEON QE Dept.

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

Test Equipment:

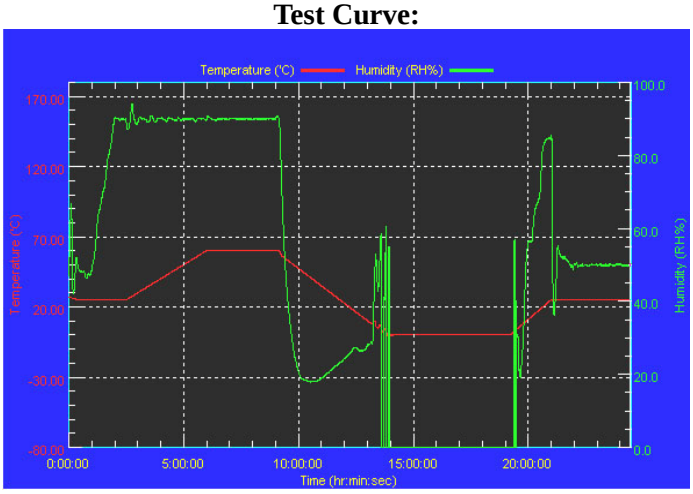
Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-D7TS-100+LN2
Date of Calibration: 09/11/'14
Serial Number: A0004

Temperature & Humidity Power On/Off Test:

Testing Specification:

Step	Temperature (℃)	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	1110/times	1110/times	0 %
Note: Failure rate need to under 0%.			

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Temperature variation operation test

Test Date: 10-03 ~ 06-2014

Test Site: AAEON QE Dept.

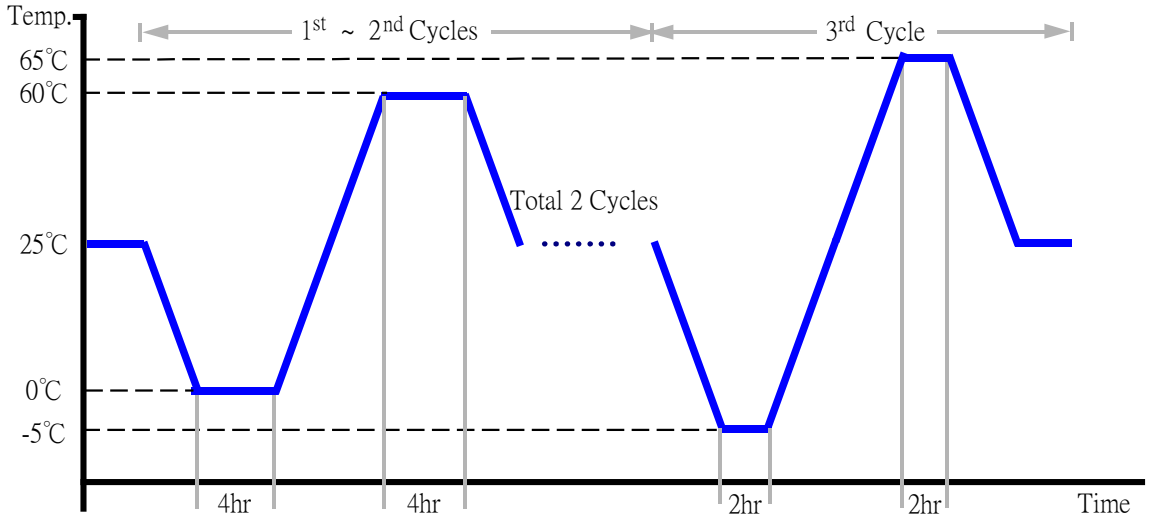
Test Standard: Refer to IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-D7TS-100+LN2
Date of Calibration: 09/11/'14
Serial Number: A0004

Temperature & Humidity Cycle Test:

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



Test Result:

No issues were found during the temperature variation operation test.

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Cold start and hot start test

Test Date: 10-06 ~ 07-2014

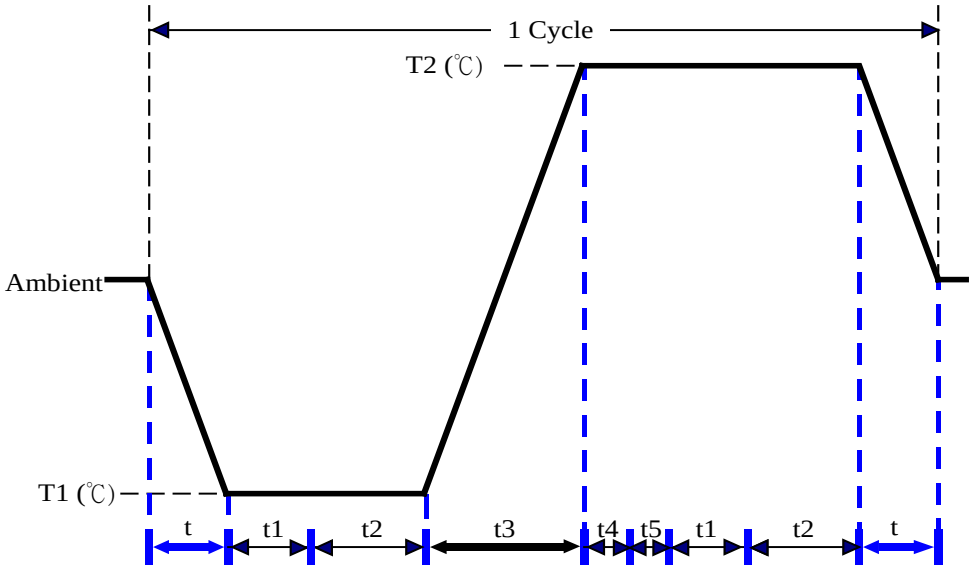
Test Site: AAEON QE Dept.

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-D7TS-100+LN2
Date of Calibration: 09/11/'14
Serial Number: A0004

Test Condition:



Parameters	Description
T1	-5℃
T2	65℃
t1	1 hrs
t2	2 hrs
t4, t5	30 min
t, t3	2℃/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 8 Software restart test 2 times
Test Software:Windows 8

Test Result:

a. No issues were found during the cold start test.

b. No issues were found during the hot start test.

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