

NANOCOM-SKU

Temperature/Humidity Test Report

Report NO:16E020013

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

2016-09-26

QE Manager

KJ Wang

Test Engineer

Rex Chang

Test item list

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1. *Test item list* ----- 2
 2. *Configuration of EUT* ----- 3
 3. *Temp./humidity power on/offtest* ----- 4
 4. *Temperaturevariationoperation test* ----- 5
 5. *Cold start and hot start test*----- 6

Testing Result

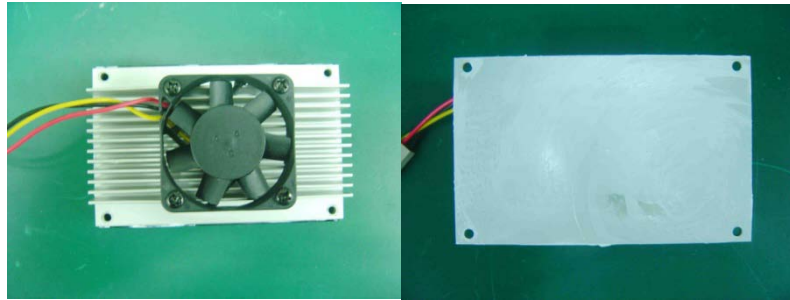
Num	Test item list	Result	Remark
1	Temp./humidity power on/offtest	Pass	
2	Temperaturevariationoperation test	Pass	
3	Cold start and hot start test	Pass	

Configuration of EUT

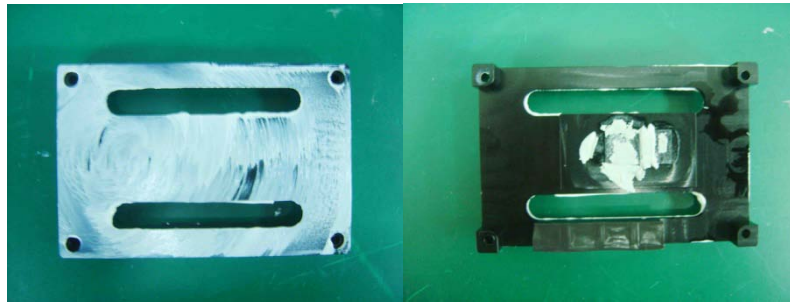
Test Product: NANOCOM-SKUA1.0

Sample Configuration & Quantity Under Test:

1. CPU: Intel Skylake-U Core i7-6600U / 2.6GHz
2. BIOS Ver. NANOCOM-SKU R1.0 (NCSUAM10) (09/09/2016)
3. Chipset: Intel ULT SOC
4. Memory: Onboard 4GB / DDR4 / SEC K4A8G165WB-BCPB
5. USB Flash: Transcend 8GB (For DOS Mode Power On/Off Test)
6. 2.5" SATA HDD: Western Digital WD800BEVT / 80GB
7. Test Software: Windows 8.1 / Run PassMark Burn In Test 8.1 Pro
8. Carrier Board: ECB-920 Ver. A1.0
9. ATX Power Supply: CWT DSA400P-C (ATX to AT Mode)
10. CPU Cooler: FAN+Heat Sink (P/N: 17592NABT0)



11. Heat-Spreader (P/N: M16NASU000) + Thermal Pad



Temp./humidity power on/off test

Test Date:09-21 ~ 22-2016

Test Site: AAEON QEDept.

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-D7TS-100+LN2
 Date of Calibration: 04/25/16
 Due date of Calibration: 04/24/17
 Serial Number: A0445

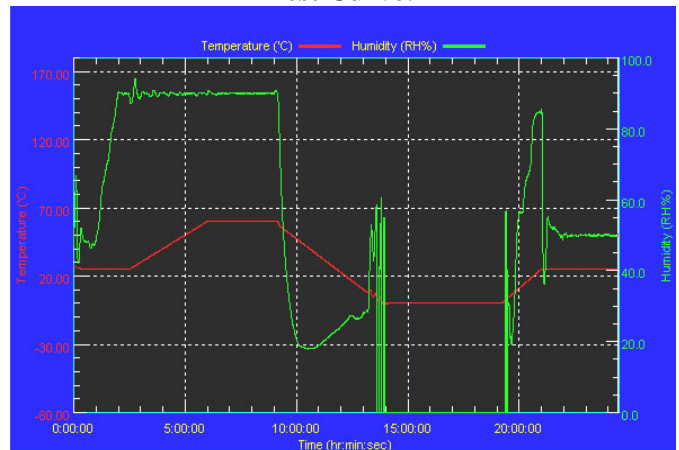
Temperature & Humidity Power On/Off Test:

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:

Test Method	Actual	Successful	Failure rate	Test Result
Power On/Off	1710/times	1710/times	0 %	Pass

Note: 1. Failure rate need to under 0%.
 2. Power on/off fixture setting: on - 45 sec / off - 5 sec

Temperature variation operation test

Test Date:09-22 ~ 23-2016

Test Site: AAEON QEDept.

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

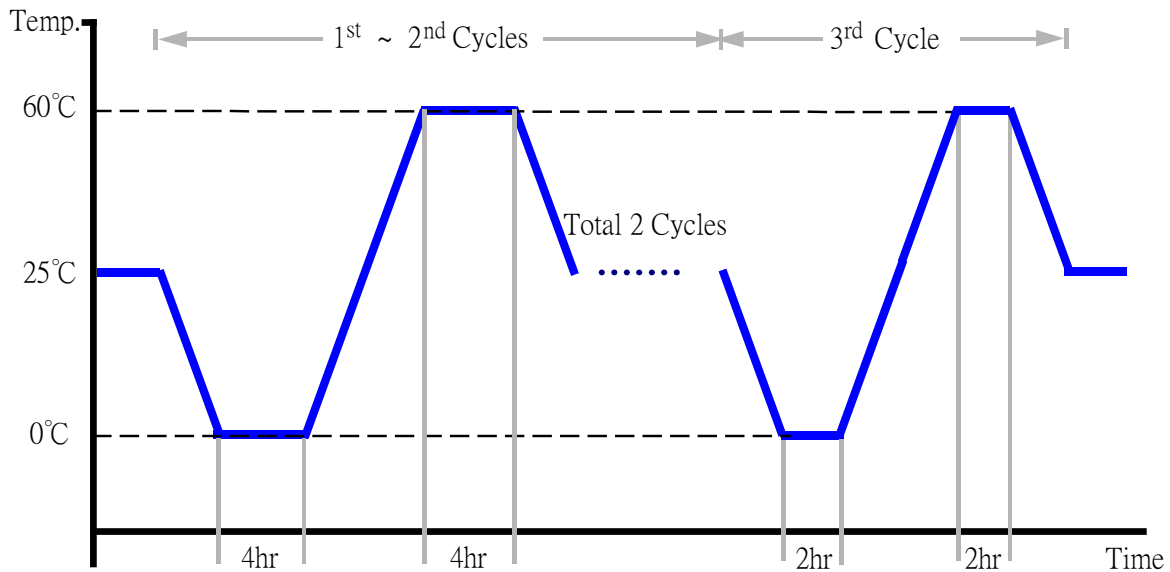
Date of Calibration: 04/25/16

Due date of Calibration: 04/24/17

Serial Number: A0445

Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0°C
2. Test High Temperature: 60°C
3. Test dwell time: 4Hrs(1~2 cycles)
2Hrs (3rd cycle)
4. Temperature slope: 2°C/min
5. Test cycle: 3 cycles
6. Test Software: Windows 8.1 / Run PassMark Burn In Test 8.1 Pro
7. Test Environment Curve:



Test Result:

No issues were found during the temperature variation operation test.

Cold start and hot start test

Test Date: 09-25 ~ 26-2016

Test Site: AAEON QEDept.

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.)

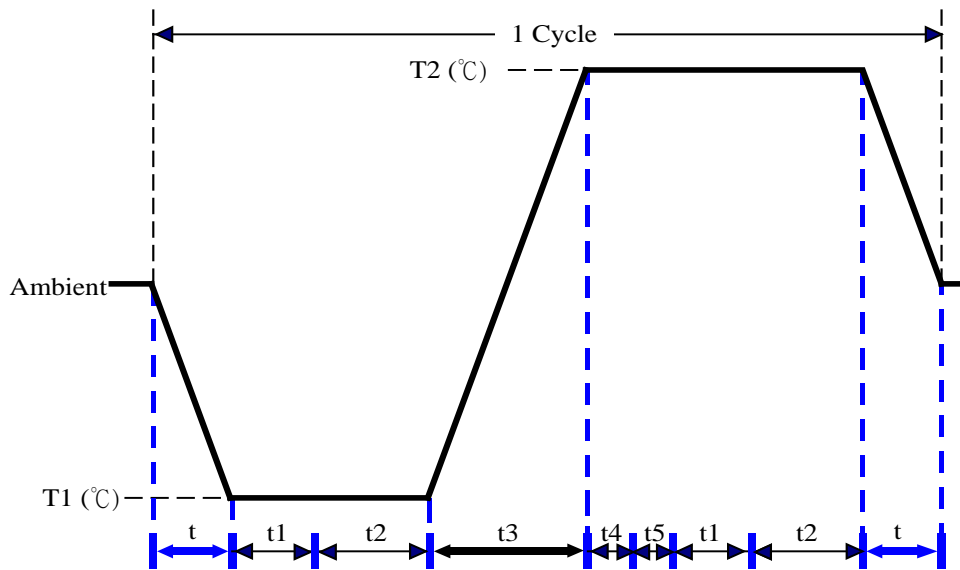
Model: THS-D7TS-100+LN2

Date of Calibration: 04/25/16

Due date of Calibration: 04/24/17

Serial Number: A0445

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: Windows 8.1 Software restart test 2 times

Test Software: Windows 8.1

Test Result:

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