NanoCOM-LN

Temperature/Humidity Test Report

Report NO: 10E020032

Issued by:	Rex Chang	/	*10/12/2010*
	Test Engineer		**Date**
Reviewed by:	Jansin Lee	/	*10/12/2010*
	Sr. Manager		**Date**

Test item list

Testing Result

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

Note 1:
Power on/off test function set 76 sec/time, but random shown on 73~80 sec/time.

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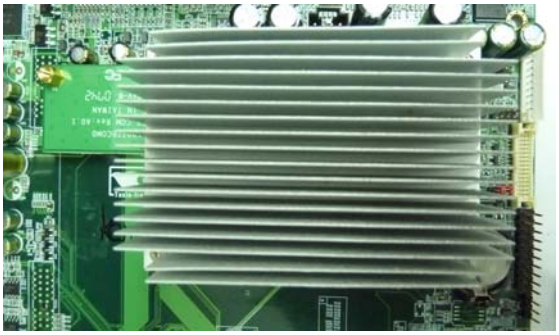
Configuration of EUT

Test Product: NanoCOM-LN

Sample Configuration & Quantity Under Test:

1. CPU: Intel Atom N455 / 1.66GHz (Bios Ver.0.02)
2. Chipset: Intel Atom N455 / ICH8-M
3. VGA: Intel Atom N450
4. Memory: Onboard 1GB / SAMSUNG K4B2G1646C-HQH9 / DDR3 667
5. SATA HDD: Onboard SSD NAND Driver / 85LD1004T /4GB
6. Test Software: Windows XP / Run PassMark Burn In Test Pro 4.0
7. AT Power Supply: Zippy SP2-4300F to ATX Mode
8. CPU Cooler:



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Temp./humidity power on/off test

Test Date: 10/11~10/12 /2010

Test Site: AAEON QA Internal Lab.

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

Test Equipment:

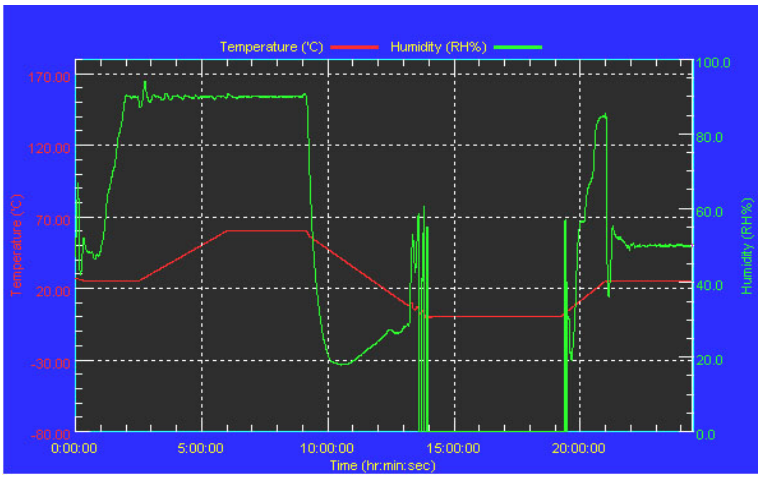
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 11/12/09
Serial Number: 2582

Temperature & Humidity Power On/Off Test:

Testing Specification:

Step	Temperature (℃)	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:

Power on/off test: failed one time, once at 60℃.

Test Method	Actual	Successful	Failure rate
Power On/Off	1195/times	1194/times	0.1 %
Note: Failure rate need to under 0.2%.			

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Temperature variation operation test

Test Date: 10/06~10/07 /2010

Test Site: AAEON QA Internal Lab.

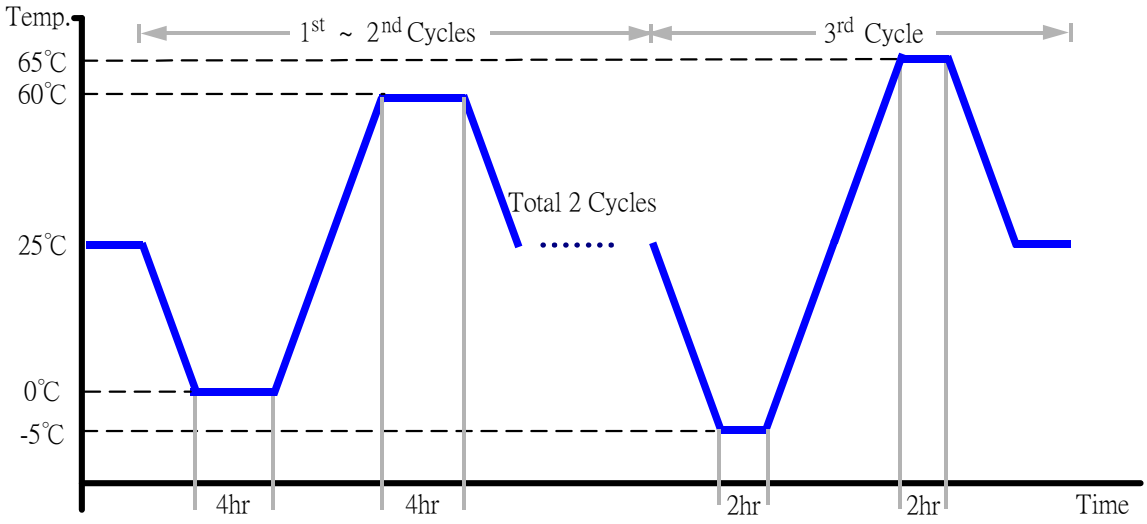
Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

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℃ (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 problem was found during the temperature variation operation test.

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Cold start and hot start test

Test Date: 10/07~10/08 /2010

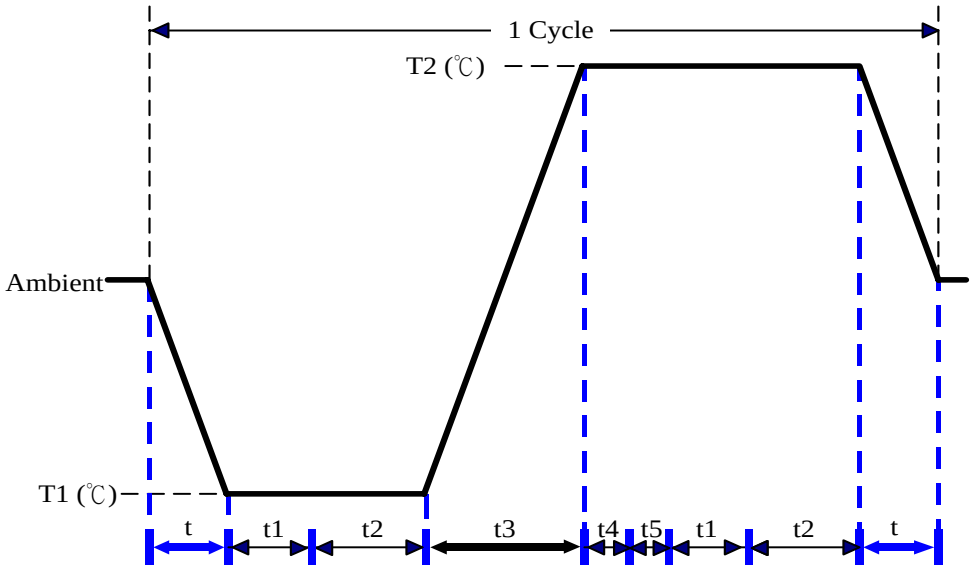
Test Site: AAEON QA Internal Lab.

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℃
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: 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.

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