

# NanoCOM-CV

B1.0

## Temperature/Humidity Test Report

Report NO: 12CO020007

|         |   |
|---------|---|
| 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> |
|---------|---|

Issue date

2012-11-08

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: NanoCOM-CV B1.0

### Sample Configuration & Quantity Under Test:

1. CPU: Intel Atom N2600 / 1.60GHz (Bios Ver. NanoCOM-CV R0.4)
2. Chipset: Integrated in Intel Atom N2600 / 1.60GHz
3. Memory: On board DDR3-SDRAM.256Mx8 SAMSUNG.K4B2G0846D-HCH9
4. SATA HDD: Seagate 5VGBKCDQ 2.5" 160GB
5. Test Software: Windows 7 / Run PassMark Burn In Test 7.0
6. Power Supply: ATX Power
7. Heat Sink:



# Temp./humidity power on/off test

**Test Date:** 11-01 ~ 02-2012

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

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

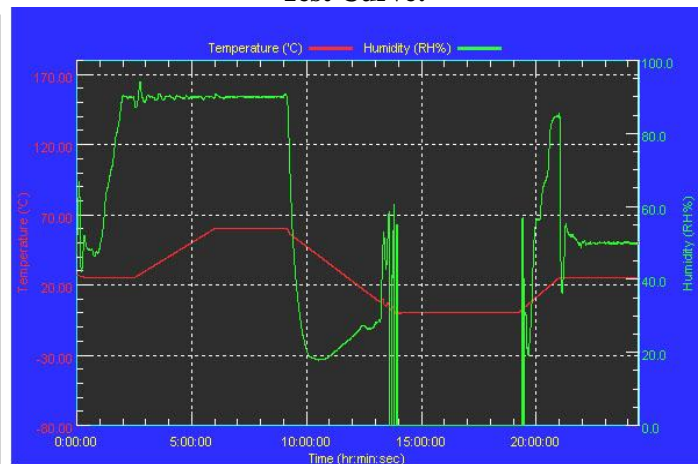
**Test Equipment:**  
Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-B6T-150+LN2  
Date of Calibration: 03/17/11  
Serial Number: 6487KT

## 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)                 | 1545/times | 1545/times | 0 %          |      |
| Note: Failure rate need to under 0.2%. |            |            |              |      |

# Temperature variation operation test

**Test Date:** 11-03~ 04-2012

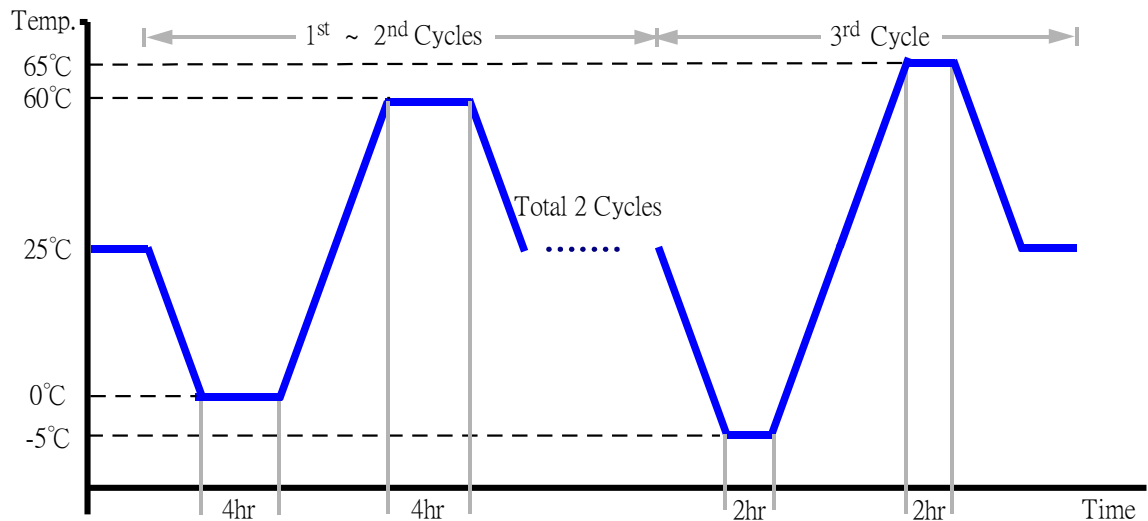
**Test Site:** AAEON QE Internal Lab.

**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 issues were found during the temperature variation operation test.

# Cold start and hot start test

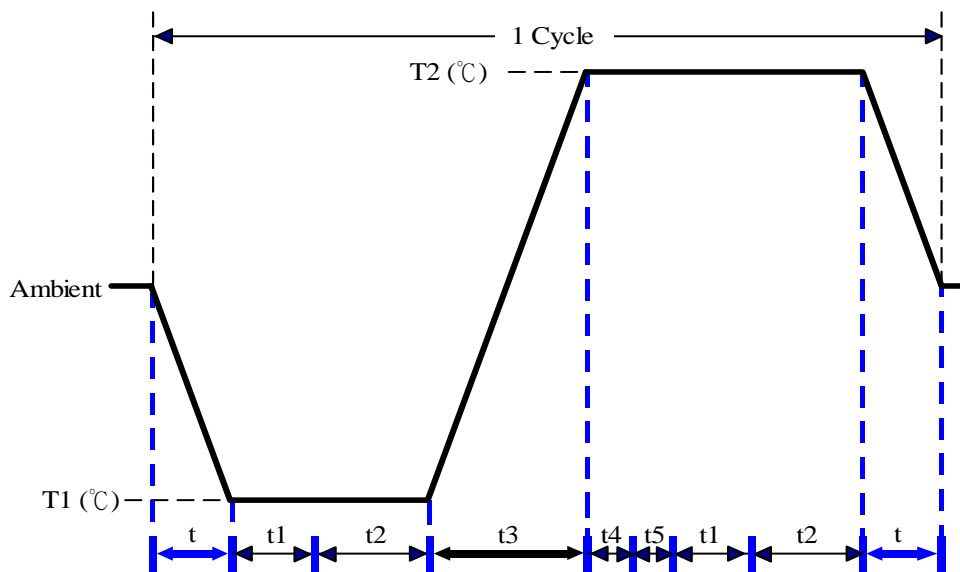
**Test Date:** 11-05 ~ 06-2012

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