GENE-APL6

Temperature/Humidity Test Report

Report NO:

Summary	☑ **Pass** ☐ **Fail** ☐ **Pass with Deviation** **Comment:**_____

Issue date	Approval	Test Engineer
2017-10-25	**Chienkow Liao**	**Dinken Chuang**

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	

Configuration of EUT

Test Product: GENE-APL6A0.2

Sample Configuration & Quantity Under Test:

1. CPU: Intel Apollo Lake N4200/ 1.1GHz
2. BIOS Ver. GENE-APL6 R0.5 (GAP6AM05) (10/12/2017)
3. Chipset: Intel Apollo Lake N4200
4. Memory: Transcend 8GB *1/ DDR3L 1600 / SEC K4B4G0846D
5. Storage: EMMC32G-M525-A51
6. Test Software: Windows 10 / Run Pass Mark Burn In Test 8.1 Pro
7. AT Power Supply: Zippy HG2-6400P / 400W (AT to ATX Mode)
8. Heat Sink:

Temp./humidity power on/off test

Test Date: 10-17~18-2017

Test Site: AAEON Taichung Internal Lab

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: (King Son Technology Co.)

Model: THS-A4C-100

Date of Calibration: 01/18/17

Due date of Calibration: 01/19/18

Serial Number: 3188

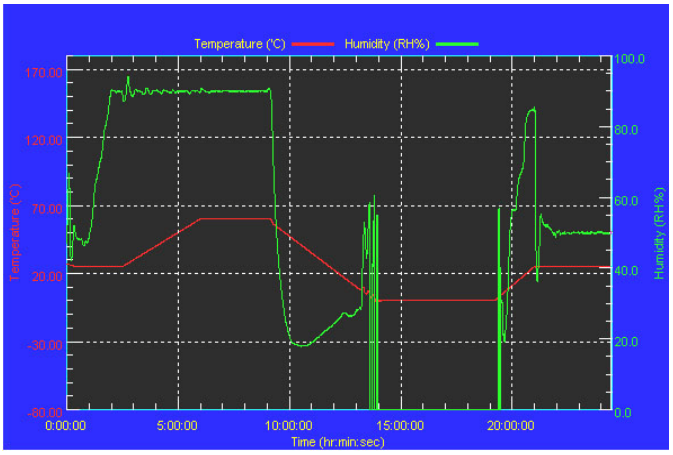
Temperature & Humidity Power On/Off Test:

1. Test High Temp./Humidity: 60℃@90%RH
2. Test Low Temperature: 0℃
3. Test Time: 24Hours / Cycle
4. Test Cycle: 2 Cycles
5. Test Software: Windows 10 / Run PassMark Rebooter v1.3 Build:1004

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	Test Result
Power On/Off	1208/times	1208/times	0 %	Pass

Note: 1. Failure rate need to under 0%.

2. Power on/off fixture setting: on -150 sec / off - 5 sec

Temperature variation operation test

Test Date: 10-19~20-2017

Test Site: AAEON Taichung Internal Lab

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

Test Equipment:

Programmable Temperature & Humidity Chamber: (King Son Technology Co.)

Model: THS-A4C-100

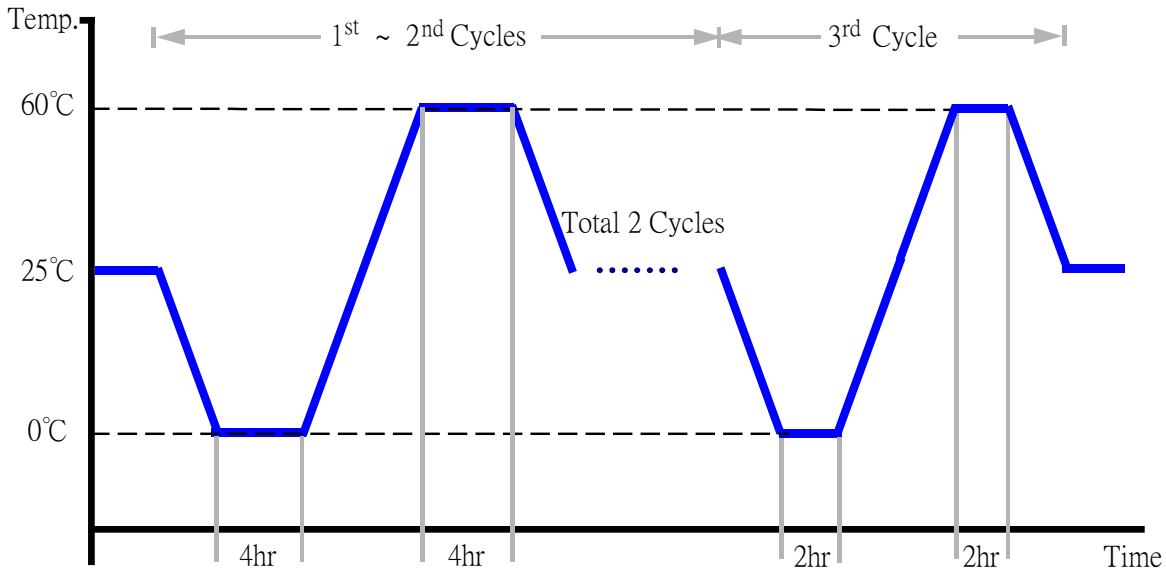
Date of Calibration: 01/18/17

Due date of Calibration: 01/19/18

Serial Number: 3188

Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0℃ (1~3 cycles)
2. Test High Temperature: 60℃(1~3 cycles)
3. Test dwell time: 4Hrs(1~2 cycles)
   2Hrs (3rdcycle)
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.

Cold start and hot start test

Test Date: 10-23~24-2017

Test Site: AAEON Taichung Internal Lab

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

Test Equipment:

Programmable Temperature & Humidity Chamber: (King Son Technology Co.)

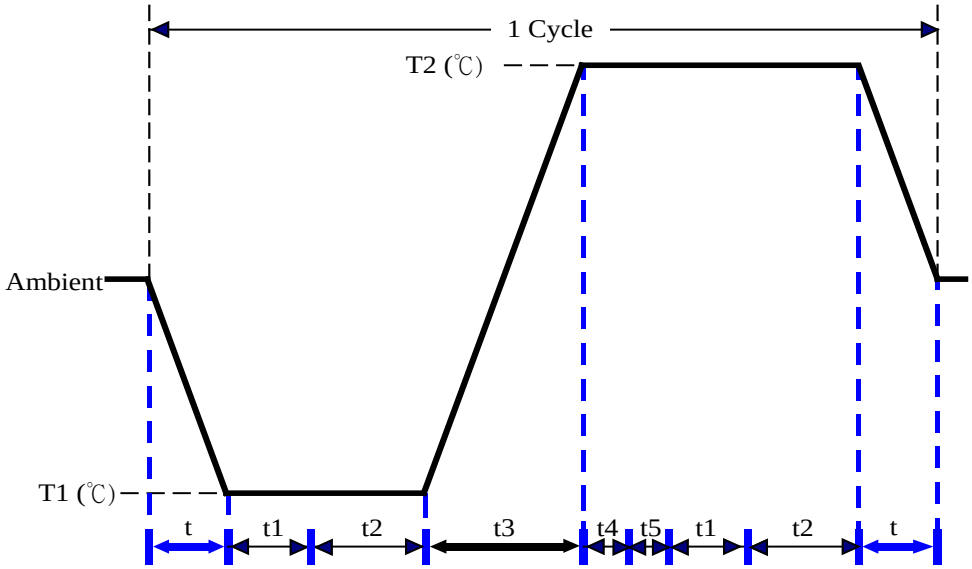
Model: THS-A4C-100

Date of Calibration: 01/18/17

Due date of Calibration: 01/19/18

Serial Number: 3188

Test Condition:



Parameters	Description
T1	0℃
T2	60℃
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: Windows10 Software restart test 2 times
Test Software:Windows 10

Test Result:

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

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