

# GENE-APL5

## Temperature/Humidity Test Report

Report NO:

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

**2016-11-17**

**Approval**

**Edwin Luo**

**Test Engineer**

**Lena Cho**

# Test item list

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## Testing Result

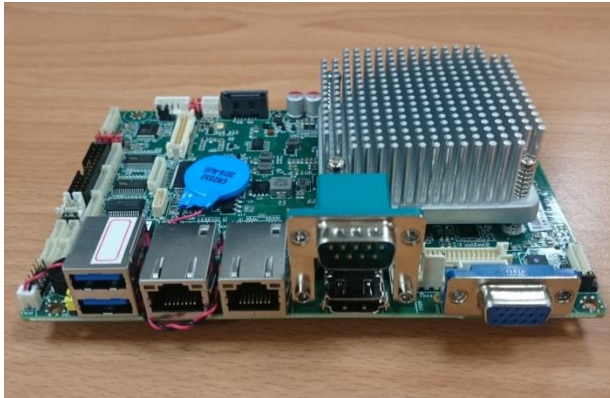
Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	N/A
2	Temperature variation operation test	Pass	N/A
3	Cold start and hot start test	Pass	N/A

# Configuration of EUT

## Test Product: GENE-APL5 A0.2

### Sample Configuration & Quantity Under Test:

1. CPU: Intel® Pentium® Processor N4200/ 2.5GHz
2. BIOS Ver. R0.5 GAP5AM05 (11/02/2016)
3. Chipset: Intel Apollo Lake
4. Memory: Transcend 8G DDR3L 1600 SODIMM / K4B4G0846B
5. USB Flash: SanDisk cruzer / 4GB (for Power On/Off test)
6. SATA HDD: TOSHIBA APR-2015 6Gb/s
7. Test Software: Windows 10 x64 / Run PassMark Burn In Test 8.1 Pro build 1015
8. Power Supply: HG2-6300P (ATX to AT mode)
9. Heat Sink:



# Temp./humidity power on/off test

**Test Date:** 11-10 ~ 11-2016

**Test Site:** AAEON QE Dept.

**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: (KSON Instrument tech.)  
 Model: THS-A4C-100  
 Date of Calibration: 05/18/16  
 Due date of Calibration: 05/17/17  
 Serial Number: 3188

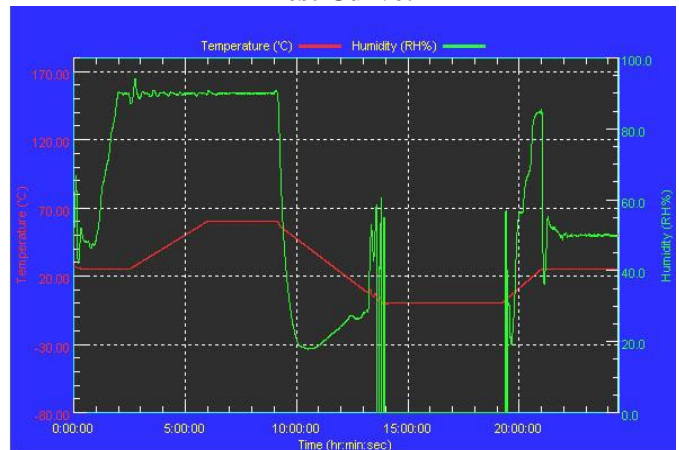
**Temperature & Humidity Power On/Off Test:**

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:**

	Actual	Successful	Failure rate	Test Result
Power On/Off	1982/times	1982/times	0 %	Pass

**Note:** 1. Failure rate need to under 0%.  
 2. Power on/off fixture setting: on - 35 sec / off - 5 sec

# Temperature variation operation test

**Test Date:** 11-14~ 15-2016

**Test Site:** AAEON QE Dept.

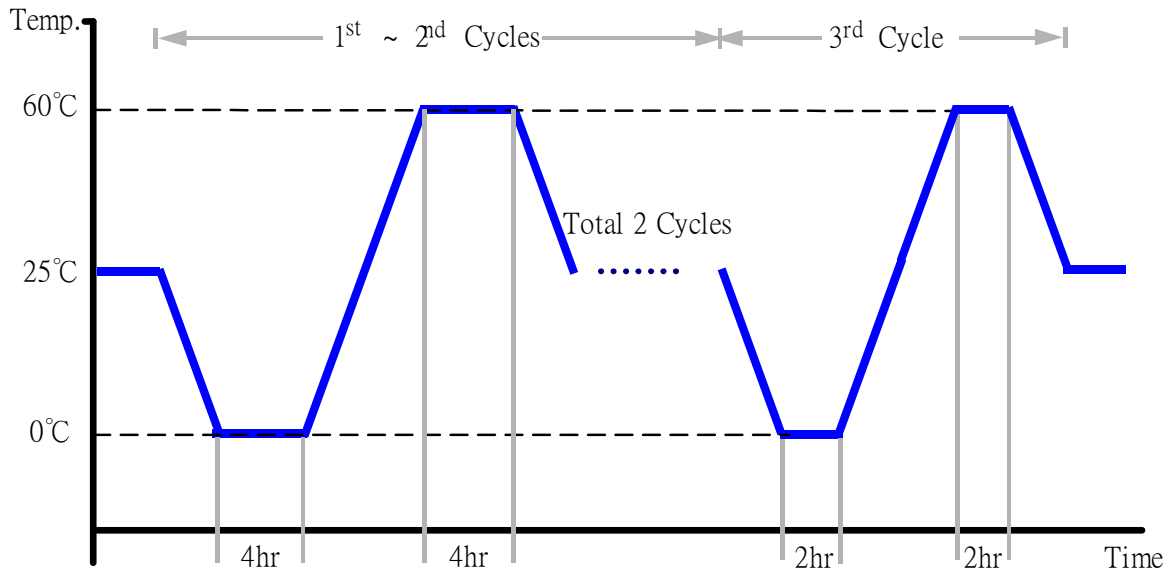
**Test Standard:** Refer to IEC 68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**

Programmable Temperature & Humidity Chamber: (KSON Instrument tech.)  
Model: THS-A4C-100  
Date of Calibration: 05/18/16  
Due date of Calibration: 05/17/17  
Serial Number: 3188

**Temperature & Humidity Cycle Test:**

1. Test Low Temperature: 0°C (1~3 cycles)
2. Test High Temperature: 60°C (1~3 cycles)
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

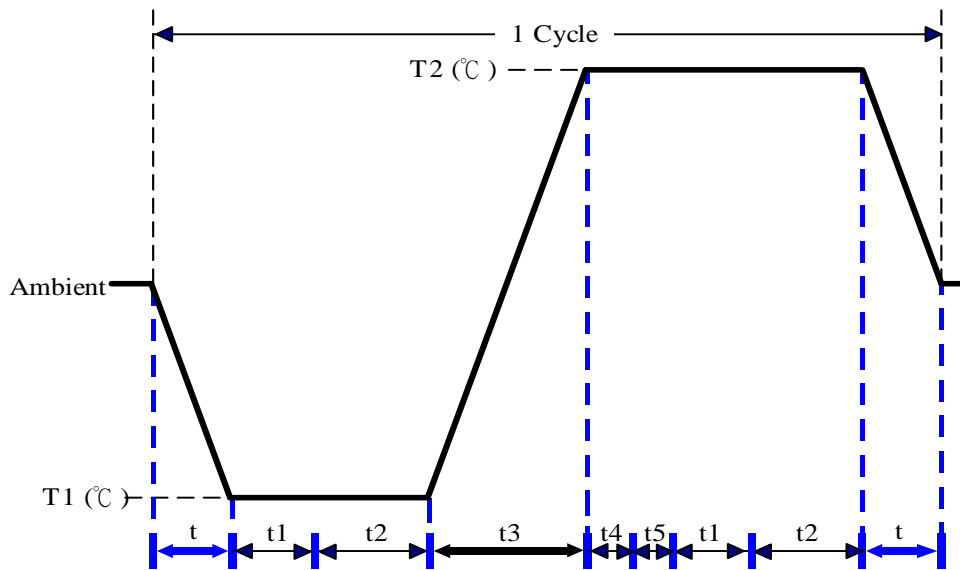
**Test Date:** 11-17-2016

**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: (KSON Instrument tech.)  
Model: THS-A4C-100  
Date of Calibration: 05/18/16  
Due date of Calibration: 05/17/17  
Serial Number: 3188

**Test Condition:**



Parameters	Description
T1	0°C
T2	60°C
t1	1 hr
t2	2 hrs
t4, t5	30 mins
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 mins / Off 5 mins)  
t3,t4: Run PassMark Burn In Test  
t5: Windows soft restart test 2 times  
Test software: Windows 10 x64 Edition

**Test Result:**

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