

# PICO-APL1

## 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**

**2017-5-15**

**Approval**

**Dinken Chuang**

**Test Engineer**

**Daniel Peng**

# Test item list

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

## 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: PICO-APL1 A0.2

### Sample Configuration & Quantity Under Test:

1. CPU: Intel ApolloLake N4200 / 1.1GHz
2. BIOS Ver. R1.0 ZAP1AM10 (04/13/2017)
3. Chipset: Intel ApolloLake N4200
4. Memory: Transcend 8GB \*1/ DDR3L 1600 / SEC K4B4G0846D
5. 2.5" SATA HDD: TOSHIBA MQ01ABD100 / 1TB
6. Test Software: Windows 10 / Run PassMark 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: 5-12~14-2017

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

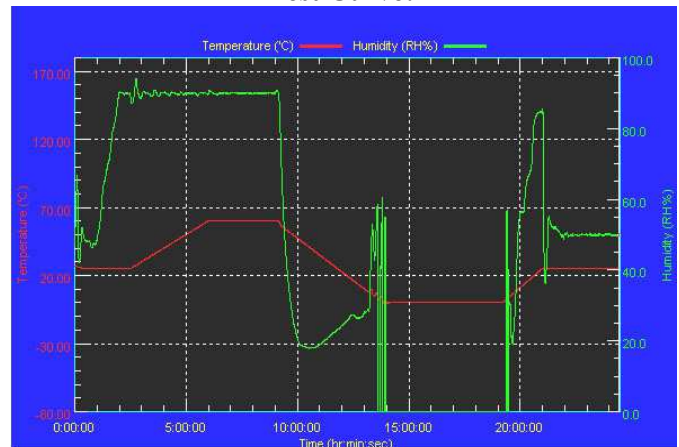
**Temperature & Humidity Power On/Off Test:**

1. Test High Temp./Humidity: 60°C @90%RH
2. Test Low Temperature: 0°C
3. Test Time: 24Hours / Cycle
4. Test Cycle: 2 Cycles
5. Test Software: PassMark reboot

**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	1227/times	1227/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:** 5-8~9-2017

**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

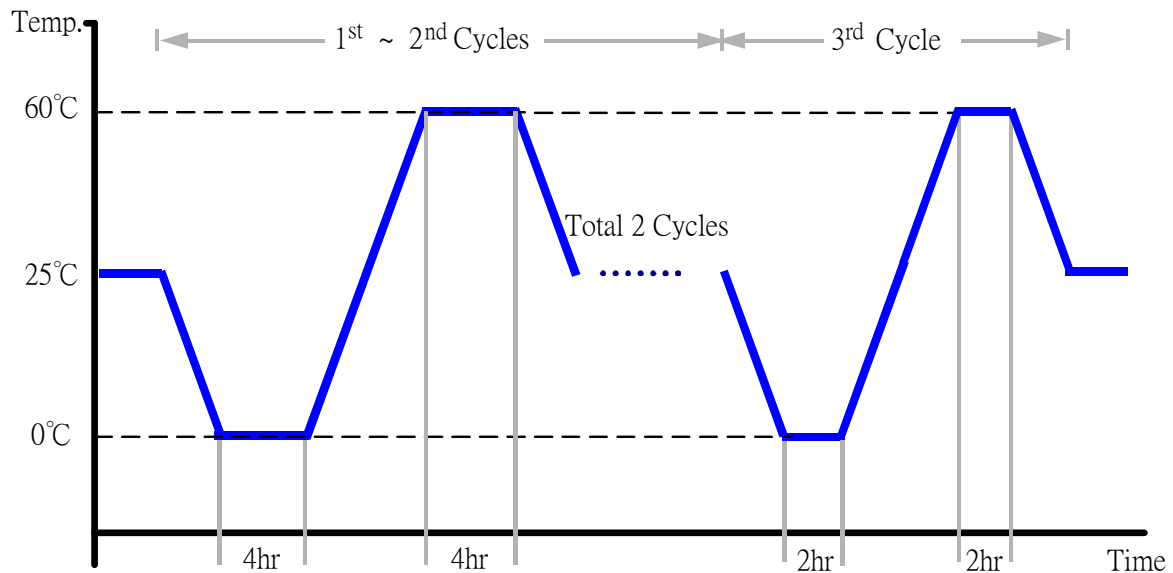
Date of Calibration: 01/18/17

Due date of Calibration: 01/19/18

Serial Number: 3188

**Temperature & Humidity Cycle Test:**

1. Test Low Temperature: 0°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:** 5-11~12-2017

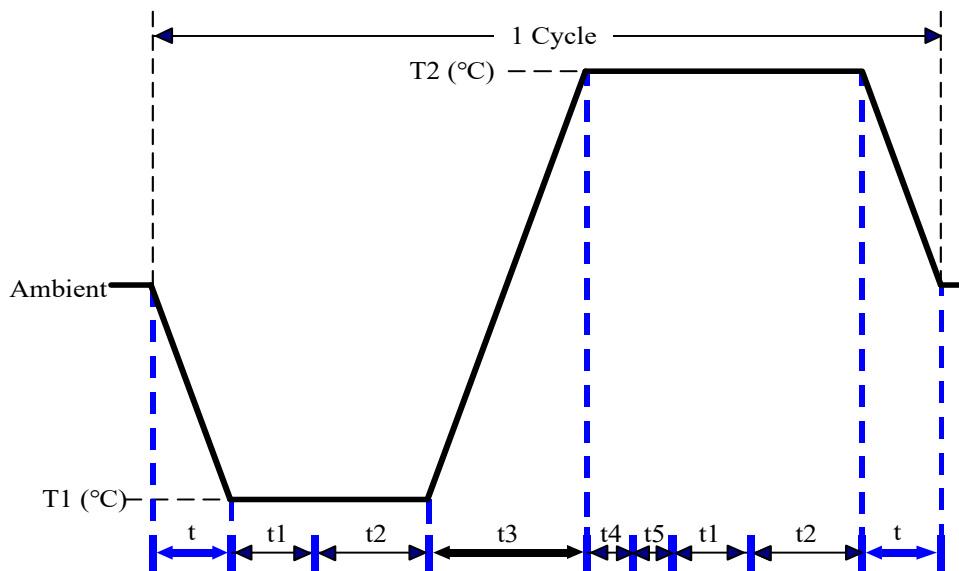
**Test Site:** AAEON Taichung Internal Lab

**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°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: 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.