

# PFM-LNP

## Temperature/Humidity Test Report

Report NO: 14E020002

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>
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**Issue date**

2014-03-17

**Approval**

Tom Lin

**Test Engineer**

Rex Chang

# Test item list

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## Testing Result

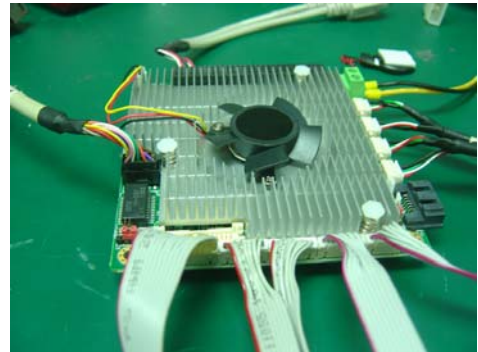
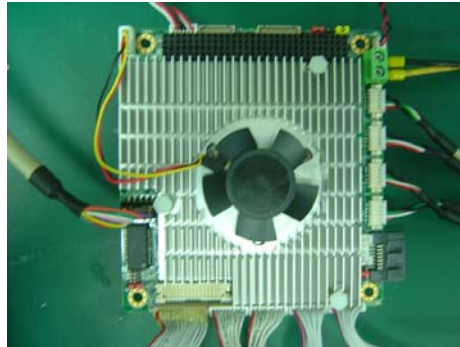
Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	
2	Temperature variation operation test	Pass	
3	Cold start and hot start test	Pass	

# Configuration of EUT

## Test Product: PFM-LNP A2.0

### Sample Configuration & Quantity Under Test:

1. CPU: Intel Atom N450/ 1.67GHz
2. BIOS : PLN\_1 2.00 x 64 (07/16/2010)
3. Chipset: Intel/Luna Pier
4. Memory: Onboard/samsung K4T1G164QF-BCE7 / 1 GB DDR2-667
5. 2.5" SATA HDD: TOSHIBA MK1676GSX / 160GB
6. Test Software: Windows XP / Run PassMark Burn In Test 7.1 Pro
7. Adapter : G-ALANTIC AD1280MB
8. Heat Sink + Fan :



# Temp./humidity power on/off test

**Test Date:** 03-16 ~ 17-2014

**Test Site:** AAEON QE Dept.

**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: 03/07/14

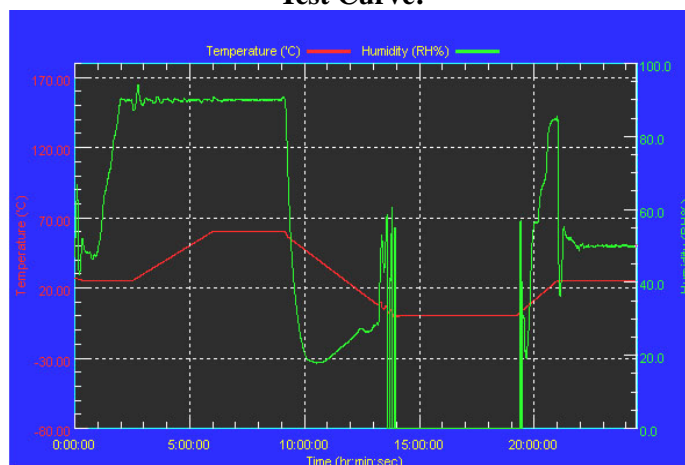
Serial Number: 6487KT

**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
Power On/Off	1941/times	1941/times	0 %
Note: Failure rate need to 0%.			

# Temperature variation operation test

**Test Date:** 03-14 ~ 16-2014

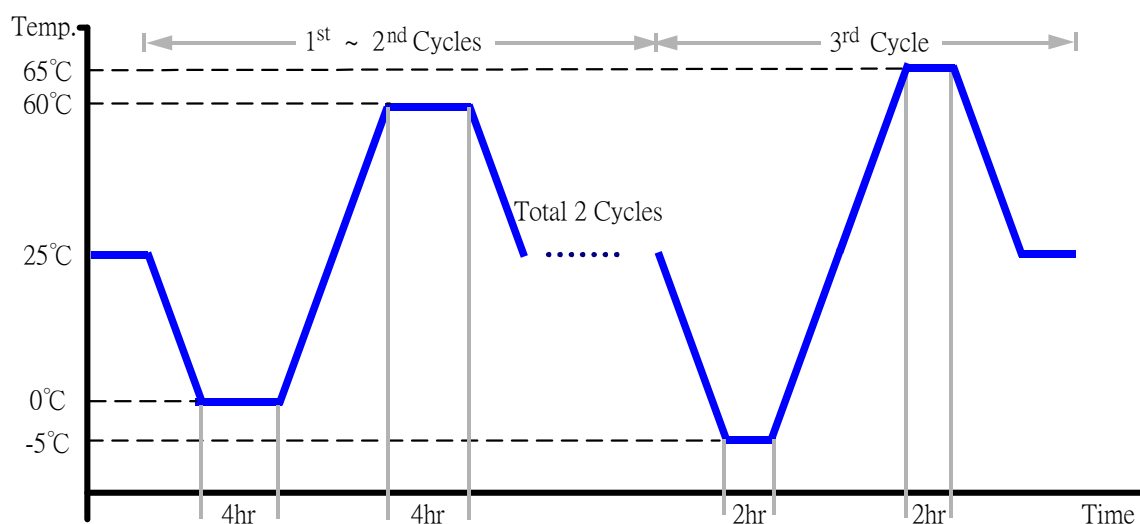
**Test Site:** AAEON QE Dept.

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

**Test Equipment:**  
Programmable Temperature & Humidity Chamber (K.SON. INS. TECH. CORP.)  
Model: THS-B6T-150+LN2  
Date of Calibration: 03/07/14  
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

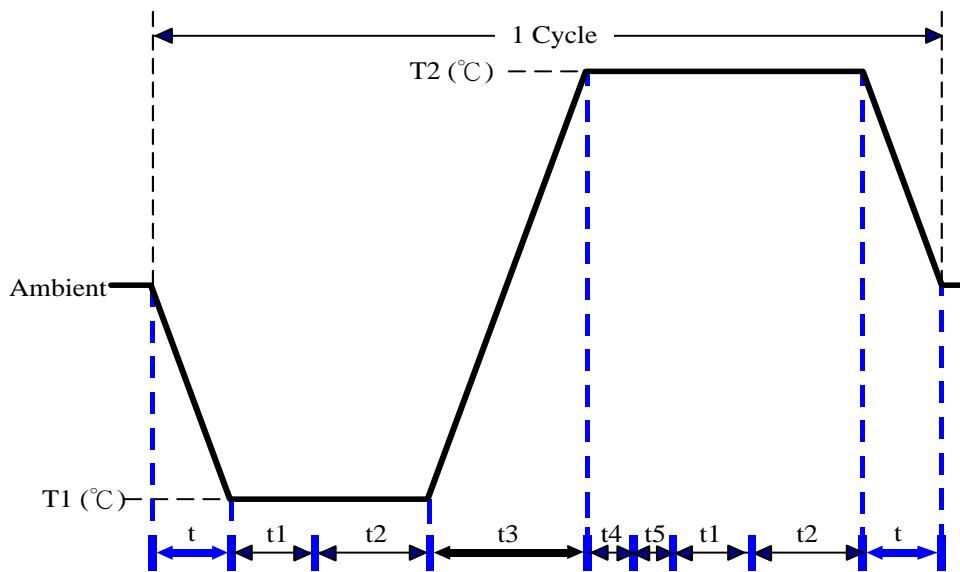
**Test Date:** 03-13 ~ 14-2014

**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 (K.SON. INS. TECH. CORP.)  
Model: THS-B6T-150+LN2  
Date of Calibration: 03/07/14  
Serial Number: 6487KT

**Test Condition:**



Parameters	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 = 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: Windows 7 Software restart test 2 times  
Test Software: Windows 7

**Test Result:**

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