

UP-CHCR1

(UPC-CHT01)

Temperature/Humidity Test Report

Report NO: 18D020004

Summary	<p><input type="checkbox"/> Pass</p> <p><input type="checkbox"/> Fail Note : There is/are ___ defect(s) not list in the report, please check it in the DTS Website.</p> <p><input checked="" type="checkbox"/> Pass with Deviation Comment: <u>1. BIOS set CPU Power Limit #1 Limit to 9W.</u> <u>2. The System cannot shutdown normally with standard power on/off test(power on 150s/ off 5s, fail at 186 times), but can be passed under power on 180s/off 10s. (power on/off 1421 times, no failure.)</u></p>
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Issue date

2018-03-28

QE Manager

KJ Wang

Test Engineer

Ben Sun

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

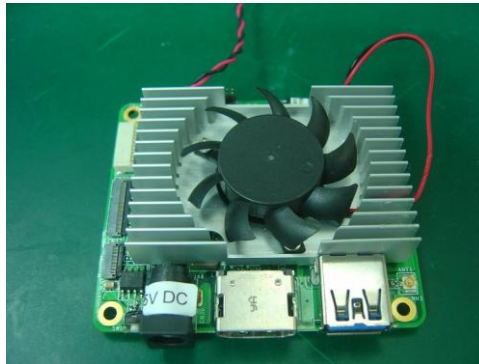
Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	
2	Temperature variation operation test	Pass	
3	Cold start and hot start test	Pass	

Configuration of EUT

Test Product: UP-CHCR1 A0.2

Sample Configuration & Quantity Under Test:

1. CPU: Intel® ATOM(TM) X5-Z8350 Processor 1.44 GHz
2. BIOS Ver.: UCR1BM13
3. Chipset: Intel® Cherry Trail
4. Memory: DDR3L 4GB(Samsung-K4B8G1646D-MYK0)
5. Storage: EMMC 64GB(Hynix - H26M78208CMR)
6. Test Software: Windows 10 / Run PassMark Burn In Test 8.1 Pro
7. Adapter: FJ-SW0504000N / 5V / 4A
8. CPU Cooler:



Temp./humidity power on/off test

Test Date: 03-23~ 25-2018

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: (K.SON. INS. TECH. CORP.)
 Model: THS-D7TS-100+LN2
 Date of Calibration: 10/05/17
 Due date of Calibration: 10/04/18
 Serial Number: 3898

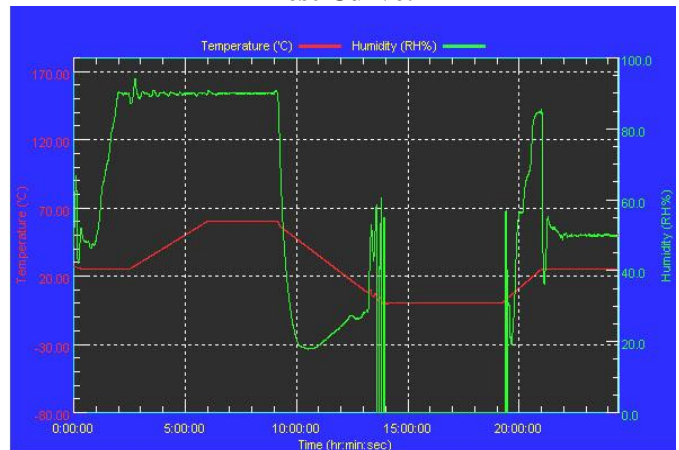
Temperature & Humidity Power On/Off Test:

1. Test High Temp./Humidity: 60°C @90%RH
2. Test Low Temperature: 0°C
3. Test Time: 24Hours / Cycle
4. Test Cycle: 3 Cycles
5. Test Software: Windows 10 / Run Rebooter program

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	1421/times	1421/times	0 %	Pass

Note: 1. Failure rate need to under 0%.
 2. Power on/off fixture setting: on - 180 sec / off - 10 sec

Temperature variation operation test

Test Date: 03-26 ~ 27-2018

Test Site: AAEON QE Dept.

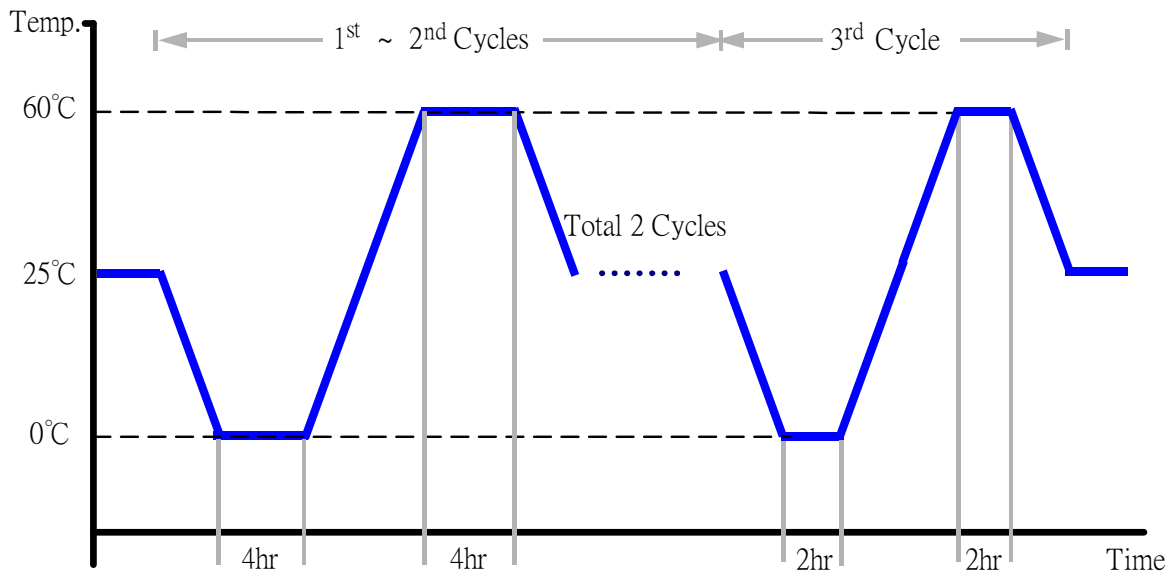
Test Standard: Refer to IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-D7TS-100+LN2
Date of Calibration: 10/05/17
Due date of Calibration: 10/04/18
Serial Number: 3898

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 (3rd 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

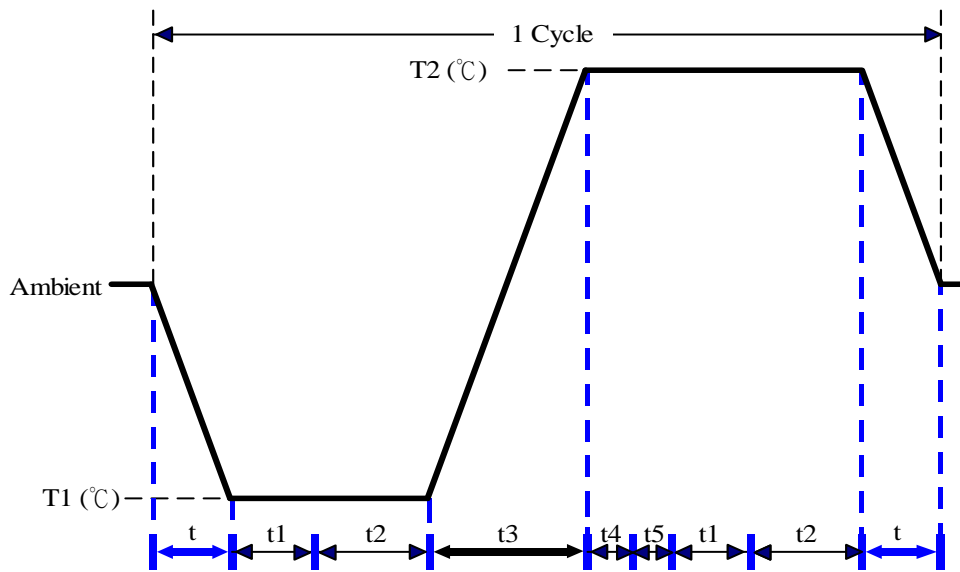
Test Date: 03-27 ~ 28-2018

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-D7TS-100+LN2
Date of Calibration: 10/05/17
Due date of Calibration: 10/04/18
Serial Number: 3898

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: Windows 10 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.