# **GENE-SKU7**

# **Temperature/Humidity Test Report**

Report NO: 17E020002

	Pass .
Sum mary	Fail  Note: There is/are defect(s) not list in the report, please check it in the DTS Website.
	✓ Pass with Deviation Comment: 1. <u>Under PassMark Burn In Test 8.0 Pro, test Network set loading to 100% test failed (Error message shows "Timeout waiting for packet"), but change to 99% test pass. Please refer to for PASSMARK SOFTWARE <a href="http://www.passmark.com/forum/showthread.php?2931-How-to-test-burnin-test-with-Network">http://www.passmark.com/forum/showthread.php?2931-How-to-test-burnin-test-with-Network</a></u>

Issue date	QE Manager	Test Engineer
2017-05-04	KJ Wang	Rex Chang

# **Test item list**

<i>1</i> .	Test item list	2
<i>2</i> .	Configuration of EUT	3
<i>3</i> .	Temp./humidity power on/off test	4
<i>4</i> .	Temperature variation operation test	<b>5</b>
<i>5</i> .	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	

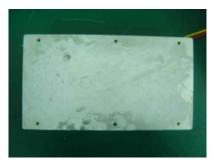
# **Configuration of EUT**

## **Test Product: GENE-SKU7 A0.1**

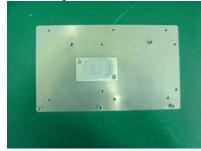
## **Sample Configuration & Quantity Under Test:**

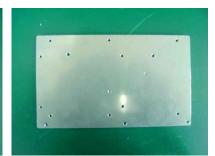
- 1. CPU: Intel Core i7-6600U / 2.6GHz
- 2. BIOS Ver. ESBD-TWITES R0.4 (EITEAM04) (03/30/2017)
- 3. Chipset: Intel Sky Lake-U SoC
- 4. Memory: Kingston 16GB / DDR4 2133 / Micron 6BA77 D9SRJ
- 5. 2.5" SATA HDD: Western Digital WD2500BEVT / 250GB
- 6. Test Software: Windows 10 / Run PassMark Burn In Test 8.1 Pro
- 7. AT Power Supply: Zippy HG2-6400P / 400W
- 8. Heat Sink + FAN:





9. Heat-Spreader + Thermal Pad:





## Temp./humidity power on/offtest

**Test Date:** 05-02 ~ 03-2017

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-B6T-150+LN2 Date of Calibration: 06/03/16 Due date of Calibration: 06/02/17

Serial Number: 9095KT

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

1. Test High Temp./Humidity: 60°C @90%RH

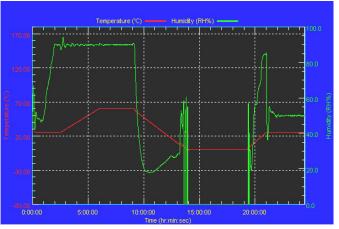
Test Low Temperature: 0°C
 Test Time: 24Hours / Cycle
 Test Cycle: 1 Cycles

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:**

Test Method	Actual	Successful	Failure rate	Test Result
Power On/Off	2406/times	2406/times	0 %	Pass

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

2. Power on/off fixture setting: on  $-31\sec / off - 5 \sec$ 

## Temperature variation operation test

**Test Date:** 05-03 ~ 04-2017 **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: 06/03/16 Due date of Calibration: 06/02/17

Serial Number: 9095KT

### **Temperature & Humidity Cycle Test:**

1. Test Low Temperature:  $0^{\circ}$ C (1~3 cycles)

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

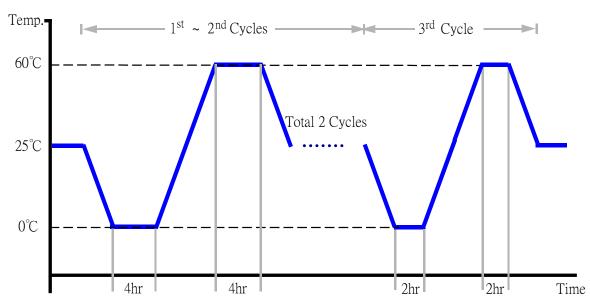
3. Test dwell time: 4Hrs(1~2 cycles)

2Hrs (3<sup>rd</sup>cycle)

4. Temperature slope:  $2^{\circ}$ 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:** 04-29 ~ 30-2017

Test Site: AAEON QE Dept.

**Test Standard:** Refer to IEC 68-2-14 Testing procedures

Test N: Change of temperature Test

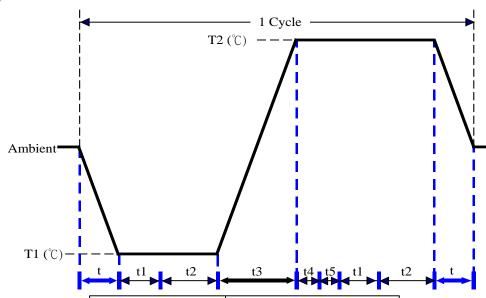
#### **Test Equipment:**

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)

Model: THS-B6T-150+LN2 Date of Calibration: 06/03/16 Due date of Calibration: 06/02/17

Serial Number: 9095KT

#### **Test Condition:**



Parameters	Description
T1	$0^{\circ}\mathbb{C}$
T2	60°C
t1	1 hrs
t2	2 hrs
t4, t5	30 min
t, t3	2°C/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.