

# AEC-6523

With 2.5" SATA HDD

## Environment Test Report

Report NO: 13P020012



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> <p><b>Comment: <u>The power switch won't work properly in the operating temperature at -30 degree C cold start test.</u></b></p>
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Issue date

2013-09-27

Approval

Tom Lin

Test Engineer

Juno Cheng

# Test item list

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## Testing Result

Num	Test item list	Result	Remark
1	Temperature cycle test	Pass	
2	High temperature storage test	Pass	
3	Low temperature storage test	Pass	
4	Humidity test	Pass	
5	Cold start and hot start test	Pass	

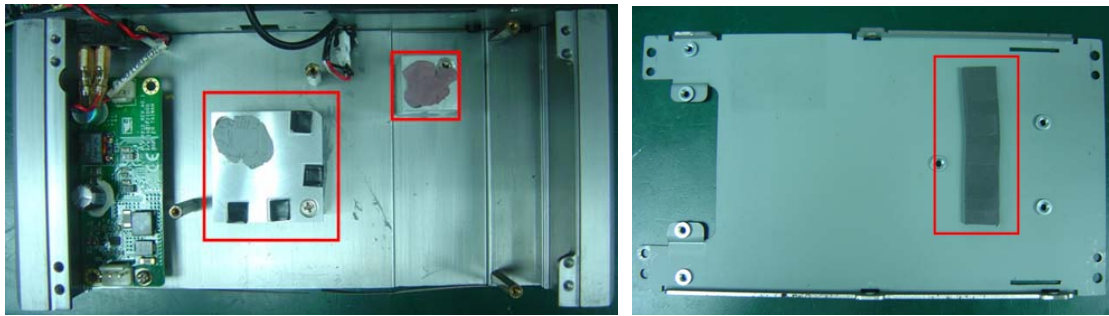
# Configuration of EUT

## Sample Define:

Sample No.	S/N	AEC-6523(GENE-CV05)
Sample 1		P6523001
Sample 2		P6523002
Sample 3		P6523003
Sample 4		P6523004

Num	Item	Spec
1.	<b>Main Board:</b>	GENE-CV05 A1.0
	1.BIOS	AEC-6523 R0.1 (6523AM01) (04/01/2013)
	2.CPU	Intel Atom N2600 1.6GHz
	3.Memory(Wide Temp.)	Transcend DDR3 1333 2GB SEC K4B2G0846D
2.	<b>HDD (Wide Temp.)</b>	Toshiba MK1060GSC 100GB
3.	<b>Power Board</b>	PER-P21D A0.1
4.	<b>Power Supply</b>	FSP060-DBAB1
5.	<b>Main Board:</b>	GENE-CV05 A1.0

## Heat Sink And Thermal Pad



## Test Condition:

Item	Testing Method	BurnIn configuration	Sample volume
CPU	PassMark BurnIn Test 7.0 Pro	Loading 50%	4 set
2D Graphic	PassMark BurnIn Test 7.0 Pro	Loading 50%	4 set
3D Graphic	PassMark BurnIn Test 7.0 Pro	Loading 50%	4 set
Memory	PassMark BurnIn Test 7.0 Pro	Loading 100%	4 set
Disk	PassMark BurnIn Test 7.0 Pro	Loading 70%	4 set
Serial Port	PassMark BurnIn Test 7.0 Pro with loop back	Loading 70%	4 set
LAN	PassMark BurnIn Test 7.0 Pro internal loop back	Loading 70%	4 set
Audio	PassMark BurnIn Test 7.0 Pro Sound test	Loading 70%	4 set
USB	USB Keyboard and Mouse	-	4 set

# Temperature cycle test

**Test Date:** 09-15 ~ 17-2013

**Test Product:** AEC-6523

**Test Site:** AAEON QE Dept.

**Test Standard:** Refer to IEC68-2-14 Testing procedures

Test N: Change of temperature Test

**Test Equipment:**

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

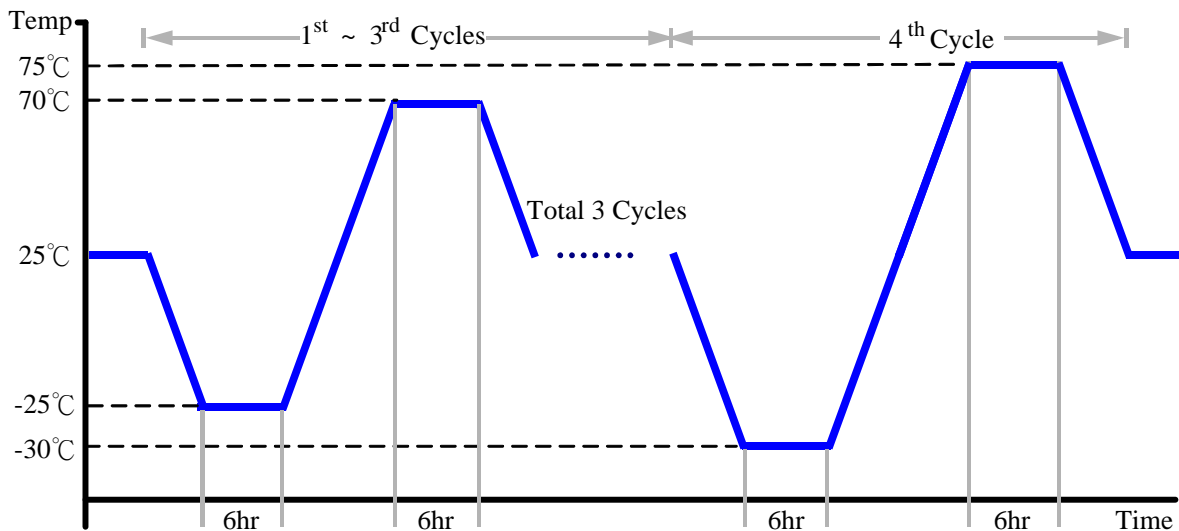
Model: THS-D4H+-100

Date of Calibration: 10/10/12

Serial Number: 2582

**Test Condition:**

1. Test Low Temperature: -25°C (1~3 cycles)  
-30°C (4<sup>th</sup> cycle)
2. Test High Temperature: 70°C (1~3 cycles)  
75°C (4<sup>th</sup> cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2°C/min
5. Test cycle: 4 cycles
6. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 4 (AEC-6523)

**Test Result:**

Sample No.	Test Result	Note
Sample 1	Pass	
Sample 2	Pass	
Sample 3	Pass	
Sample 4	Pass	
<b>Note:</b>		

# High temperature storage test

**Test Date:** 09-17 ~ 19-2013

**Test Product:** AEC-6523

**Test Site:** AAEON QE Dept.

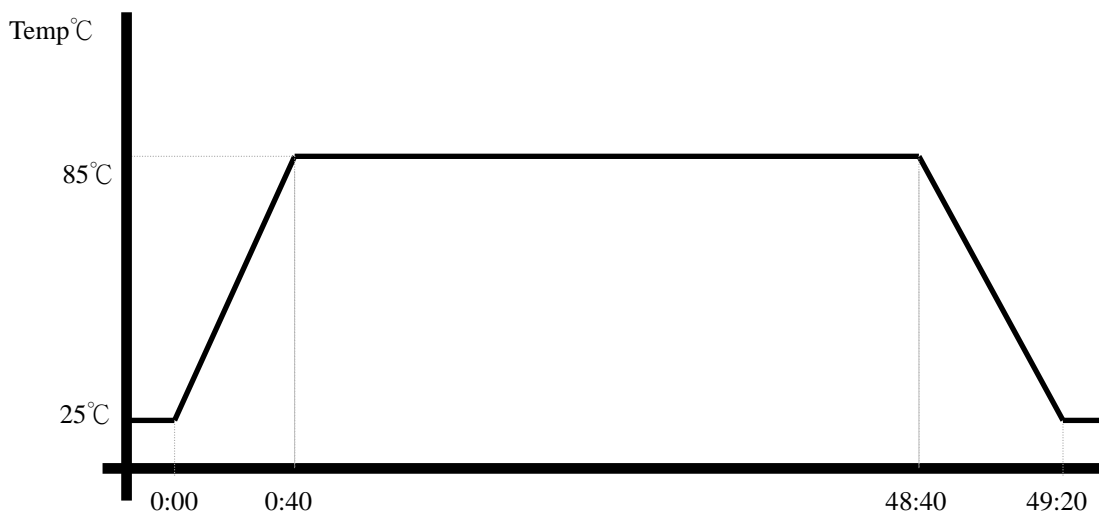
**Test Standard:** Refer to IEC 68-2-2 Testing procedures  
Test Bb: Dry Heat Test (Non-operation)

**Test Equipment:**

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)  
Model: THS-D4H+-100  
Date of Calibration: 10/10/12  
Serial Number: 2582

**Testing Item:**

1. Test Temperature: 85°C
2. Test Times: 48Hrs
3. Test Software: Windows 7 / Run PassMark Burn In Test 7.0 Pro
4. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 4 (AEC-6523)

**Test Result:**

Sample No.	Test Result	Note
Sample 1	Pass	
Sample 2	Pass	
Sample 3	Pass	
Sample 4	Pass	

Note:

# Low temperature storage test

**Test Date:** 09-15 ~ 17-2013

**Test Product:** AEC-6523

**Test Site:** AAEON QE Dept.

**Test Standard:** Refer to IEC 68-2-1 Testing procedures  
Test Ab: Cold Test (Non-operation)

**Test Equipment:**

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)  
Model: THS-D4H+-100  
Date of Calibration: 10/10/12  
Serial Number: 2582

**Testing Item:**

1. Test Temperature: -40°C
2. Test Times: 48Hrs
3. Test Software: Windows 7 / Run PassMark Burn In Test 7.0 Pro
4. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 4 (AEC-6523)

**Test Result:**

Sample No.	Test Result	Note
Sample 1	Pass	
Sample 2	Pass	
Sample 3	Pass	
Sample 4	Pass	
<b>Note:</b>		

# Humidity Test

**Test Date:** 09-19~21-2013

**Test Product:** AEC-6523

**Test Site:** AAEON QE Dept.

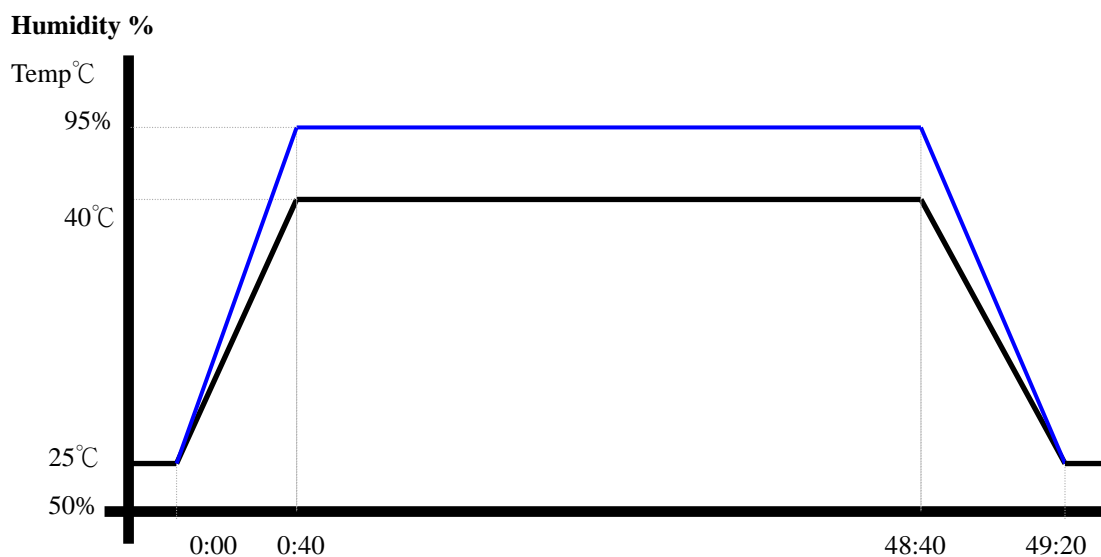
**Test Standard:** Refer to IEC 68-2-3 Testing procedures  
Test Ca: Damp heat, steady state (Non-operation)

**Test Equipment:**

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)  
Model: THS-D4H+-100  
Date of Calibration: 10/10/12  
Serial Number: 2582

**Testing Item:**

1. Test Temperature: 40°C
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows 7 / Run PassMark Burn In Test 7.0 Pro
5. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 4 (AEC-6523)

**Test Result:**

Sample No.	Test Result	Note
Sample 1	Pass	
Sample 2	Pass	
Sample 3	Pass	
Sample 4	Pass	

Note:

# Cold start and hot start test

**Test Date:** 09-21~ 23-2013

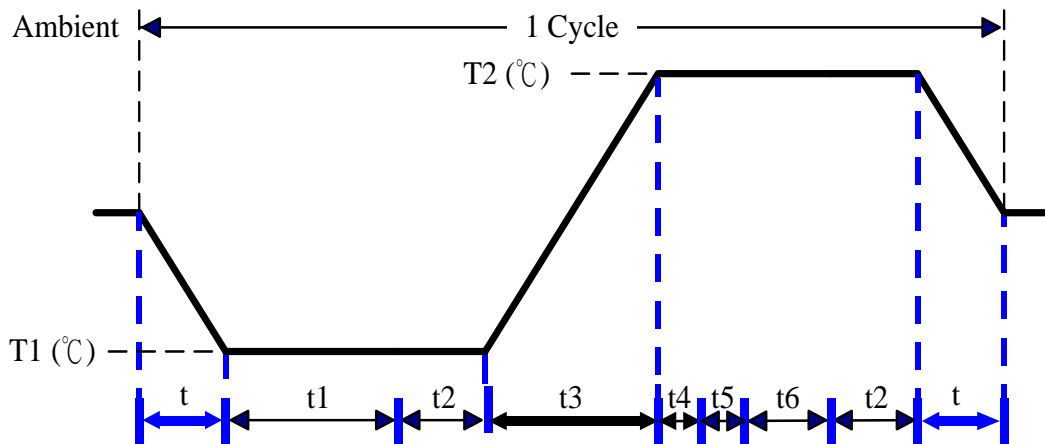
**Test Product:** AEC-6523

**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-D4H+-100  
Date of Calibration: 10/10/12  
Serial Number: 2582

**Test Condition:**



Parameters	Description
T1	-30°C
T2	75°C
t1	4 hrs
t2, t6	2 hrs
t4, t5	1hrs
t, t3	2°C/min
n (Cycle)	1

t = temperature slope  
t , t1, t6: Power Off  
t2: Power on/off test 10 times (on 2 min / off 5min)  
t3, t4: Run burn in test 7.0  
t5: Win 7 Software restart test 3 times  
Test Software: Windows 7

**Sample Quantity Under Test:**

Quantity: 4

**Test Result:**

Sample No.	Cold Start Test	Hot Start Test	Test Result	Note
Sample 1	Pass	Pass	Pass	
Sample 2	Pass	Pass	Pass	
Sample 3	Pass	Pass	Pass	
Sample 4	Pass	Pass	Pass	

Note: