

AHP-2122HTT

Environment Test Report

Report NO: 11P020034

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail Note : There is/are ____ defect(s) not list in the report, please check it in the DTS Website. <input type="checkbox"/> Pass with Deviation Comment: _____
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Issue date	Approval	Test Engineer
2011-12-08	Jansin Lee	Rex Chang

Configuration of EUT

<i>1. Test item list -----</i>	<i>2</i>
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<i>8. Cold start and hot start test -----</i>	<i>11</i>

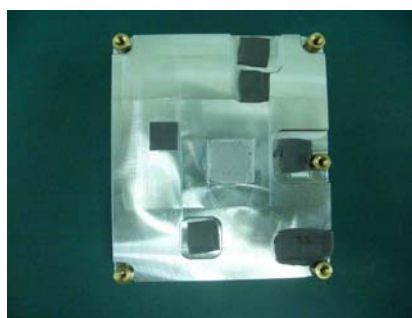
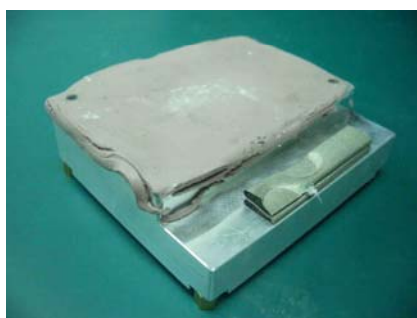
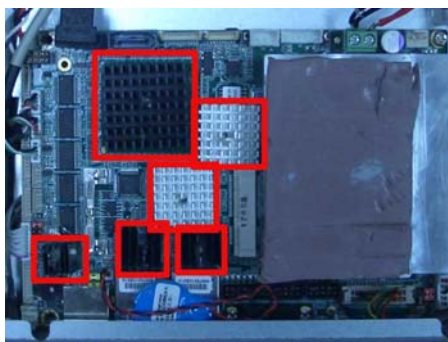
Testing Result

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

Temperature rise test

Num	Item	Spec
1.	Fanless Touch Panel PC	AHP-2122HTT-A2-1010
	1. LED Panel	12.1" AUO G121XN01 V0
	2. Main Board	AAEON GENE-LN05 Rev. B1.0
	3. BIOS Ver	GENE-LN05B V1.1 4.6.4.0 08/22/2011 17:22:18
	4. CPU	Onboard Intel Atom D525 / 1.8GHz
	5. Memory	DSL 4GB * 1 / DDR3 1066 / SEC K4B2G0846C
	6. Industrial SATA HDD	Seagate ST980817SM / 80GB
	7. Power Board	PER-P17D B1.0
	8. Test Software	Windows 7 / Run PassMark Burn In Test 6.0 Pro
2.	AC Adapter	FSP FSP084-DMAA1

Heat Sink



HDD Kit



Temperature rise test

Test Date: 12-07-2011

Test Product: AHP-2122HTT

Test Site: AAEON QE Dept.

Test Standard: Reference EN 61131-2(94), UL508 (94)

Temperature Measurement:

40 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 10/12/11
Serial Number: 12A323190

Test Condition:

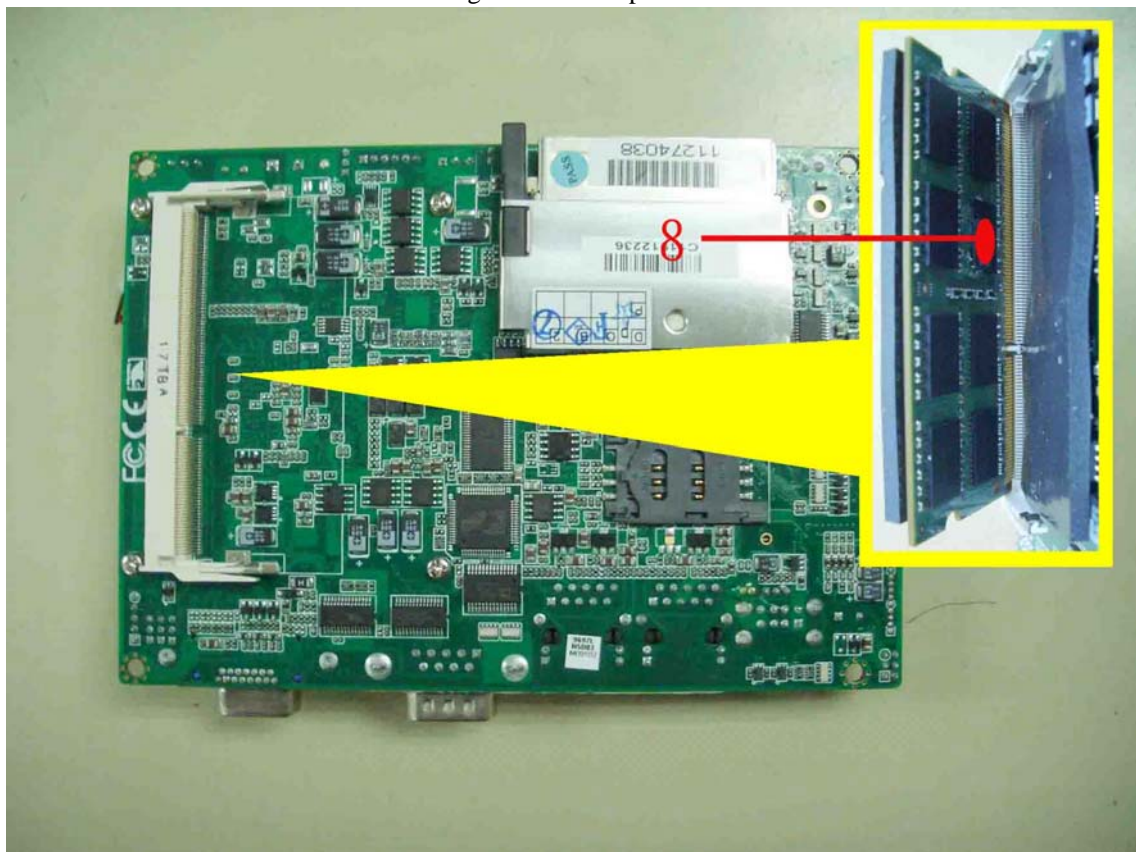
Ambient temperature: 60°C
Continuous running till thermal stability (within less than 1°C)

Test Software:

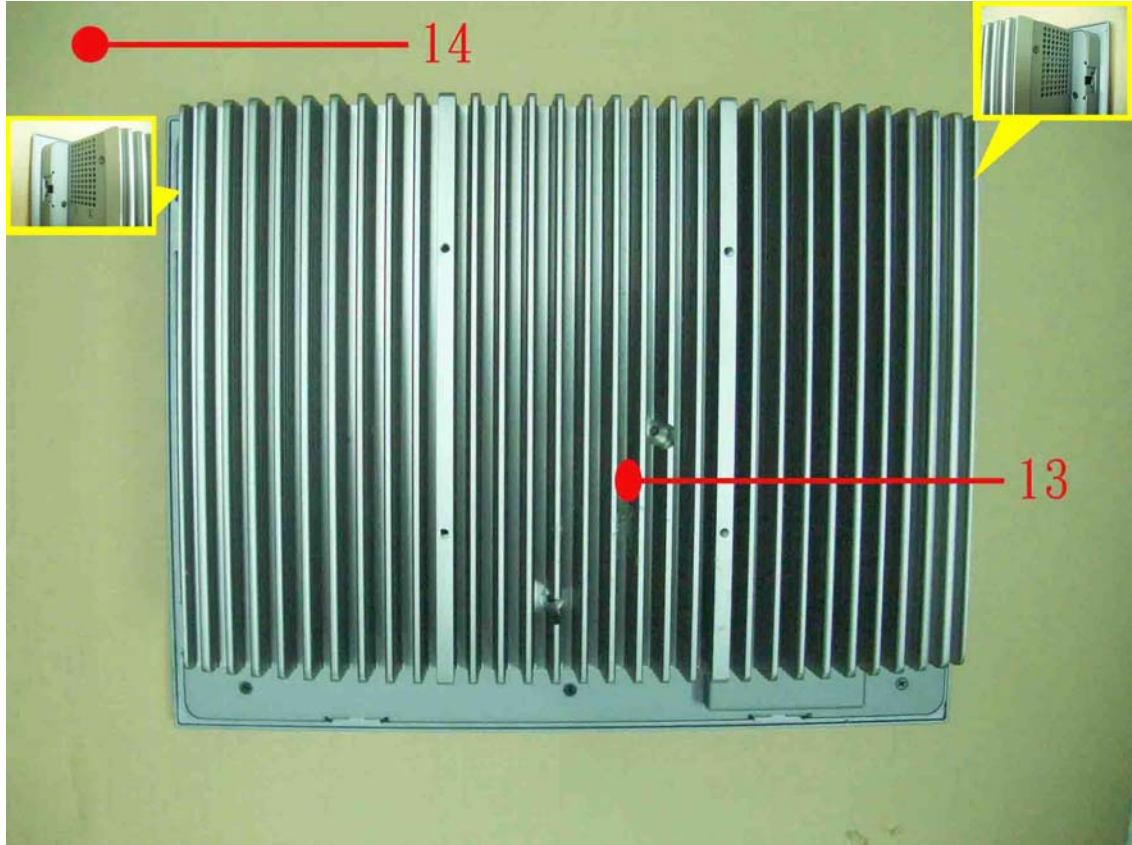
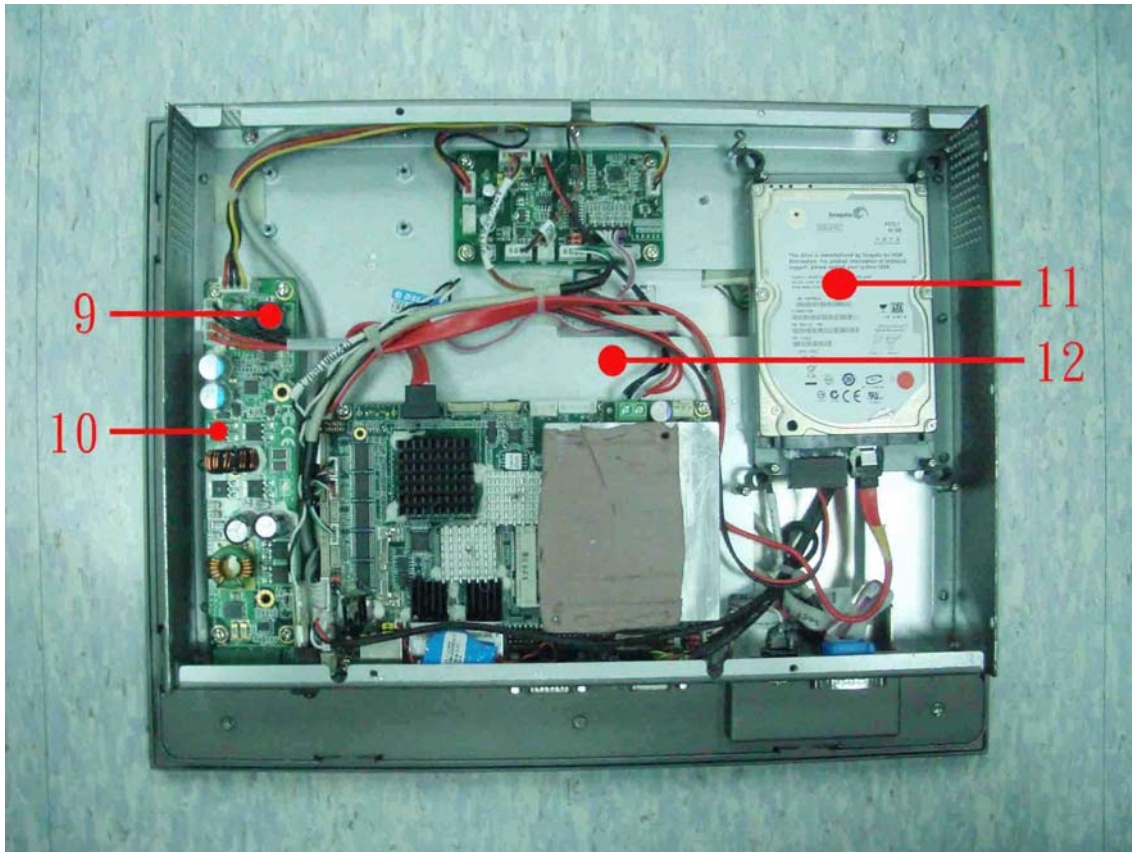
Windows 7 / Run PassMark Burn In Test 6.0 Pro

Terminal Recorder:

Measuring Thermal Couple Position :



Temperature rise test



Temperature rise test

Thermal profile data:

AHP-2122HTT

Point	Temp. Stage(°C)	Spec	60	25
GENE-LN05 B1.0				
01. U20 - (TF)Intel.CPU.D.DUAL.CORE.D525.1.80GHz.		100	82.5	47.5
02. U9 - (TF)Chipset ICH8M.INTEL.NH82801HBM.SLB9A		105	89.8	54.8
03. U17 - (TF)CLOCK GENERATOR.IDT.9LPRS501PGLF		115	79.2	44.2
04. U27 - (TF)Super I/O.Winbond.W83627DHG-P		85	83.1	48.1
05. U34 - (TF)GigaBit Ethernet PHY.INTEL.WG82567V SLAW7		100	82.0	47.0
06. U35 - (TF)PCI-E GigaBit Ethernet Chipset.Intel.WG82583V		100	81.1	46.1
07. U36 - (TF)AUDIO CODEC.REALTEK.ALC662-GR		100	82.5	47.5
08. Memory		95	81.5	46.5
PER-P17D B1.0				
09. L1		125	74.9	39.9
10. Q5		130	77.4	42.4
11. HDD		85	84.8	49.8
12. Control Box Inside Air Temperature		N/A	77.7	42.7
13. Control Box External Surface		N/A	74.5	39.5
14. Chamber Air Temperature		N/A	60.0	25.0
Any Tm value showed in red words which meaning the value over the Tc degree C of this device specification.				

Temperature Measurement Table:

Location	TA=60.0°C	Temp. Rise (Thermal Couple)	SpeedFan 4.42 (Read from BIOS)
Sensor 1 / Local Temp.		N/A	N/A
Sensor 2 / AUX		N/A	N/A
Sensor 3 / Core0		82.2°C	84.0°C

Sample Configuration & Quantity Under Test:

Quantity: 1 (AHP-2122HTT)

Test Result:

No problem was found during the temperature rise operation test.

Temperature cycle operation test

Test Date: 11-18~21-2011

Test Product: AHP-2122HTT

Test Site: AAEON QE Dept.

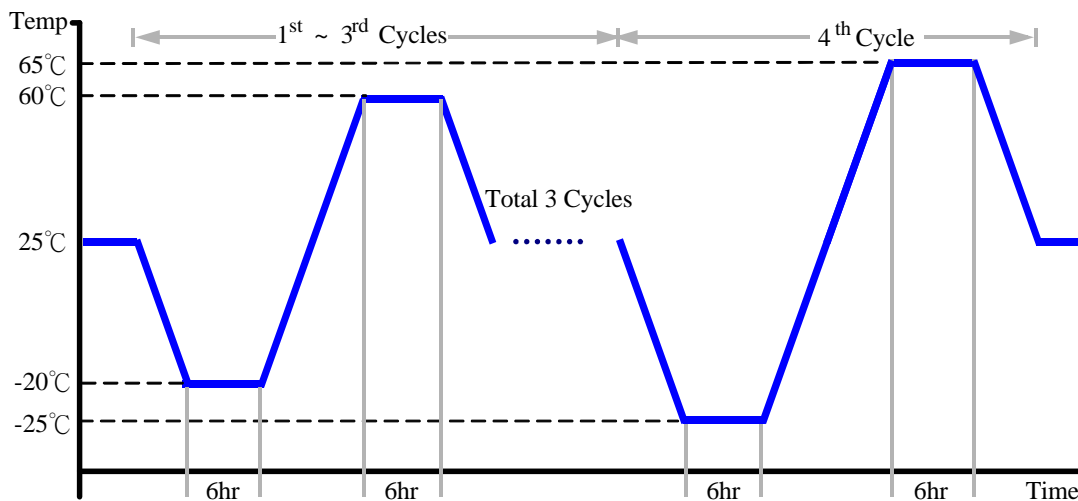
Test Standard: Reference IEC68-2-14 Testing procedures
 Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
 K.SON. INS. TECH. CORP.
 Model: THS-D4H+-100
 Date of Calibration: 10/13/11
 Serial Number: 2582

Test Condition:

1. Test Low Temperature: -20°C (1~3 cycles)
 -25°C (4th cycle)
2. Test High Temperature: 60°C (1~3 cycles)
 65°C (4th 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: 1 (AHP-2122HTT)

Test Result:

No problem was found during the temperature operation cycle test.

High temperature storage test

Test Date: 11-15 ~ 17-2011

Test Product: AHP-2122HTT

Test Site: AAEON QE Dept.

Test Standard: Reference 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: 10/13/11
Serial Number: 2582

Testing Item:

1. Test Temperature: 70°C
2. Test Times: 48Hrs
3. Test Software: Windows 7 / Run PassMark Burn In Test 6.0 Pro
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AHP-2122HTT)

Test Result:

No problem was found after the high temperature storage test.

Low temperature storage test

Test Date: 11-09~11-2011

Test Product: AHP-2122HTT

Test Site: AAEON QE Dept.

Test Standard: Reference 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: 10/13/11
 Serial Number: 2582

Testing Item:

1. Test Temperature: -20°C
2. Test Times: 48Hrs
3. Test Software: Windows 7 / Run PassMark Burn In Test 6.0 Pro
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:
 Quantity: 1 (AHP-2122HTT)

Test Result:

No problem was found after the low temperature storage test.

Humidity test

Test Date: 11-11~14-2011

Test Product: AHP-2122HTT

Test Site: AAEON QE Dept.

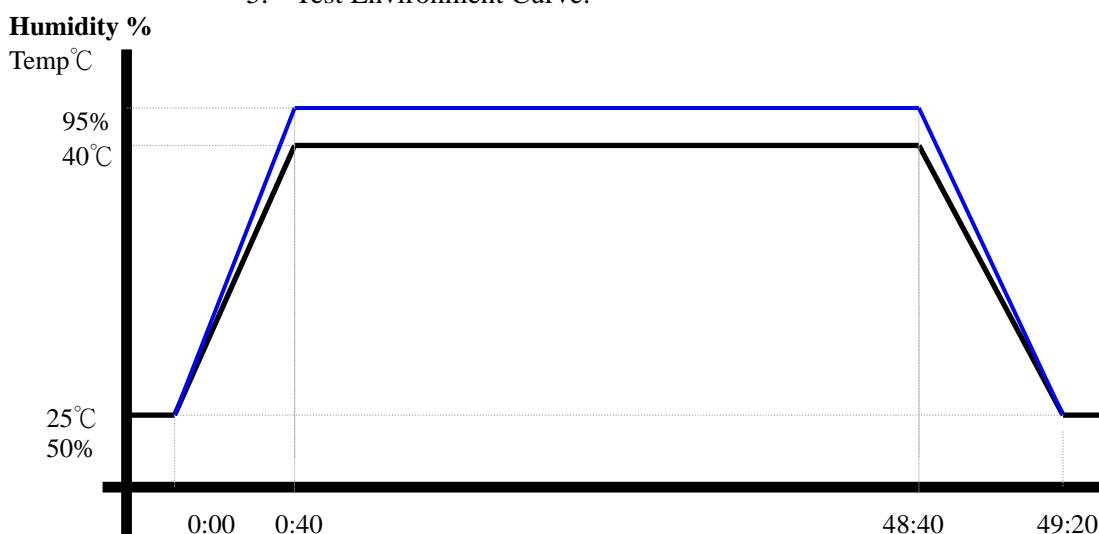
Test Standard: Reference IEC 68-2-3 Testing procedures
 Test Ca: Damp heat, steady state (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
 K.SON. INS. TECH. CORP.
 Model: THS-D4H+-100
 Date of Calibration: 10/13/11
 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 6.0 Pro
5. Test Environment Curve:



Sample Configuration & Quantity Under Test:
 Quantity: 1 (AHP-2122HTT)

Test Result:

No problem was found after the humidity storage test.

Cold start and hot start test

Test Date: 11-17~18-2011

Test Product: AHP-2122HTT

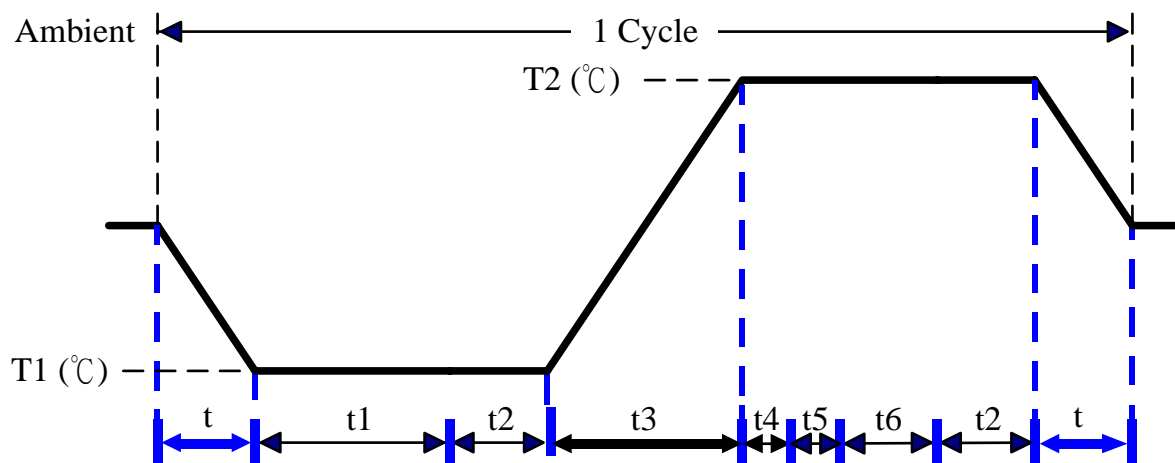
Test Site: AAEON QE Dept.

Test Standard: Reference 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: 10/13/11
Serial Number: 2582

Test Condition:



Parameters	Description
T1	-25°C
T2	65°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 PassMark Burn In Test
t5: Win 7 Software restart test 3 times
Test Software: Windows 7

Test Result:

- a. No problem was found during the cold start test.
- b. No problem was found during the hot start test.