

AGP-3155

Environment Test Report

Report NO: 11P020009

Summary	<p><input checked="" type="checkbox"/> Pass</p> <p><input type="checkbox"/> Fail</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"/> Pass with Deviation</p> <p>Comment: _____</p>
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Issue date

2011-01-12

Approval

Jansin Lee

Test Engineer

Allen Hsu

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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	Temperature variation operation test	Pass	
6	Cold start and hot start test	Pass	

Configuration of EUT

Num	Item	Spec
1.	Embedded System:	AGP-3155
	1. Main Board	IMBI-QM57 (BIOS 0.1)
	2. CPU	Intel® Celeron® Processor P4500 (2M Cache, 1.86 GHz)
	3. Memory	DSL / ELPIDA J1108BDSE-DJ-F /DDR3 1066/2G
	4. 3.5" SATA SSD	Seagate ST3160318AS / 160GB
	5. Test Software	Windows XP / Run PassMark Burn In Test 6.0 Pro
2.	ATX Power Supply	Enhance 250W / ENP-7025B

CPU Cooler



Temperature rise test

Test Date: 01-03-2011

Test Product: AGP-3155

Test Site: AAEON Internal Lab.

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

Temperature Measurement:

40 Channel Thermal Recorder:

YOKOGAWA Inc,

Model: DA100-13-1D

Date of Calibration: 11/08/2010

Serial Number: 12A323190

Test Condition:

Ambient temperature: 50°C

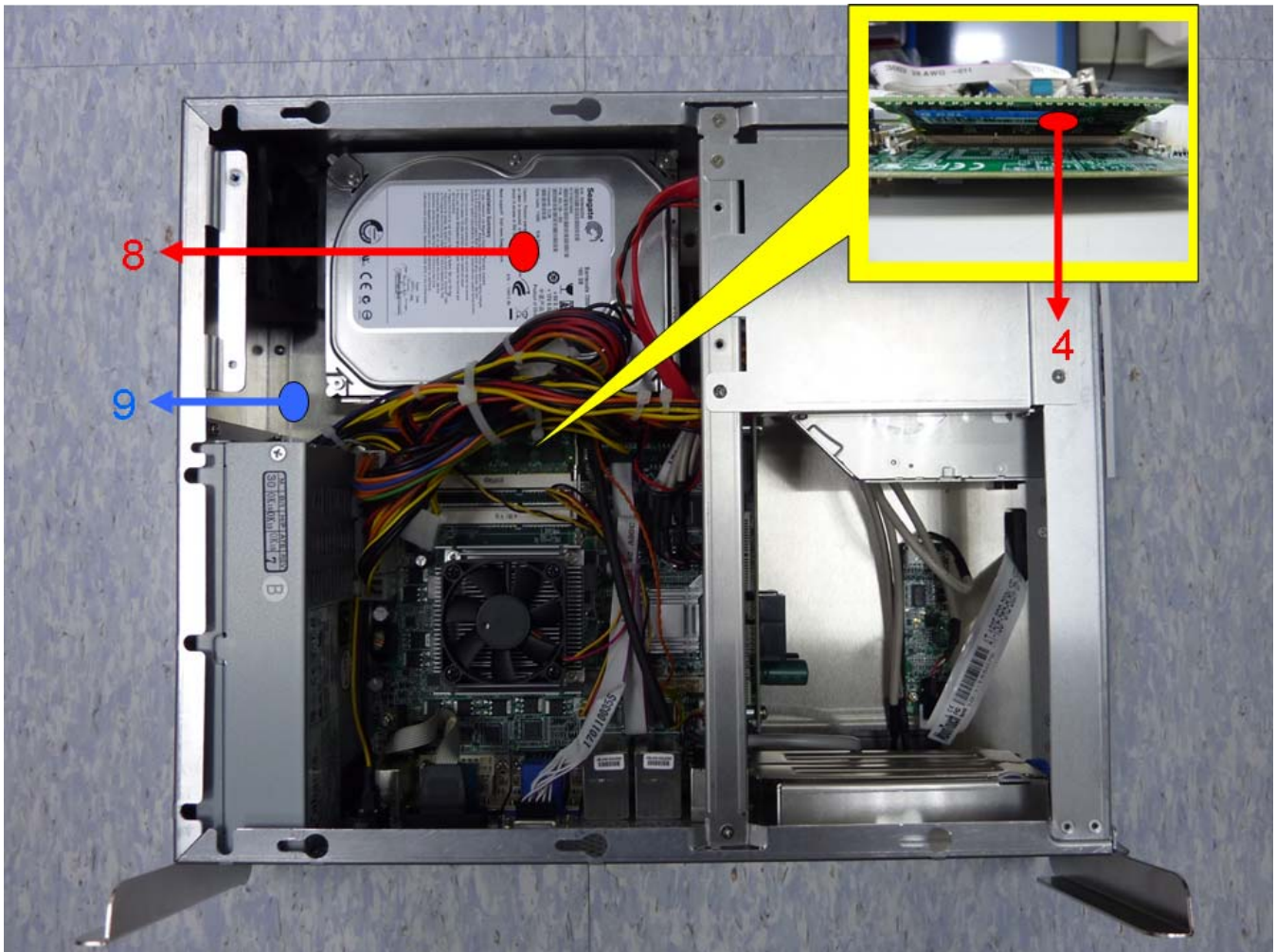
Continuous running till thermal stability (within less than 1°C)

Test Software:

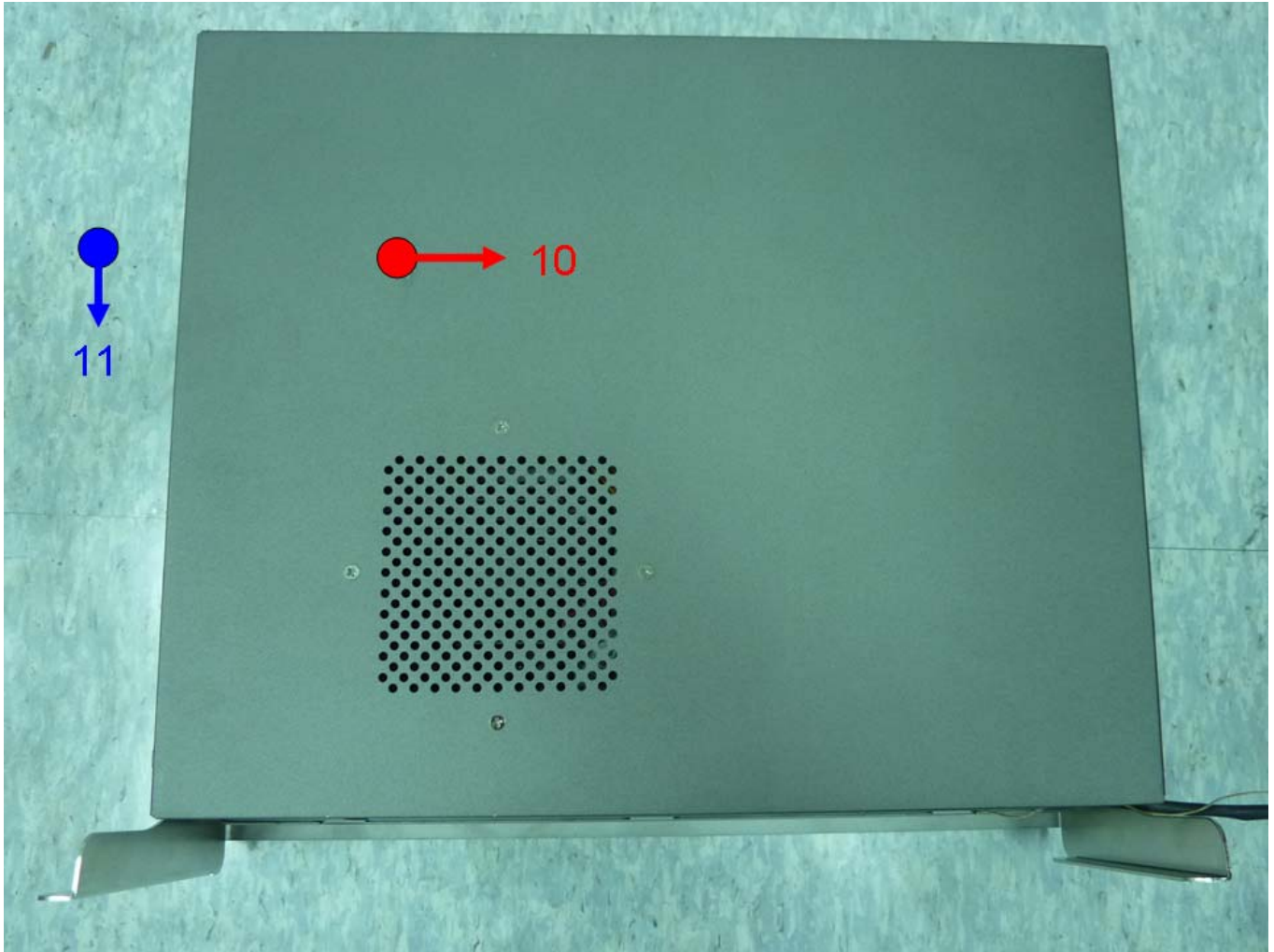
Windows XP / Run PassMark Burn In Test 6.0 Pro

Terminal Recorder:

Measuring Thermal Couple Position :



Temperature rise test



Temperature rise test

Thermal profile data:

AGP-3155

Point	Temp. Stage(°C)	Spec	50	25
AGP-3155				
01. CPU 1		90	65.9	40.9
02. CPU 2		90	67.1	42.1
03. U2 - Chipset PCH.INTEL.BD82QM57 SLGZQ		125	71.4	46.4
04. RAM		95	70.6	45.6
05. U6 - CLOCK GENERATOR.SILEGO.SLG505YC264BTTR		100	73.5	48.5
06. L14 - 2pin.RDC=0.76m Ohm.Panasonic.ETQP4LR36AFC		130	70.8	45.8
07. L5 - 2pin.RDC=1.8m Ohm.GOTREND.GSTC104P-R56MN		125	71.6	46.6
08. SATA HDD		60	59.4	34.4
09. Control Box Inside Air Temperature		N/A	57.8	32.8
10. Control Box Surface		N/A	52.4	27.4
11. Chamber Air Temperature		N/A	49.8	24.8
Any Tm value showed in red words which meaning the value over the Tc degree C of this device specification.				

Temperature Measurement Table:

Location	T _A =50.0°C	Temp. Rise (Thermal Couple)	SpeedFan 4.41 (Read from BIOS)
Senser 1 Temp.(CPU)		65.9°C	61.0°C
Senser 2 Temp.		N/A	63.0°C
Senser 3 Temp.		N/A	66.0°C

Sample Configuration & Quantity Under Test:

Quantity: 1 (AGP-3155)

Test Result:

No problem was found during the temperature rise operation test.

Temperature cycle test

Test Date: 12-30~12-31-2010

Test Product: AGP-3155

Test Site: AAEON Internal Lab.

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.

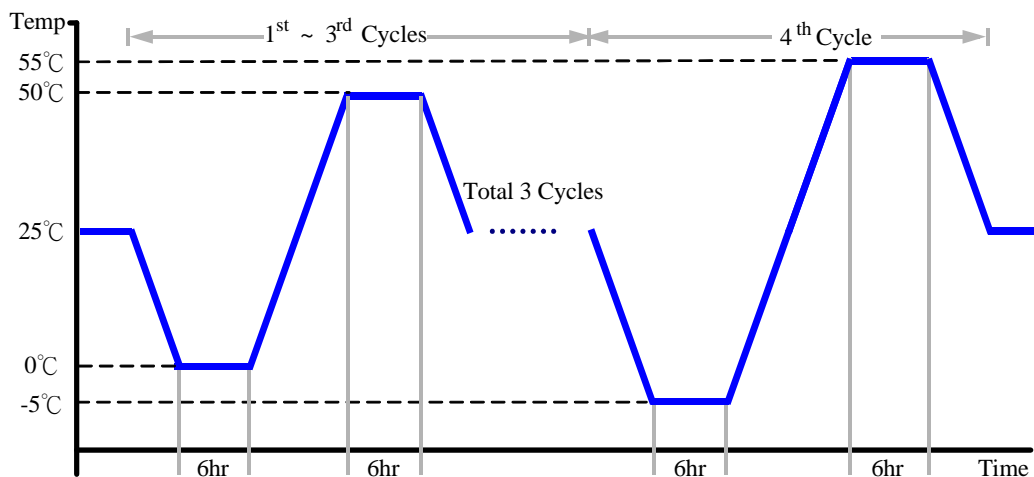
Model: THS-B6T-150+LN2

Date of Calibration: 04/01/10

Serial Number: 6487KT

Test Condition:

1. Test Low Temperature: 0°C (1~3 cycles)
-5°C (4th cycle)
2. Test High Temperature: 50°C (1~3 cycles)
55°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 (AGP-3155)

Test Result:

No problem was found during the temperature operation cycle test.

High temperature storage test

Test Date: 12-31-2010

Test Product: AGP-3155

Test Site: AAEON Internal Lab.

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.

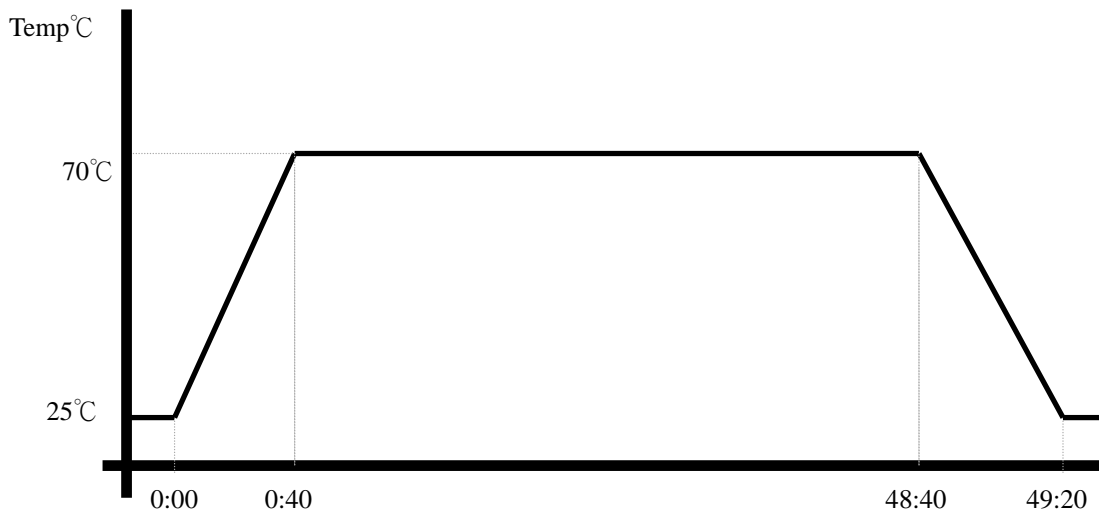
Model: THS-B6T-150+LN2

Date of Calibration: 04/01/10

Serial Number: 6487KT

Testing Item:

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



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGP-3155)

Test Result:

No problem was found after the high temperature storage test.

Low temperature storage test

Test Date: 12-29-2010

Test Product: AGP-3155

Test Site: AAEON Internal Lab.

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-B6T-150+LN2

Date of Calibration: 04/01/10

Serial Number: 6487KT

Testing Item:

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



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGP-3155)

Test Result:

No problem was found after the low temperature storage test.

Humidity test

Test Date: 12-29~12-30-2010

Test Product: AGP-3155

Test Site: AAEON Internal Lab.

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-B6T-150+LN2

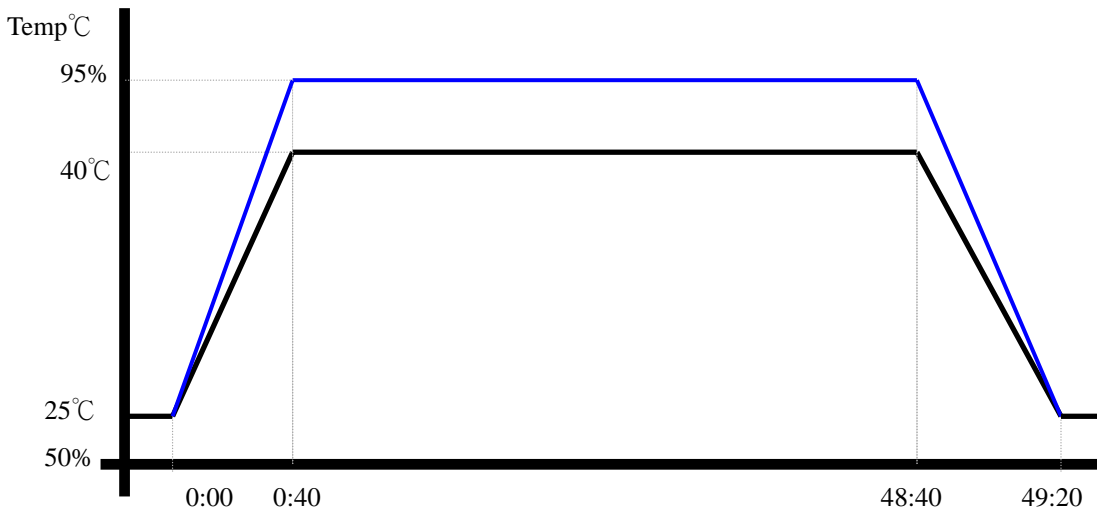
Date of Calibration: 04/01/10

Serial Number: 6487KT

Testing Item:

1. Test Temperature: 40°C
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows XP / Run PassMark Burn In Test 6.0 Pro
5. Test Environment Curve:

Humidity %



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGP-3155)

Test Result:

No problem was found after the humidity storage test.

Cold start and hot start test

Test Date: 12-29~12-30-2010

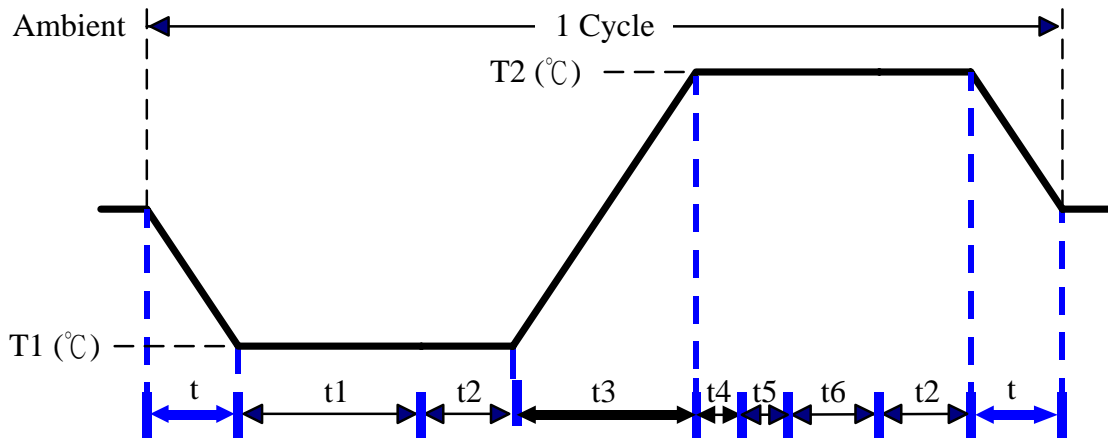
Test Product: AGP-3155

Test Site: AAEON Internal Lab.

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-B6T-150+LN2
 Date of Calibration: 04/01/10
 Serial Number: 6487KT

Test Condition:



Parameters	Description
T1	-5°C
T2	55°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 XP Software restart test 3 times
 Test Software: Windows XP

Test Result:

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