AGP-3175

Environment Test Report

Report NO: 10P020016

Summary	☑ **Pass** ☐ **Fail** Note : There is/are ___ defect(s) not list in the report, please check it in the DTS Website. ☐ **Pass with Deviation** **Comment:** _____

Issue date	Approval	Test Engineer
2010-10-27	**Jansin Lee**	**Rex Chang**

Test item list

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	

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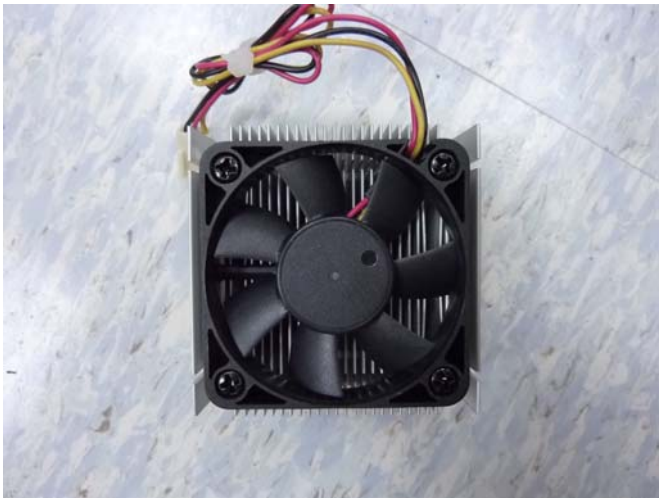
Configuration of EUT

Num	Item	Spec
1.	**Panel PC**:	AGP-3175
	1. Main Board	IMBI-QM57 Rev A1.0 (BIOS 1.0)
	2. CPU	Intel® Celeron® Processor P4500 (2M Cache, 1.86 GHz)
	3. Memory	DSL 1066 1GB – DDR3 – ELPIDA J1108BDSE-DJ-F
	4. 3.5” SATA H.D	Seagate 250GB – ST3250318AS
	5. Test Software	Windows XP / Run PassMark Burn In Test 5.1 Pro
2.	ATX Power Supply	Enhance ENP-7025B /250W

Heat Sink



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Temperature rise test

Test Date: 10-22~10-26-2010

Test Product: AGP-3175

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: 12/08/09
Serial Number: 12A323190

Test Condition:

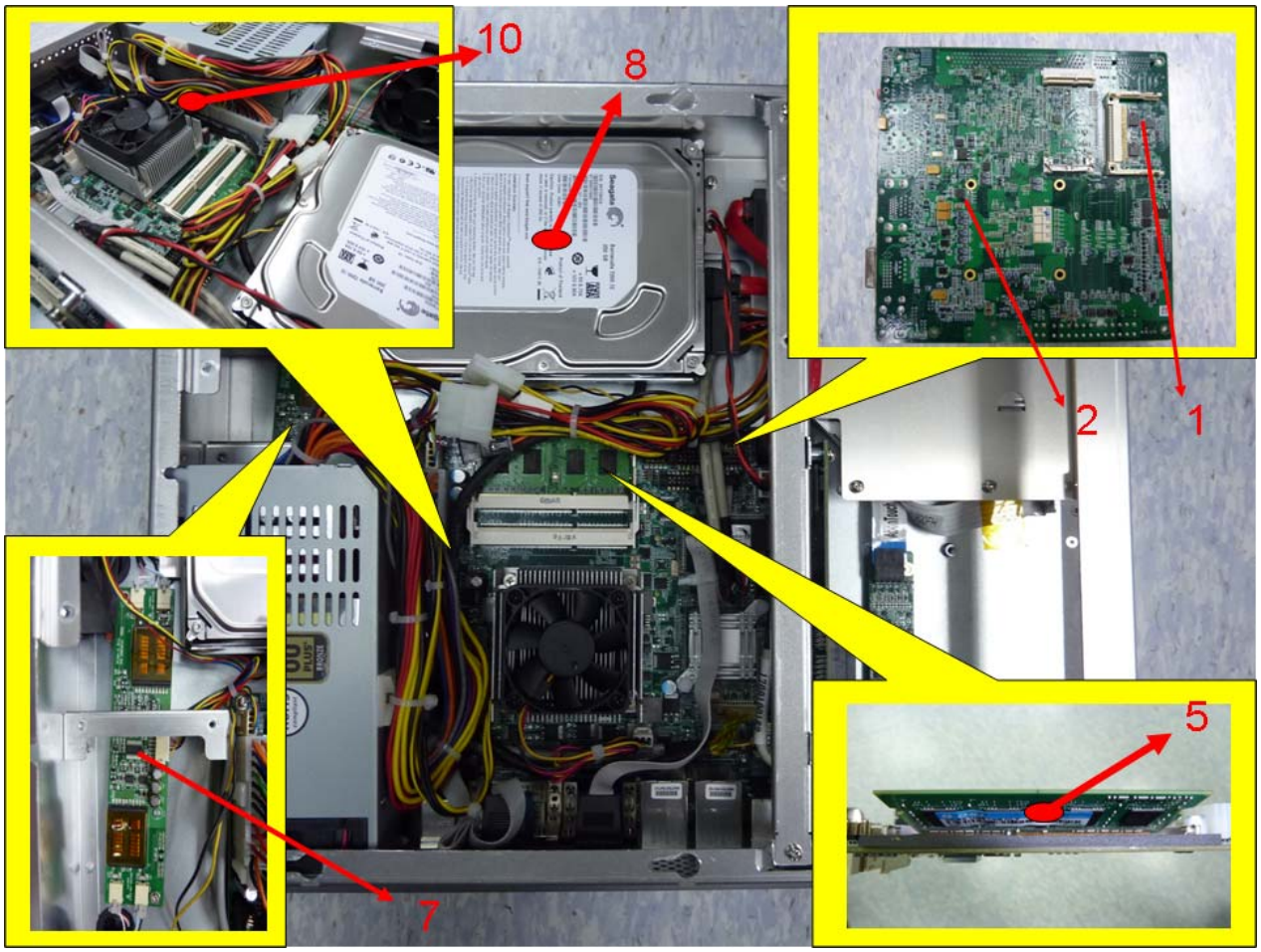
Ambient temperature: 50℃
Continuous running till thermal stability (within less than 1℃)

Test Software:

Windows XP / Run PassMark Burn In Test 5.1 Pro

Terminal Recorder:

Measuring Thermal Couple Position：



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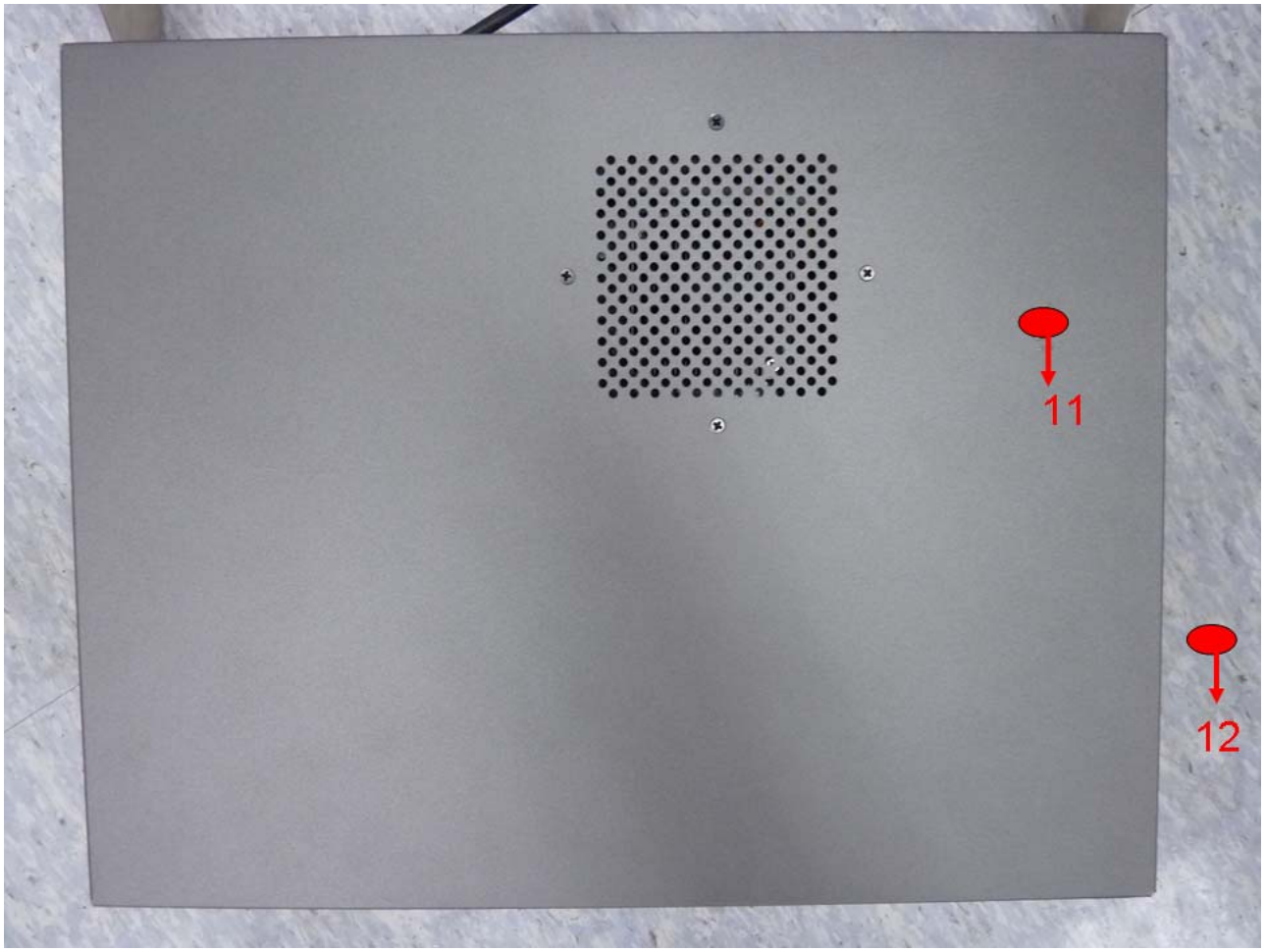
Temperature rise test



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Temperature rise test

Thermal profile data:

AGP-3175

Point / Temp. Stage(℃)	Spec	50	25
IMBI-QM57			
01. U58- 20Pin RS-232 Driver&Receivers.	95	77.6	52.6
02. U49- MOSFET Drivers	110	74.3	49.3
03. CPU Die1	90	67.6	42.6
04. CPU Die2	90	64.4	39.4
05. Memory	95	62.8	37.8
06. U2 - Chipset PCH.INTEL.BD82QM57 SLGZQ	100	77.3	52.3
07. LCD Inverter – GP1904-10	85	71.7	46.7
08. SATA H.D	60	57.9	32.9
09. U6 - CLOCK GENERATOR	95	72.1	47.1
10. Control Box Inside Air Temperature	N/A	53.7	28.7
11. Control Box Surface	N/A	50.4	25.4
12. Chamber Air Temperature	N/A	50.3	25.3
Any Tm value showed in red words which meaning the value over the Tc degree C of this device specification.			

Sample Configuration & Quantity Under Test:

Quantity: 1 (AGP-3175)

Test Result:

No problem was found during the temperature rise operation test.

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Temperature cycle test

Test Date: 10-20~22-2010

Test Product: AGP-3175

Test Site: AAEON Internal Lab.

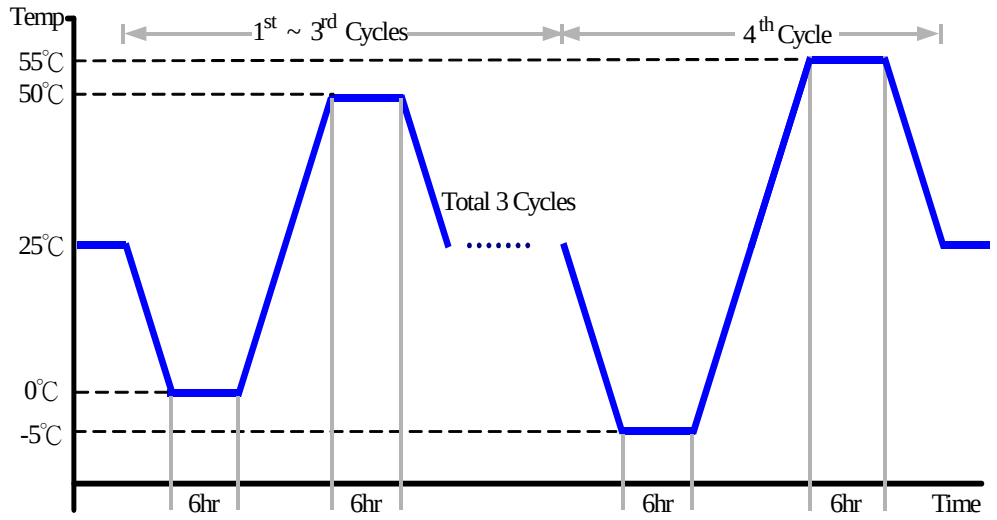
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

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℃ (1~3 cycles)
   -5℃ (4^{th} cycle)
2. Test High Temperature: 50℃ (1~3 cycles)
   55℃ (4^{th} cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2℃/min
5. Test cycle: 4 cycles
6. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGP-3175)

Test Result:

No problem was found during the temperature operation cycle test.

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High temperature storage test

Test Date: 10-18~20-2010

Test Product: AGP-3175

Test Site: AAEON Internal Lab.

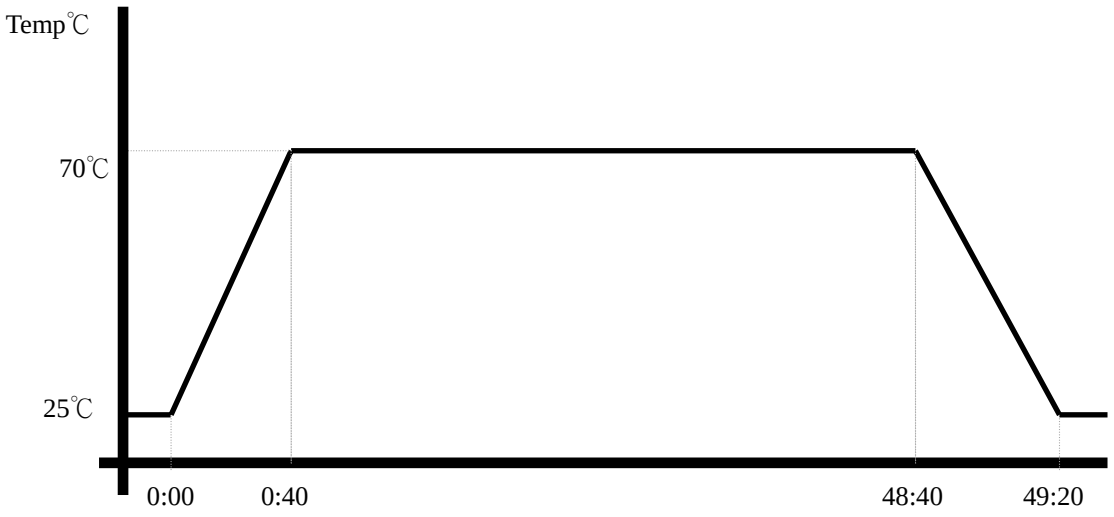
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

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℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:
Quantity: 1 (AGP-3175)

Test Result:

No problem was found after the high temperature storage test.

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Low temperature storage test

Test Date: 10-14~18-2010

Test Product: AGP-3175

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℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (AGP-3175)

Test Result:
No problem was found after the low temperature storage test.

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Humidity test

Test Date: 10-18-2010 ~ 10-20-2010

Test Product: AGP-3175

Test Site: AAEON Internal Lab.

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

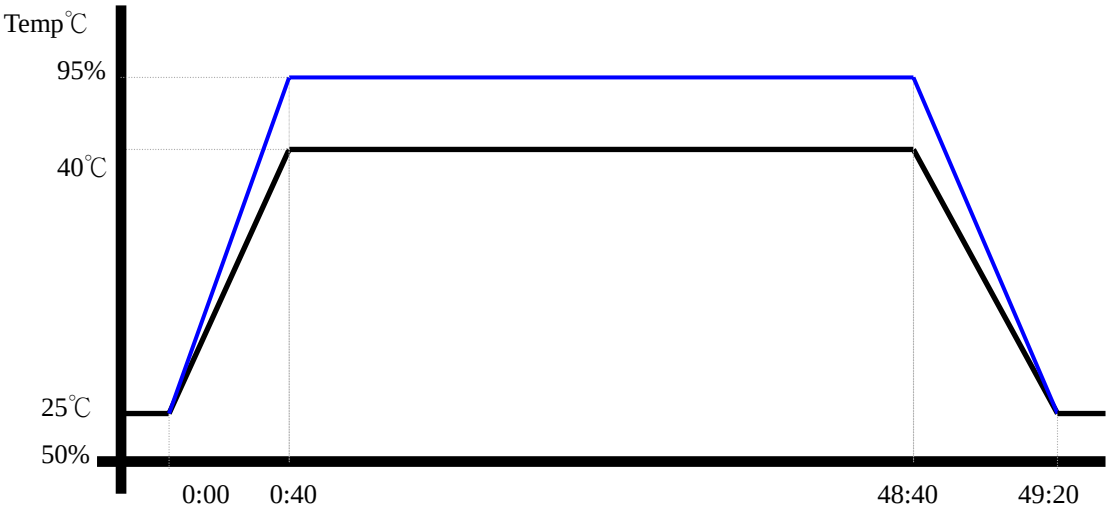
Test Equipment:

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℃
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows XP / Run PassMark Burn In Test 5.1 Pro
5. Test Environment Curve:

Humidity %



Sample Configuration & Quantity Under Test:
Quantity: 1 (AGP-3175)

Test Result:

No problem was found after the humidity storage test.

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Cold start and hot start test

Test Date: 10-12~14-2010

Test Product: AGP-3175

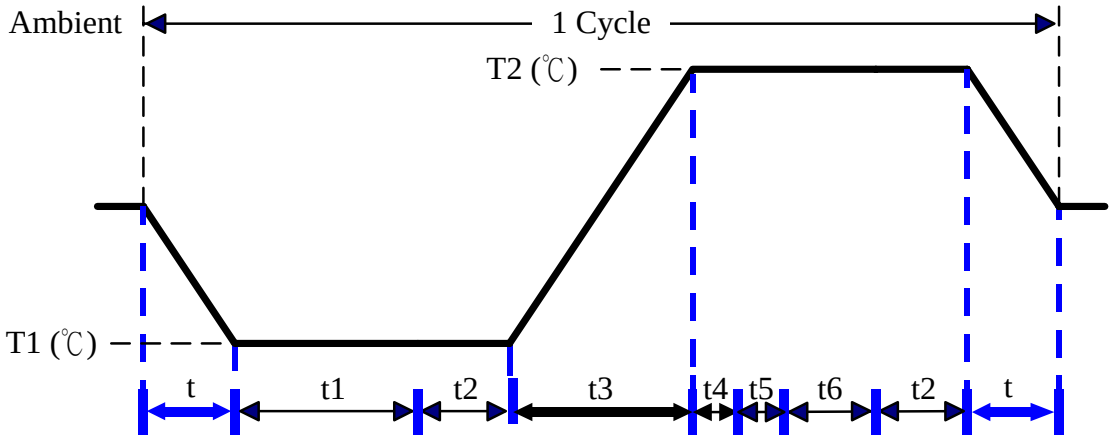
Test Site: AAEON Internal Lab.

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℃
T2	55℃
t1	4 hrs
t2, t6	2 hrs
t4, t5	1hrs
t, t3	2℃/min
n (Cycle)	1

t = temprature 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.

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