



Industrial Computing Platform Partner

AOP-9150

With 2.5" SATA HDD

Environment Test Report

Report NO: 09P020025

Issued by:

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/

08/14/2009

Test Engineer

Date

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08/14/2009

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Date

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Test Configuration:

Num	Item	Spec
1.	Panel PC:	AOP-9150HT-A1
	1. 15" LCD	CPT.CLAA150XP07
	2. Inverter	ATBEL.AB-A502-16
	4. Power Supply	POWER-WIN PW-060B-1Y12(G)
2.	CPU Board:	EMB-9459T A1.0
	1. Bios Ver.	EMB-9459T Ver: 1.0
	2.CPU	Intel Atom N270 / 1.6GHz
	3.Memory (Wide Temp.)	DSL 512 / ELPIDA E5108AJBG-6E / DDR2 667
	4. HDD	Fujitsu MHY2080BH / 80GB
	5.Test Software	Windows XP / Run PassMark Burn In Test 5.1 Pro

Temperature rise test

Test Date: 08-10-2009

Test Product: AOP-9150

Test Site: AAEON QA 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: 40dC

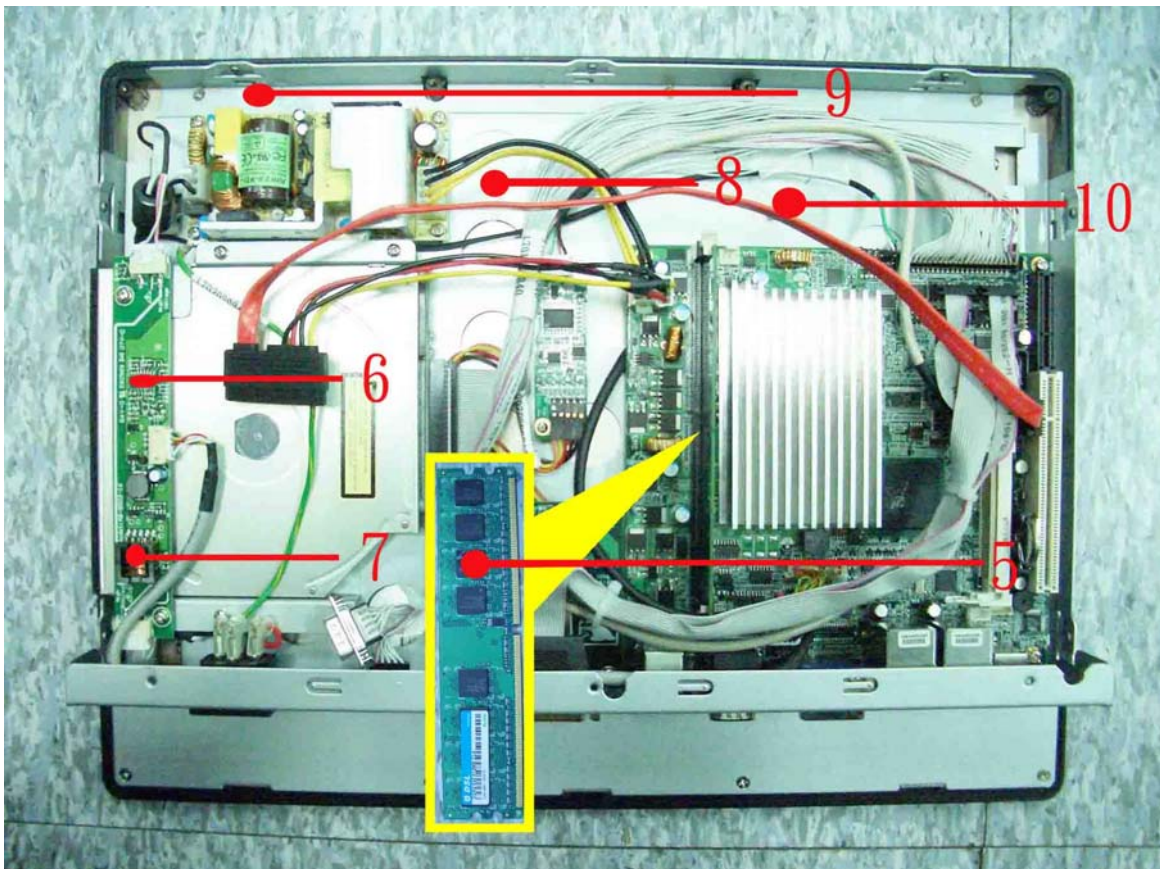
Continuous running till thermal stability (within less than 1°C)

Test Software:

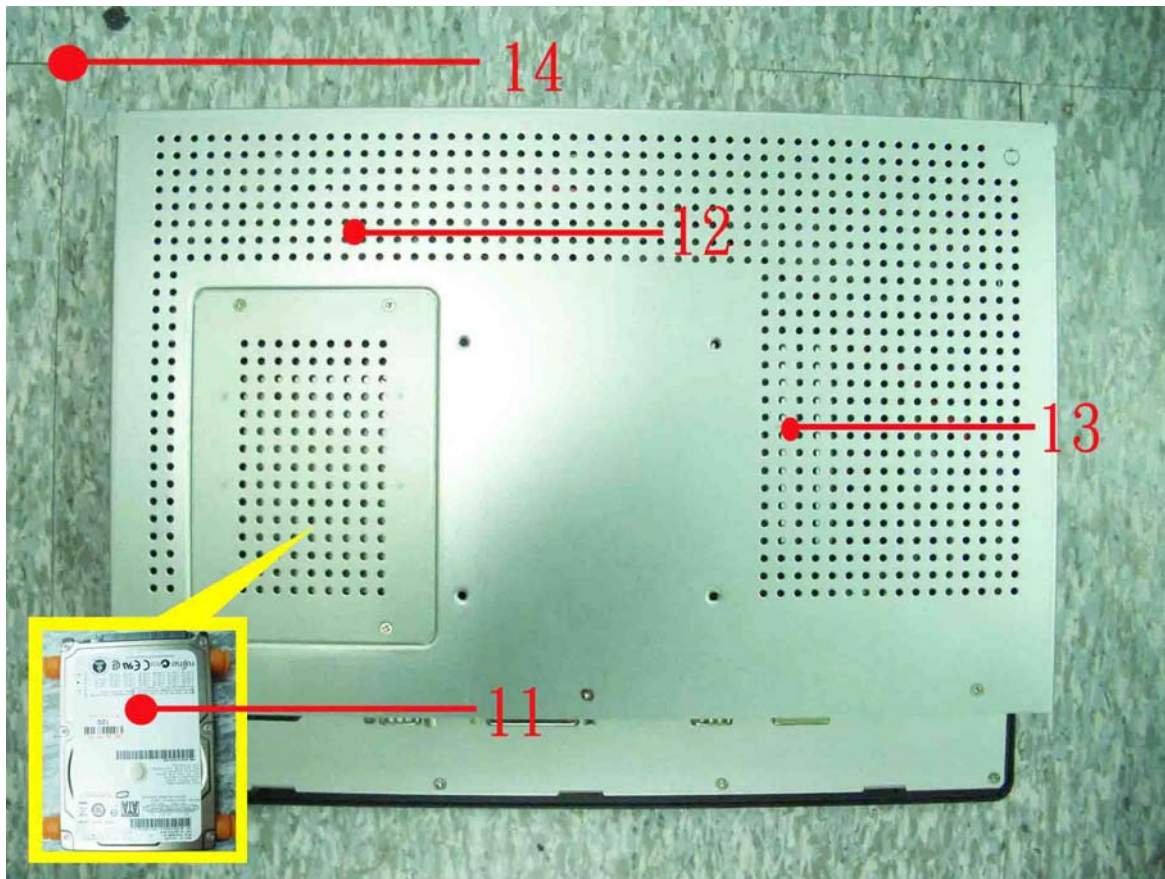
Windows XP / Run PassMark Burn In Test 5.1

Terminal Recorder:

Measuring Thermal Couple Position :



Temperature rise test



Thermal profile data:

AOP-9150

Point	Temp. Stage(°C)	Spec	40	25
01. U33 - (TF) CLOCK GENERATOR.ICS.ICS954226AGLF		95	88.9	73.9
02. U28 - (TF) Chipset ICH7M.Intel.NH82801GBM SL8YB		99	82.2	67.2
03. U38 - (TF) Intel CPU.Diamondville.N270.1.6GHz/FSB		90	87.8	72.8
04. U30 - (TF) Chipset.Intel.QG82945GSE SLB2R		105	80.9	65.9
05. Memory		95	78.5	63.5
06. Inverter		85	74.5	59.5
07. Inverter		155	79.3	64.3
08. Control Box Inside Air Temperature - 1		N/A	60.4	45.4
09. Control Box Inside Air Temperature – Power Supply Ambient Temp.		64	63.8	49.1
10. Control Box Inside Air Temperature - 3		N/A	70.0	55.0
11. HDD		60	56.7	41.7
12. Control Box External Surface - 1		N/A	54.5	39.5
13. Control Box External Surface - 2		N/A	49.5	34.5
14. Chamber Air Temperature		N/A	40.1	25.1

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 (AOP-9150)

Test Result:

No problem was found during the temperature rise operation test.

Temperature cycle test

Test Date: 07-31-2009 ~ 08~03-2009

Test Product: AOP-9150

Test Site: AAEON QA Internal Lab.

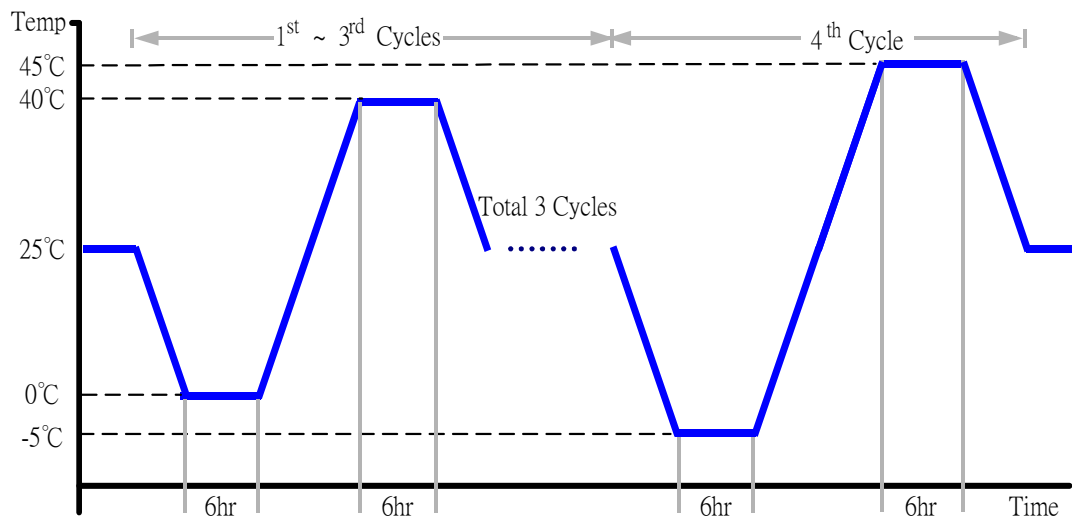
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 05/07/09
Serial Number: 1241

Test Condition:

1. Test Low Temperature: 0°C (1~3 cycles)
-5°C (4th cycle)
2. Test High Temperature: 40°C (1~3 cycles)
45°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 (AOP-9150)

Test Result:

No problem was found during the temperature operation cycle test.

Test Date: 07-29~31-2009

Test Product: AOP-9150

Test Site: AAEON QA 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-D4L+-100
Date of Calibration: 05/07/09
Serial Number: 1241

Testing Item:

1. Test Temperature: 60°C
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 (AOP-9150)

Test Result:

No problem was found after the high temperature storage test.

Low temperature storage test

Test Date: 07-27~29-2009

Test Product: AOP-9150

Test Site: AAEON QA 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-D4L+-100

Date of Calibration: 05/07/09

Serial Number: 1241

Testing Item:

1. Test Temperature: -20°C
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 (AOP-9150)

Test Result:

No problem was found after the low temperature storage test.

Humidity test

Test Date: 07-24~27-2009

Test Product: AOP-9150

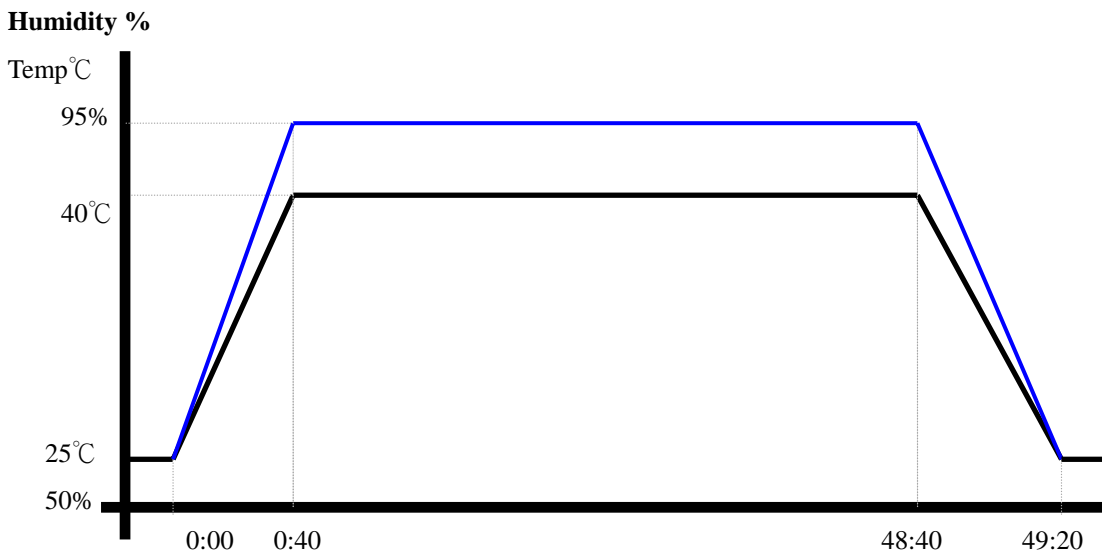
Test Site: AAEON QA Internal Lab.

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-D4L+-100
Date of Calibration: 05/07/09
Serial Number: 1241

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 5.1 Pro
5. Test Environment Curve:



Sample Configuration & Quantity Under Test:
Quantity: 1 (AOP-9150)

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

Cold start and hot start test

Test Date: 08-03~04-2009

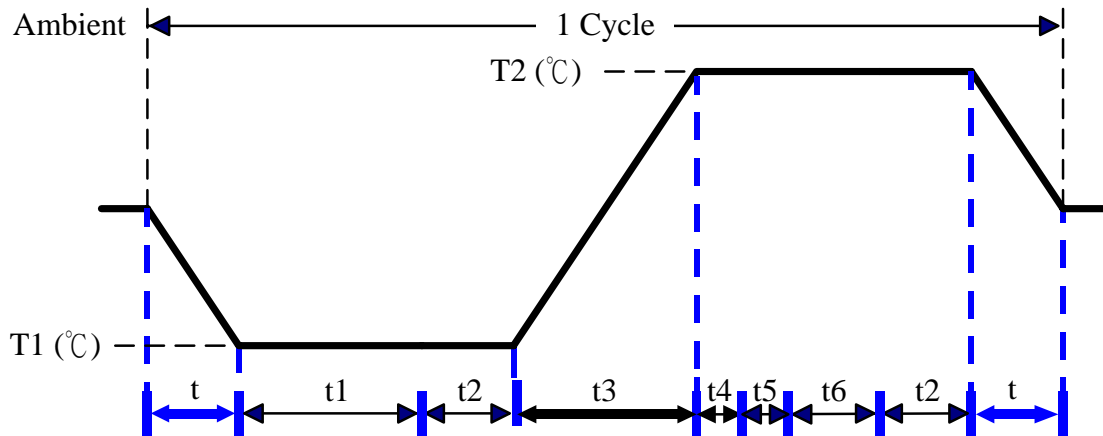
Test Product: AOP-9150

Test Site: AAEON QA 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-D4L+-100
Date of Calibration: 05/07/09
Serial Number: 1241

Test Condition:



Parameters	Description
T1	-5°C
T2	45°C
t1	4 hrs
t2, t6	2 hrs
t4, t5	1 hrs
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.