



Computing Platform Service Partner

AHP-1122

With 2.5" SATA HDD

Environment Test Report

Report NO: 10P020012

Issued by: **Rex Chang** / **10/07/2010**

Test Engineer Date

Reviewed by: **Jansin Lee** / **10/07/2010**

Sr. Manager Date

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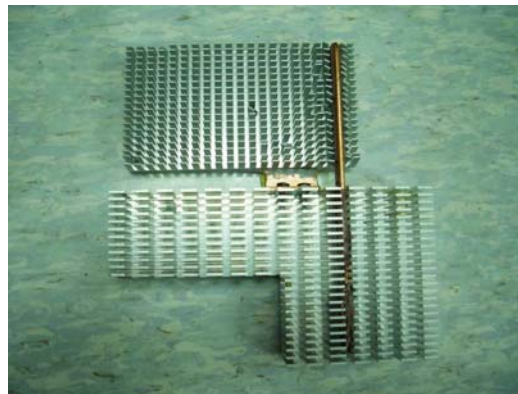
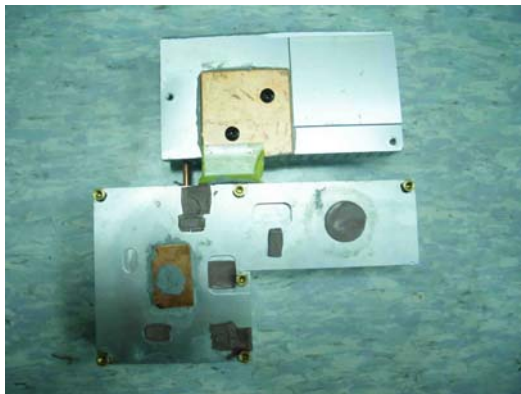
Testing Result

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	Humidity test	Pass	
6	Cold start and hot start test	Pass	

Configuration of EUT

Num	Item	Spec
1.	Fanless Touch Panel	AHP-1122
	1. LCD	12.1" AUO G121XN01 V0.LVDS
	2. Main Board	AAEON GENE-LN05 Rev. A0.3 (BIOS Ver: 0.1)
	3. CPU	Intel Atom D510 / 1.66GHz
	4. Memory	DSL 1GB * 1 / DDR2 667 / ELPIDA E1108AFSE-8E-E
	5. Industrial SATA HDD	Seagate ST980817SM / 80GB
	6. Test Software	Windows XP / Run PassMark Burn In Test 5.3 Pro
2.	Power Adapter	FSP FSP084-DMAA1

Heat Sink



Temperature rise test

Test Date: 10-07-2010

Test Product: AHP-1122

Test Site: AAEON QE 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:

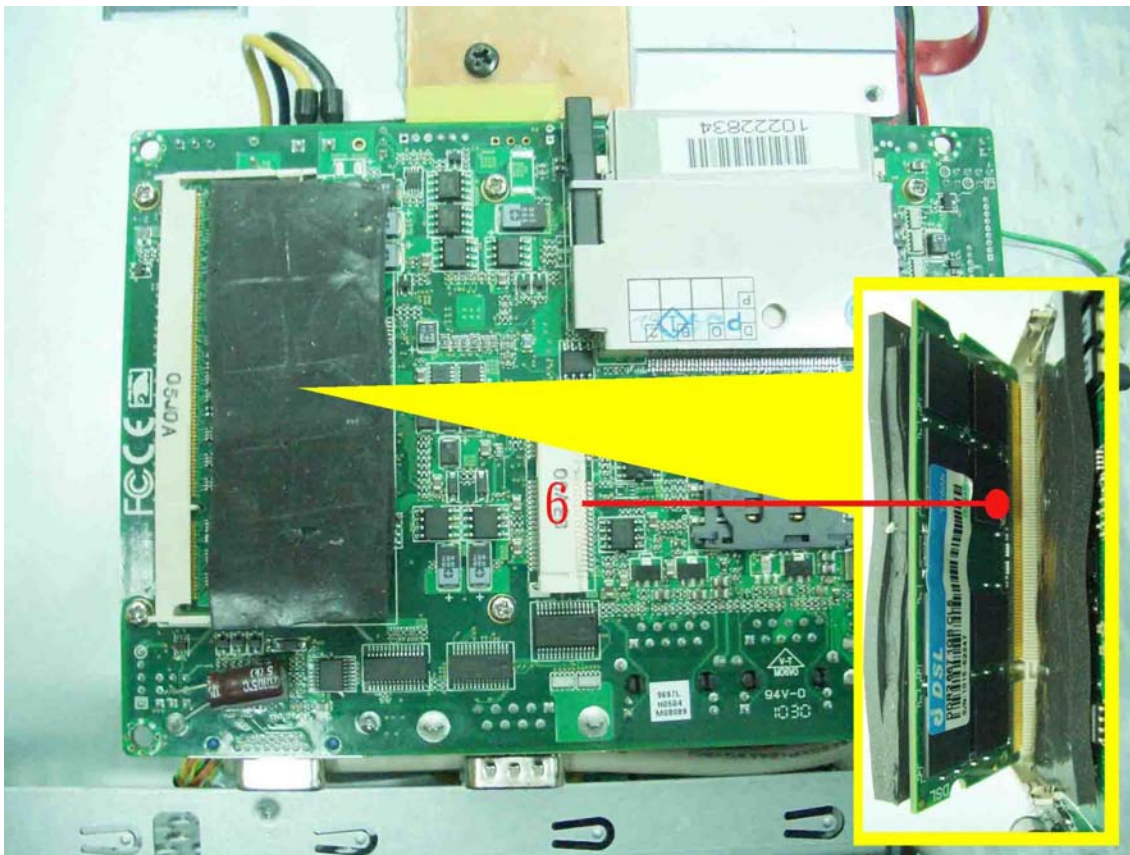
Ambient temperature: 50°C
Continuous running till thermal stability (within less than 1°C)

Test Software:

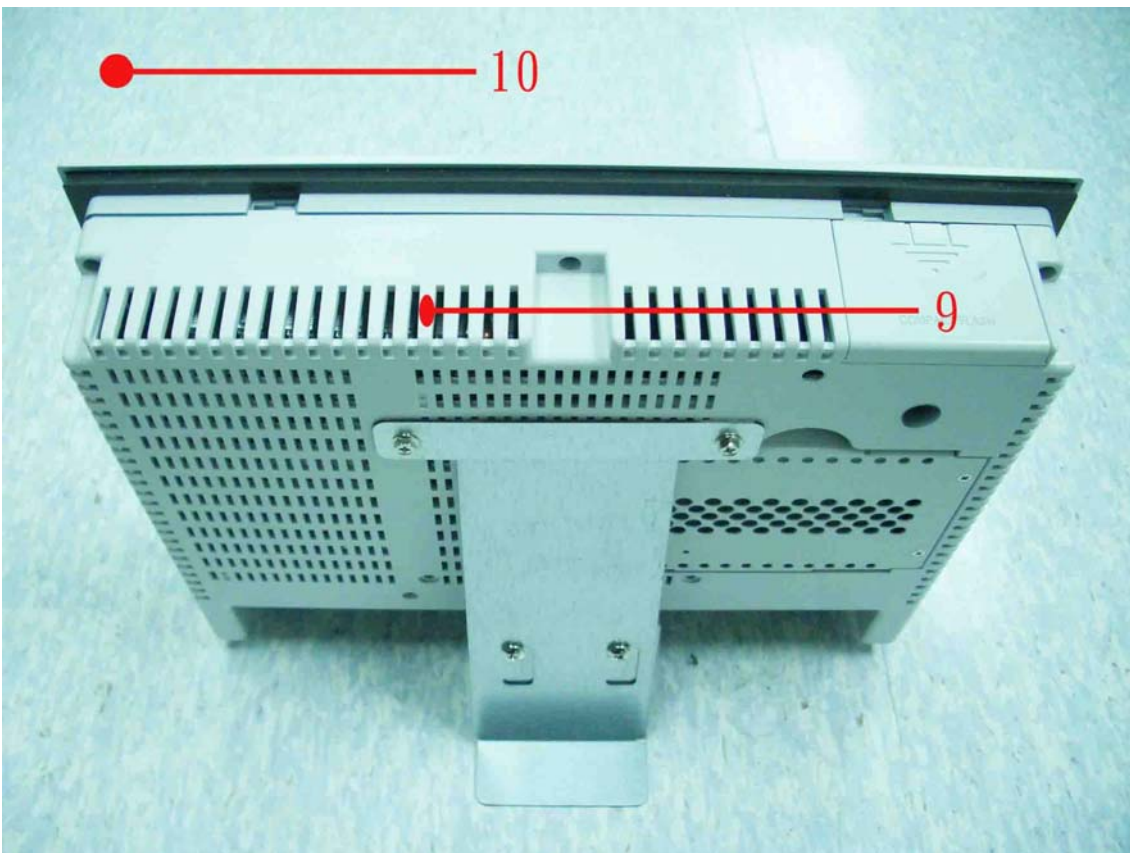
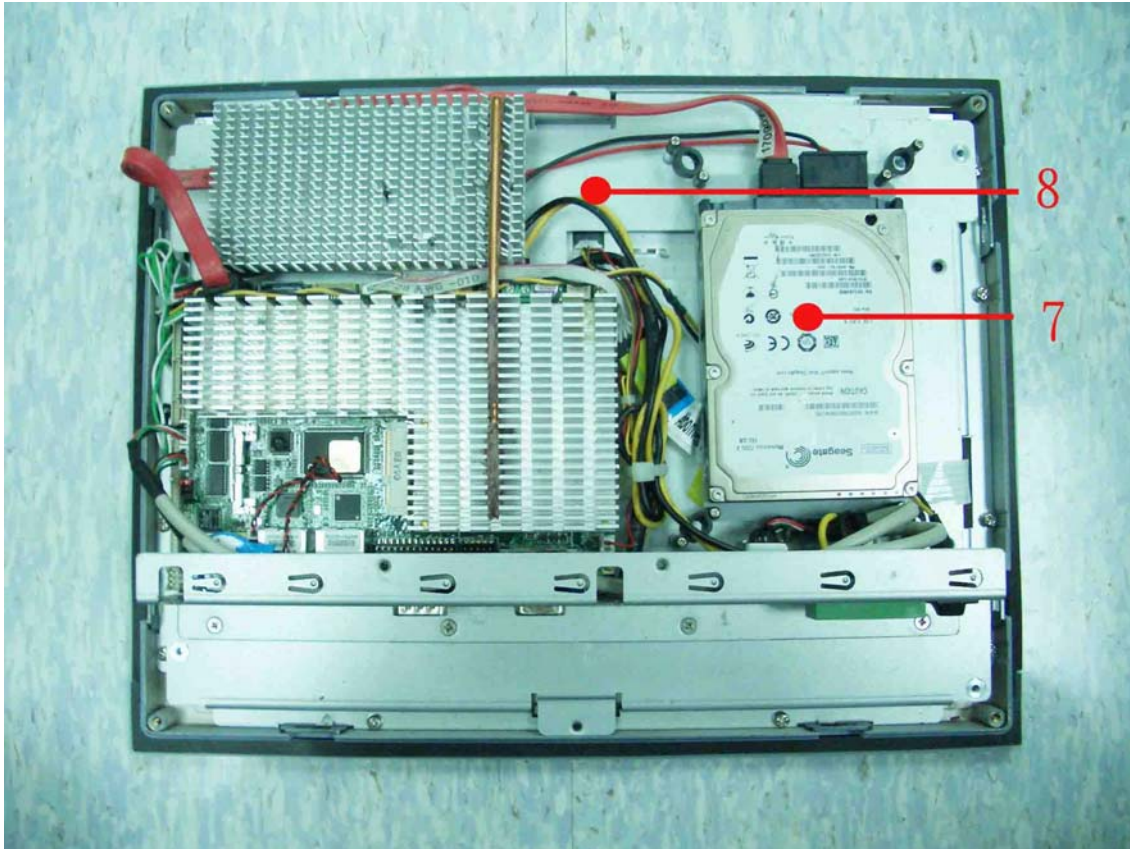
Windows XP / Run PassMark Burn In Test 5.3 Pro

Terminal Recorder:

Measuring Thermal Couple Position :



Temperature rise test



Temperature rise test

Thermal profile data:

AHP-1122

Point	Temp. Stage(°C)	Spec	50	25
GENE-LN05				
01. U19 - (TF) Intel CPU.Pineview D.DUAL CORE.D510.1.66GHz. SLBLA		100	91.3	66.3
02. U11 - (TF) Chipset ICH8M.INTEL.NH82801HBM.SLB9A		105	85.9	60.9
03. U15 - (TF) CLOCK GENERATOR.IDT.9LPRS501PGLF		115	91.7	66.7
04. U37 - (TF) Audio Codec.REALTEK.ALC888-GR		95	78.8	53.8
05. U21 - (TF) LPC to 4 UART.FINTEK.F81216DG		95	79.0	54.0
06. Memory		95	90.1	65.1
07. HDD Surface		85	69.7	44.7
08. Control Box Inside Air Temperature		N/A	76.8	51.8
09. Control Box External Surface		N/A	74.6	49.6
10. Chamber Air Temperature		N/A	50.1	25.1
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=50.1°C	Temp. Rise (Thermal Couple)	SpeedFan 4.31 (Read from BIOS)
CPU		91.3°C	N/A
System Temp. 1		N/A	N/A
System Temp. 2 (South Bridge)		85.9°C	99.0°C

Sample Configuration & Quantity Under Test:

Quantity: 1 (AHP-1122)

Test Result:

No problem was found during the temperature rise operation test.

Temperature cycle test

Test Date: 10-01~04-2010

Test Product: AHP-1122

Test Site: AAEON QE Internal Lab.

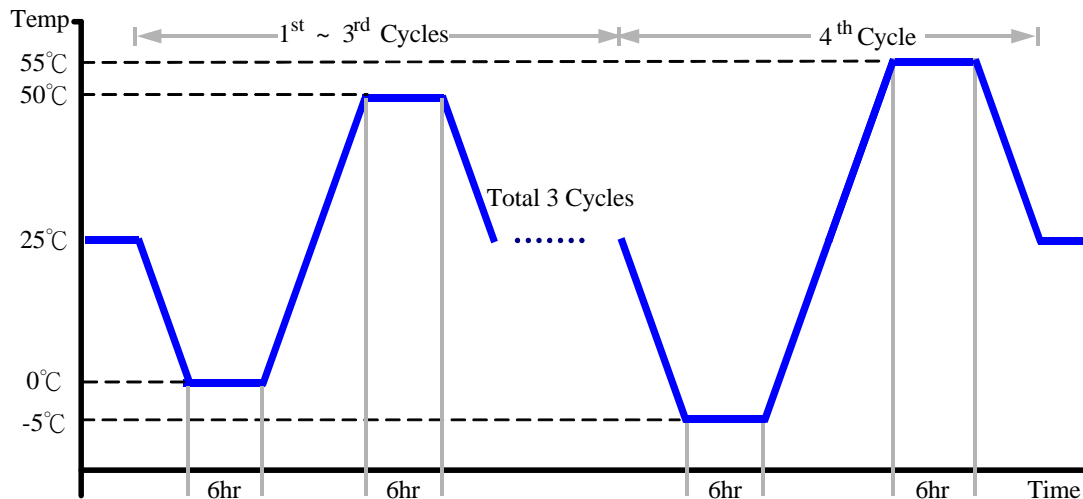
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/08/09
Serial Number: 3898

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 (AHP-1122)

Test Result:

No problem was found during the temperature operation cycle test.

Test Date: 09-28~30-2010

Test Product: AHP-1122

Test Site: AAEON QE 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.

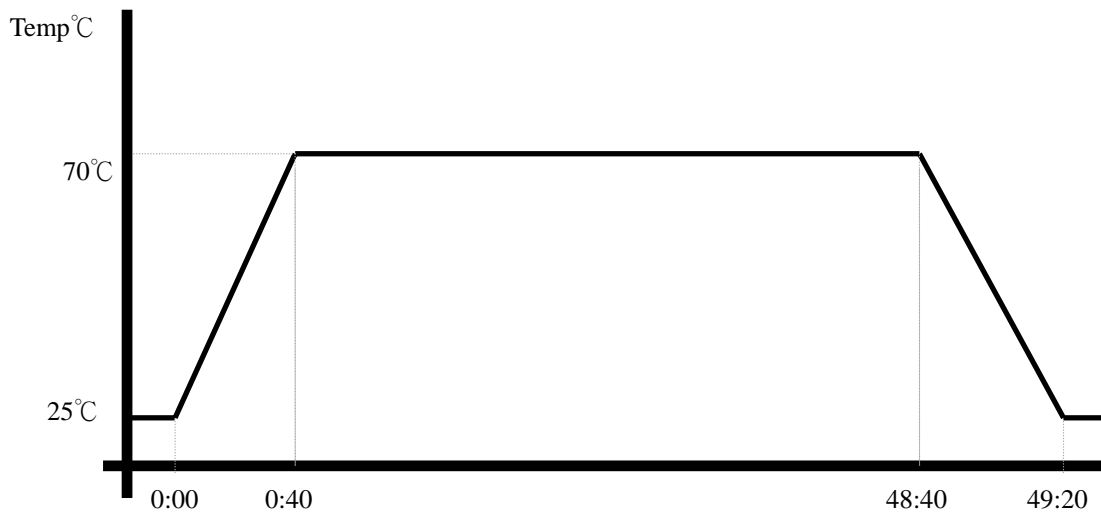
Model: THS-D7S-100+1 N2

Date of Calibration: 12/08/09

Serial Number: 3898

Testing Item:

1. Test Temperature: 70°C
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.3 Pro
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AHP-1122)

Test Result:

No problem was found after the high temperature storage test.

Test Date: 09-22~24-2010

Test Product: AHP-1122

Test Site: AAEON QE 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-D7S-100+1 N2

Date of Calibration: 12/08/09

Serial Number: 3898

Testing Item:

1. Test Temperature: -20°C
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.3 Pro
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AHP-1122)

Test Result:

No problem was found after the low temperature storage test.

Test Date: 09-24~27-2010

Test Product: AHP-1122

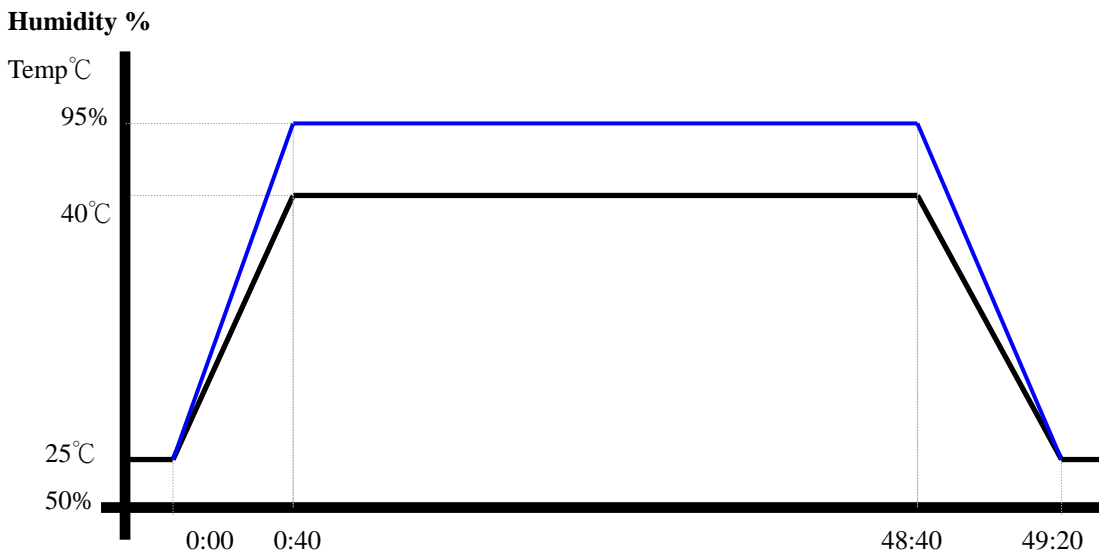
Test Site: AAEON QE Internal Lab.

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-D7S-100+1 N2
Date of Calibration: 12/08/09
Serial Number: 3898

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 5.3 Pro
5. Test Environment Curve:



Sample Configuration & Quantity Under Test:
Quantity: 1 (AHP-1122)

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

Cold start and hot start test

Test Date: 09-30-2010 ~ 10-01-2010

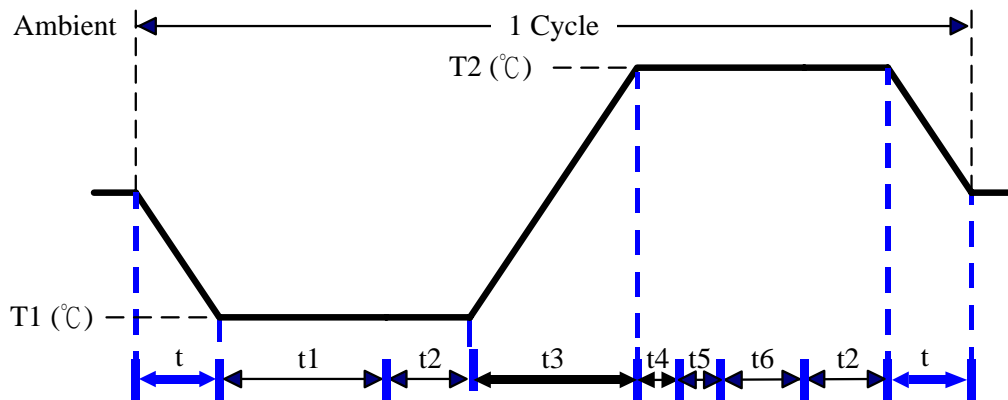
Test Product: AHP-1122

Test Site: AAEON QE 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-D7S-100+1 N2
Date of Calibration: 12/08/09
Serial Number: 3898

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.