POP-100-G3-HT-0001

Environment Test Report

Report NO: 08P020007

Issued by:	Rex-Chang	/	*05/20/2008*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*05/20/2008*
	Manager		**Date**

Test item list

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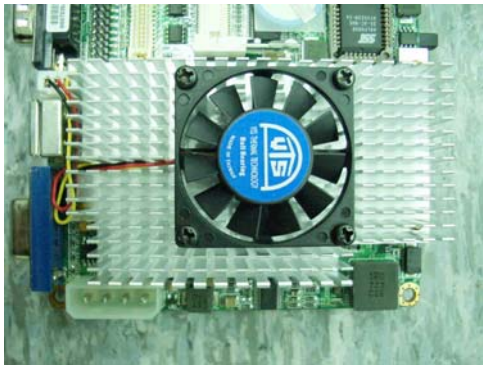
Test Configuration:

Num	Item	Spec
1.	**Panel PC**:	POP-100-G3-HT-0001
	1. 12"LCD	CLAA102NA01CW_V0.2_CPT
	2. Inverter	ATBEL AB-A301-V.03S
	3. Power Board	AAEON PER-P02D A1.1
	4. Power Adapter	SINPRO MPU100-108
2.	CPU Board:	GENE-8310 A1.1
	1. Bios Ver.	GENE-8310 V1.7.3
	2.CPU	Intel Celeron M Processor 1.5GHz
	3.Memory	DSL 512MB / HYNIX HY5DU121622CTP-J
	4. HDD	FUJITSU MHW2040AT / 40GB
	5.Test Software	Windows XP / Run PassMark Burn In Test 4.0 Pro

Cooler



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Temperature cycle test

Test Date: 05-16~19-2008

Test Product: POP-100-G3-HT-0001

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

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

Test Equipment:

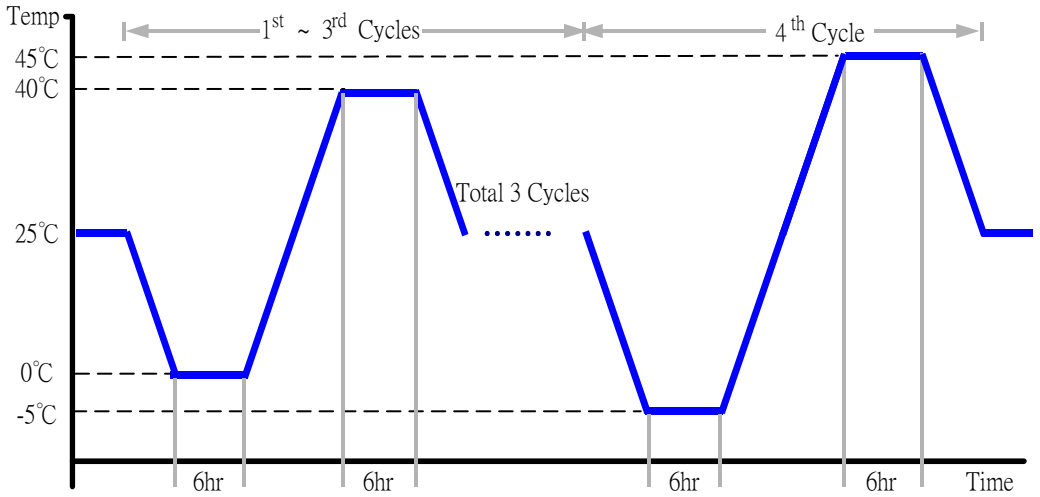
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/07
Serial Number: 3898

Temperature Measurement:

40 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/13/07
Serial Number: 12A323190

Test Condition:

1. Test Low Temperature: 0℃ (1~3 cycles)
   -5℃ (4th cycle)
2. Test High Temperature: 40℃ (1~3 cycles)
   45℃ (4th cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2℃/min
5. Test cycle: 4 cycles
6. Test Environment Curve:



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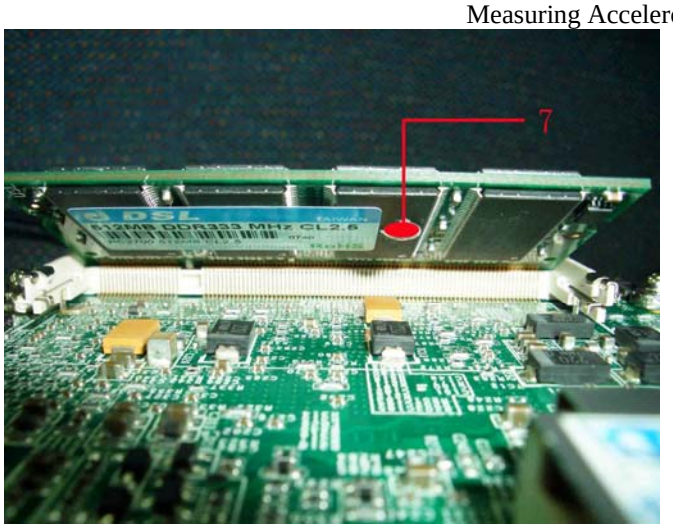
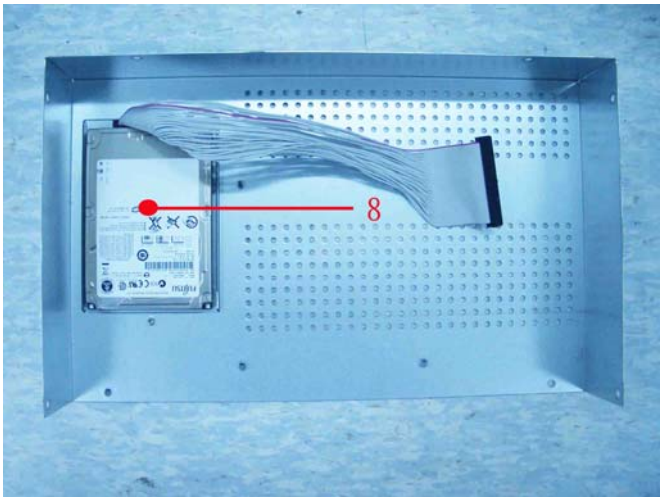
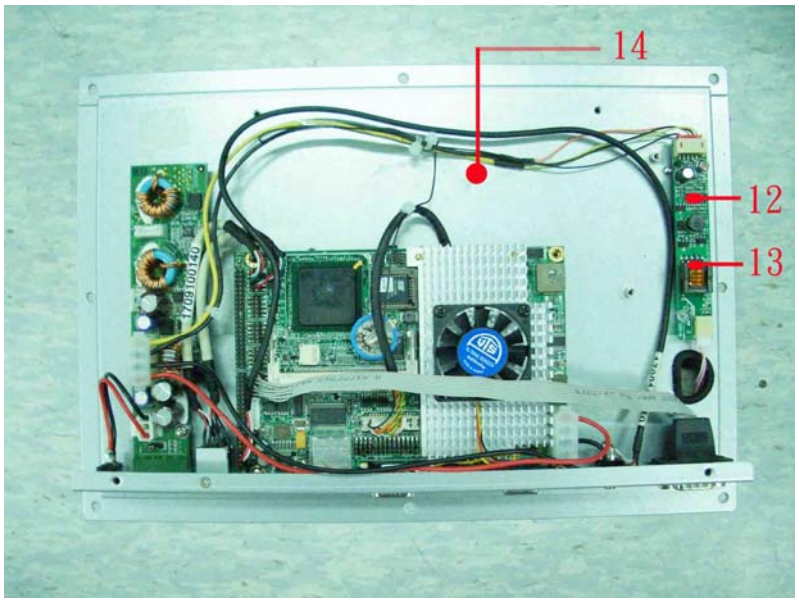
Temperature cycle test

Terminal Recorder:

Measuring Accelerometer Position







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Temperature cycle test

Thermal profile data:

POP-100-G3-HT-0001

Point / Temp. Stage(℃)	Spec	40	25	0
GENE-8310				
01. U4 - (TF) INTEL CPU.Celeron M-1.5G	100	66.1	51.1	26.1
02. U8 - (TF) Chipset.NB82852GM.Intel.RG82852GM-SL6ZK	85	58.9	43.9	18.9
03. U3 - (TF) Chipset ICH4.INTEL.FW82801DB SL6DM.	115	60.3	45.3	20.3
04. U6 - (TF) ICS.ICS952601;EE-A040124;14S3260100;TWN	125	61.5	46.5	21.5
05. L2 - (TF) COIL.1.0uH.VISHAY.HLP5050EZER1R0M01	125	64.6	49.6	24.6
06. U35 - (TF) Super I/O.ITE.IT8712F-A/IX-L	95	57.6	42.6	17.6
07. Memory (Wide Temp.)	85	61.8	46.8	21.8
08. HDD (Wide Temp.)	80	46.9	31.9	6.9
PER-P02D Power Board				
09. U2 - (TF)IC.32Pin Regulator.Vin 3.5-36V.LINEAR.LTC3728EUH#PBF	85	66.1	51.1	26.1
10. Q7 - (TF)PWR.N-Channel 30V MOSFET.VISHAY.SI4410BDY-T1-E3v	125	71.5	56.5	31.5
11. U1 - (TF)PWR.SSOP16 MOSFET.LINEAR-TECHNOLOGY.LTC1778EGN	110	75.9	60.9	35.9
Inverter				
12. Inverter-1	70	68.9	53.9	28.9
13. Inverter-2	155	72.4	57.4	32.4
14. Control Box Internal Air Temperature	N/A	47.9	32.9	7.9
15. Control Box External Surface	N/A	43.2	28.2	3.2
16. Chamber Air Temperature	N/A	40.5	25.5	0.5
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 (POP-100-G3-HT-0001)

Test Result:

No problem was found during the temperature operation cycle test.

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High temperature storage test

Test Date: 05-14~16-2008

Test Product: POP-100-G3-HT-0001

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

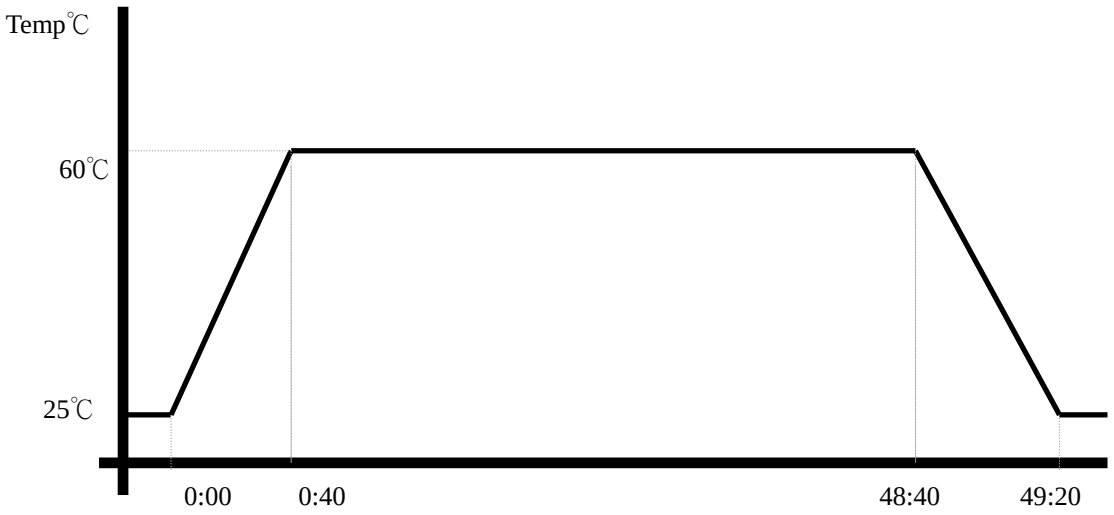
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/07
Serial Number: 3898

Testing Item:

1. Test Temperature: 60℃
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 (POP-100-G3-HT-0001)

Test Result:

No problem was found after the high temperature storage test.

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Low temperature storage test

Test Date: 05-12~14-2008

Test Product: POP-100-G3-HT-0001

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

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: 12/13/07
Serial Number: 3898

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 (POP-100-G3-HT-0001)

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

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Humidity test

Test Date: 05-09~12-2008

Test Product: POP-100-G3-HT-0001

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

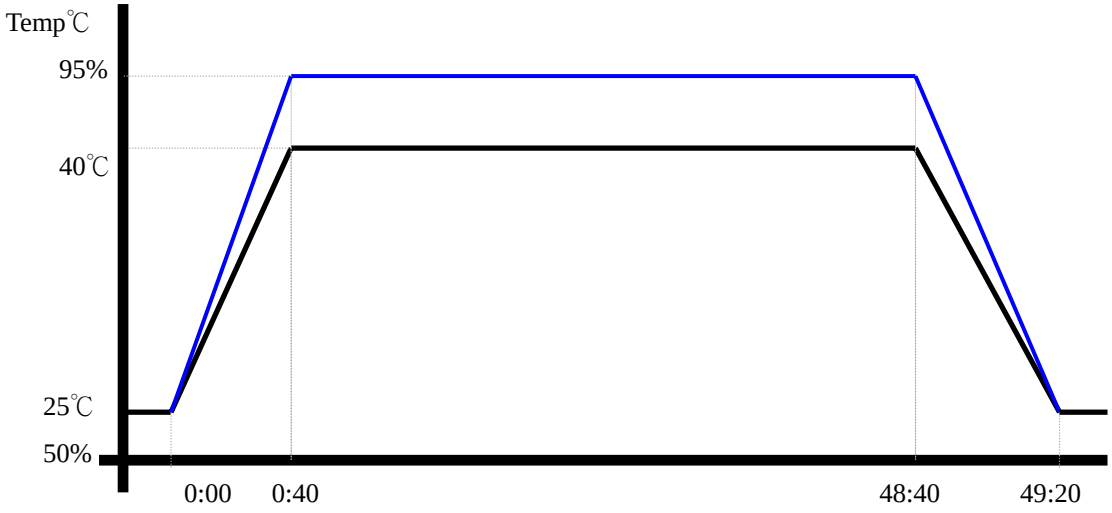
Test Standard: Reference IEC 68-2-3 Testing procedures
Test Ca: Damp heat, steady state (Non-operation)

Test Equipment:
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/13/07
Serial Number: 3898

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 (POP-100-G3-HT-0001)

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

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Cold start and hot start test

Test Date: 05-19~20-2008

Test Product: POP-100-G3-HT-0001

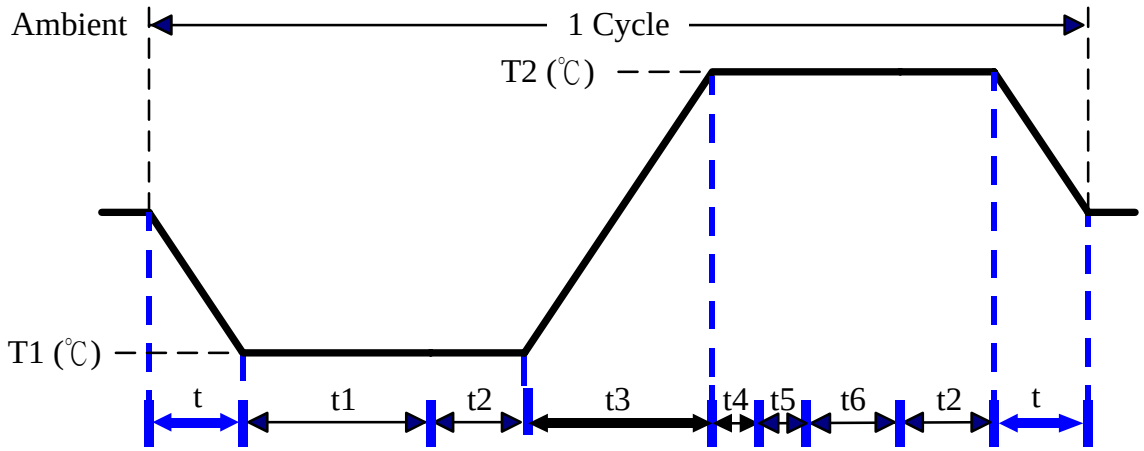
Test Site: AAEON QA Internal Lab.

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-D7S-100+1 N2
Date of Calibration: 12/13/07
Serial Number: 3898

Test Condition:



Parameters	Description
T1	-5℃
T2	45℃
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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