POP-70-G3-HTT-0001

Environment Test Report

Report NO: 08P020013

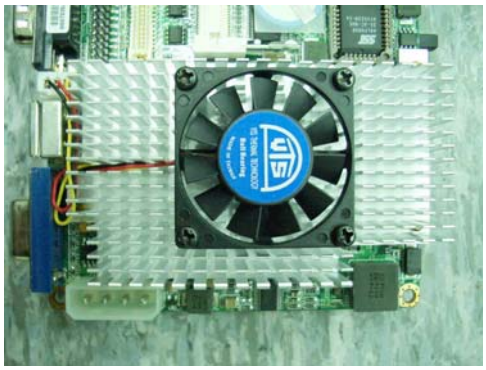
Issued by:	Rex-Chang	/	*06/12/2008*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*06/12/2008*
	Manager		**Date**

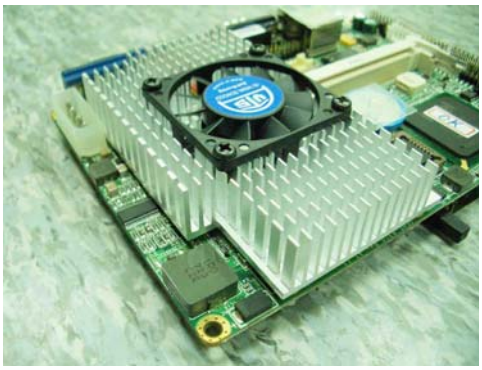
Test item list

Test Configuration:

Num	Item	Spec
1.	**Panel PC**:	POP-70-G3-HTT-0001
	1. 7.0" LCD	DATA IMAGE.FG0700A2DSSWAG01
	2. Power Board	AAEON E-102 Rev.A1.1
	3. Power Adapter	SINPRO MPU100-108
2.	CPU Board:	GENE-8310 A1.1
	1. Bios Ver.	POP-70 BIOS VA0.1
	2.CPU	Intel Celeron M Processor 1.5GHz
	3.Memory (Wide Temp.)	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: 06-09~11-2008

Test Product: POP-70-G3-HTT-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:

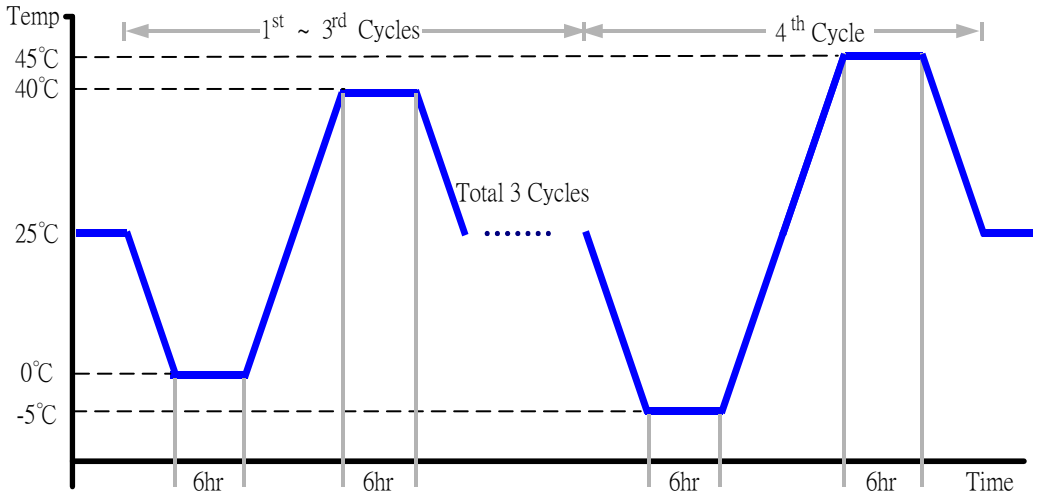
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-B6T-150+LN2
Date of Calibration: 04/17/08
Serial Number: 6488KT

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



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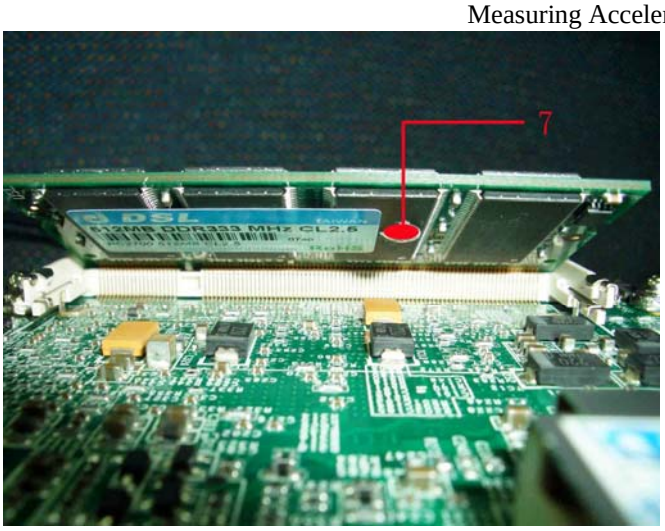
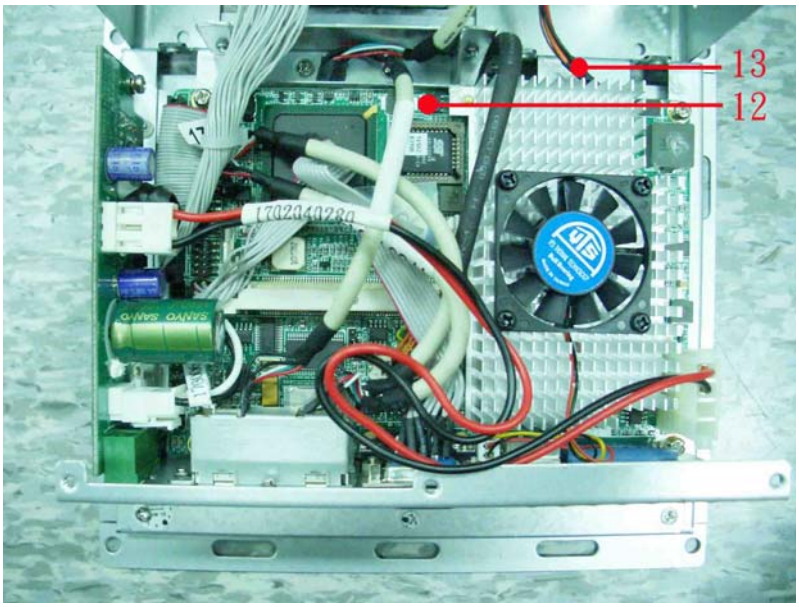
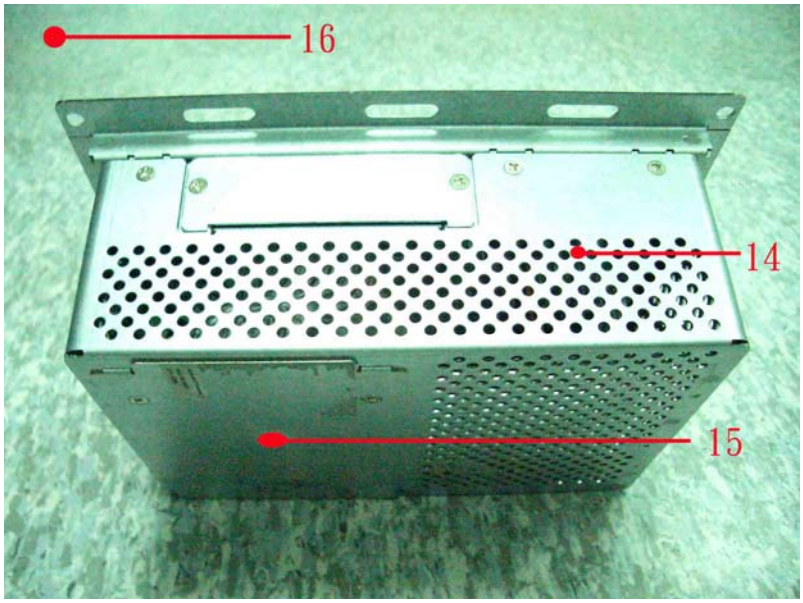
Temperature cycle test

Terminal Recorder:

Measuring Accelerometer Position







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Temperature cycle test

Thermal profile data:

POP-70-G3-HTT-0001

Point / Temp. Stage(℃)	Spec	40	25	0
GENE-8310				
01. U4 - (TF) INTEL CPU.Celeron M-1.5G	100	68.7	53.7	28.7
02. U8 - (TF) Chipset.NB82852GM.Intel.RG82852GM-SL6ZK	85	62.1	47.1	22.1
03. U3 - (TF) Chipset ICH4.INTEL.FW82801DB SL6DM.	115	69.1	54.1	29.1
04. U6 - (TF) ICS.ICS952601;EE-A040124;14S3260100;TWN	125	65.7	50.7	25.7
05. L2 - (TF) COIL.1.0uH.VISHAY.HLP5050EZER1R0M01	125	73.2	58.2	33.2
06. U35 - (TF) Super I/O.ITE.IT8712F-A/IX-L	95	71.2	56.2	31.2
07. Memory (Wide Temp.)	85	77.7	62.7	37.7
08. HDD	60	55.4	40.4	15.4
R-102 Power Board				
09. U1 - (TF)PWR. MOSFET.LINEAR-TECHNOLOGY.LTC1778EGN	110	72.5	57.5	32.5
10. Q1 - (TF)PWR.N-Channel PowerMosfet.ANPEC.APM3011NUC-XXL	125	72.5	57.5	32.5
11. U1 - (TF)COIL. GOTREND.C50B18B-12A09YDPTS	110	98.7	83.7	58.7
Inverter				
12. Control Box Internal Air Temperature -1	N/A	58.3	43.3	18.3
13. Control Box Internal Air Temperature -2	N/A	59.2	44.2	19.2
14. Control Box External Surface -1	N/A	52.1	37.1	12.1
15. Control Box External Surface -2	N/A	49.4	34.4	9.4
16. Chamber Air Temperature	N/A	40.7	25.7	0.7
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-70-G3-HTT-0001)

Test Result:

No problem was found during the temperature operation cycle test.

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High temperature storage test

Test Date: 06-04~06-2008

Test Product: POP-70-G3-HTT-0001

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

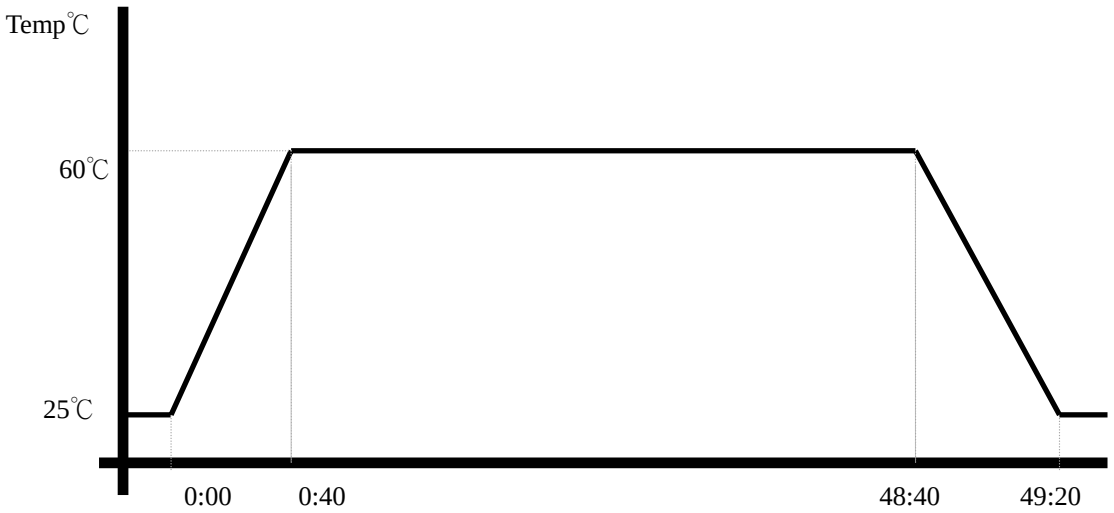
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-B6T-150+LN2
Date of Calibration: 04/17/08
Serial Number: 6488KT

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-70-G3-HTT-0001)

Test Result:

No problem was found after the high temperature storage test.

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Low temperature storage test

Test Date: 06-02~04-2008

Test Product: POP-70-G3-HTT-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-B6T-150+LN2
Date of Calibration: 04/17/08
Serial Number: 6488KT

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-70-G3-HTT-0001)

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

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Humidity test

Test Date: 06-06~09-2008

Test Product: POP-70-G3-HTT-0001

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

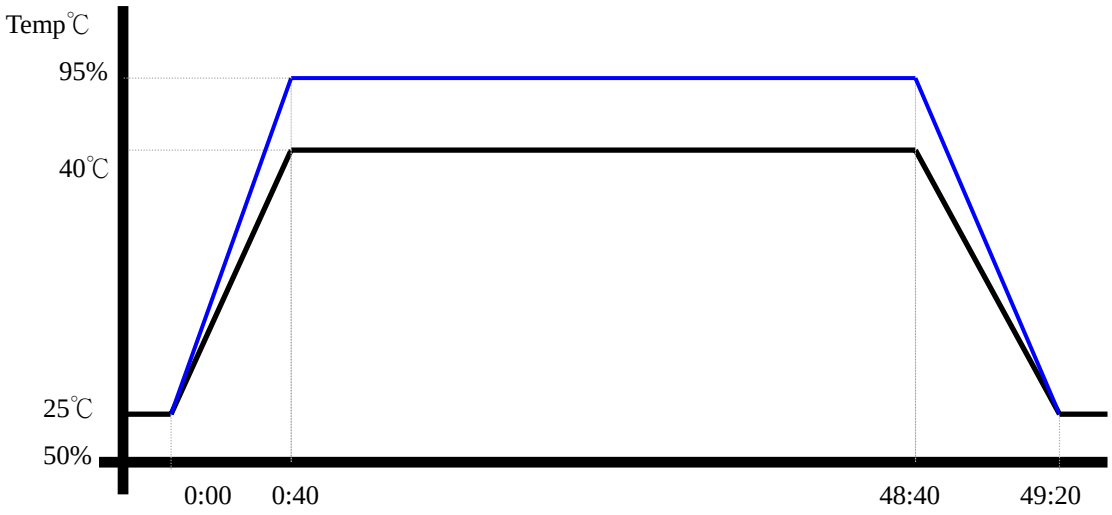
Test Standard: Reference IEC 68-2-3 Testing procedures
Test Ca: Damp heat, steady state (Non-operation)

Test Equipment:
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-B6T-150+LN2
Date of Calibration: 04/17/08
Serial Number: 6488KT

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-70-G3-HTT-0001)

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

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Cold start and hot start test

Test Date: 06-11~12-2008

Test Product: POP-70-G3-HTT-0001

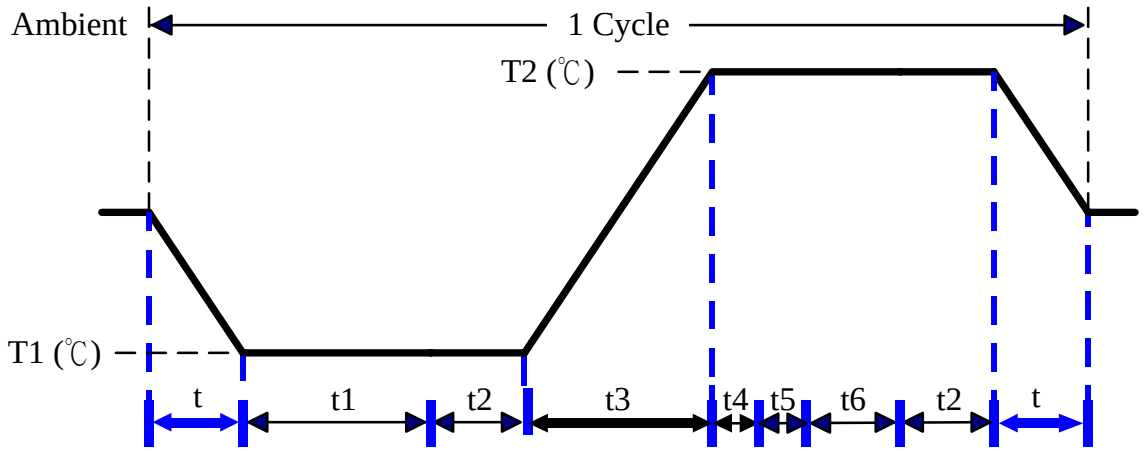
Test Site: AAEON QA Internal Lab.

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-B6T-150+LN2
Date of Calibration: 04/17/08
Serial Number: 6488KT

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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