FOX-151

With 2.5” HDD

Environment Test Report

Report NO: 09P020019

Issued by:	Rex-Chang	/	*06/24/2009*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*06/24/2009*
	Manager		**Date**

Test item list

Test Configuration:

Num	Item	Spec
1.	**Panel PC**:	FOX-151-HTT-A1
	1. 15" LCD	CHI MEI.G150X1-L01
	2. Inverter	GPSI GP1202-03B
	3. Power Board	AAEON PER-P02D A1.1
	4. Power Adapter	SINPRO MPU100-108
2.	CPU Board:	GENE-9455 A1.0
	1. Bios Ver.	GENE-9455 VER:1.0
	2.CPU	Intel N270 / 1.6GHz
	3.Memory (Wide Temp.)	DSL 512MB / ELPIDA E5108AJBG-6E / DDR2 667
	4. HDD (Wide Temp.)	FUJITSU MHW2040AC / 40GB
	5.Test Software	Windows XP / Run PassMark Burn In Test 5.1 Pro

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Temperature rise test

Test Date: 06-23-2009

Test Product: FOX-151

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: 12/08/08
Serial Number: 12A323190

Test Condition:

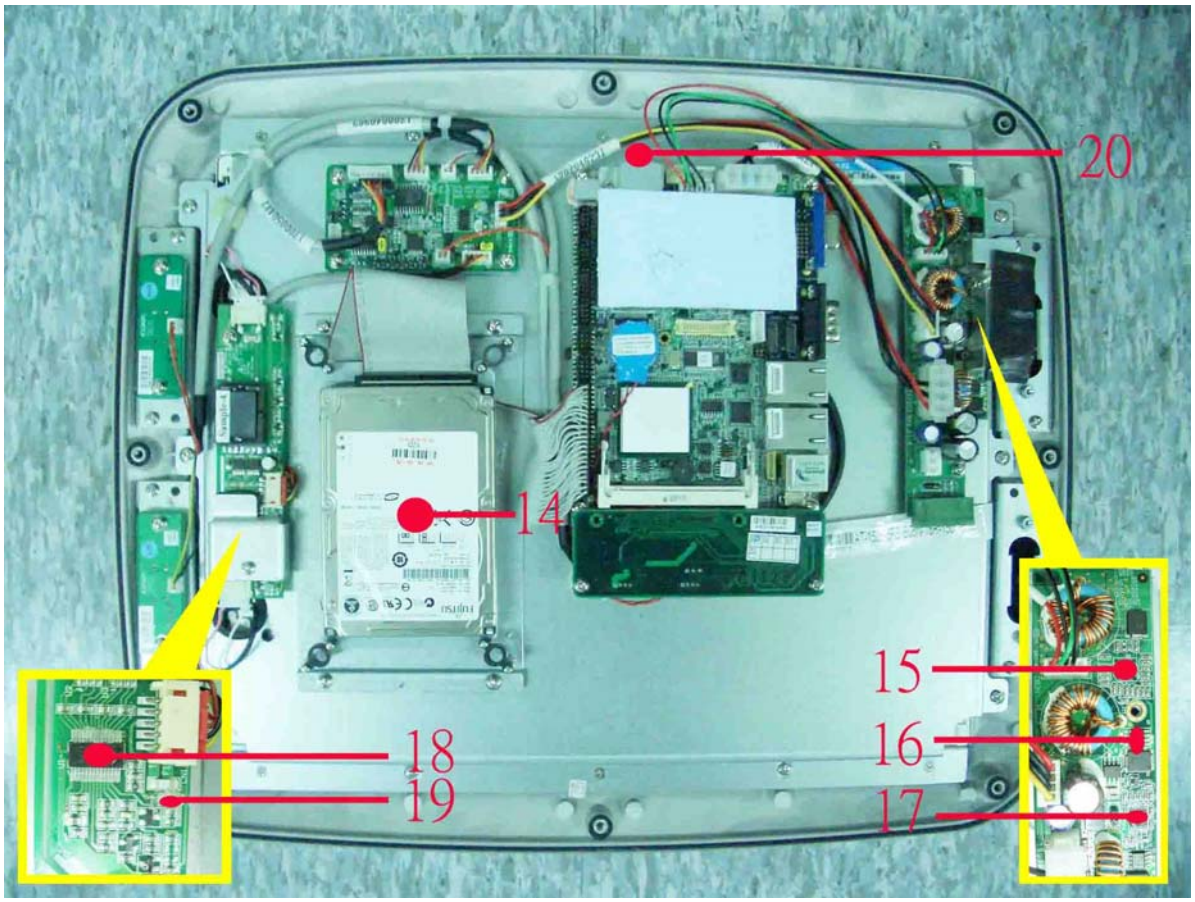
Ambient temperature: 55dC
Continuous running till thermal stability (within less than 1℃)

Test Software:

Windows XP / Run PassMark Burn In Test 5.1

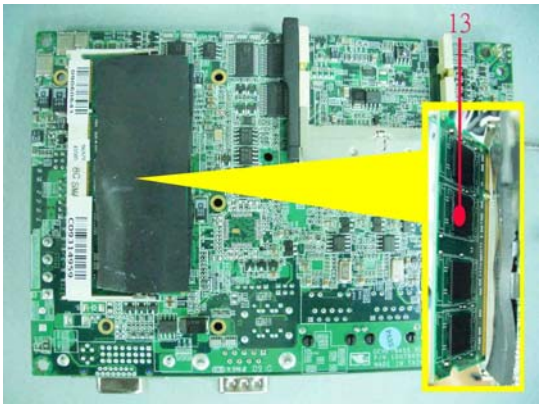
Terminal Recorder:

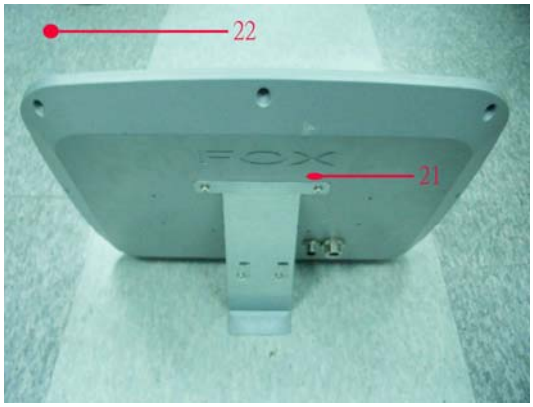
Measuring Thermal Couple Position：



AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Temperature rise test





Thermal profile data:

FOX-151

Point / Temp. Stage(℃)	Spec	55	25
GENE-9455			
1. CPU	90	84.5	59.5
2. U13 - (TF) Intel 945GSE Express Chipset.Intel.QG82945GSE SLB2R	105	78.5	53.5
3. U4 - (TF) Chipset ICH7M.Intel.NH82801GBM SL8YB	99	95.6	70.6
4. U9 - (TF) Super I/O w/4 COMs.ITE.IT8781F/AX-L	100	88.7	63.7
5. U3 - (TF) CLOCK GENERATOR.IDT.9LPRS501PGLF	100	93.3	68.3
6. U7 - (TF) GigaBit Ethernet Chipset.Intel.WG82574L	109	90.6	65.6
7. U17 - (TF) PWR. N-Channel.30V.12A.ANPEC.APM4410KC-TRL	125	84.0	59.0
8. L8 - (TF) COIL.GOTREND.GSTC063P-2R2MN	150	82.9	57.9
9. U19 - (TF) PWR.DirectFET MX.N-MOSFET.IR.IRF6628TRPBF	125	95.3	70.3
10. L7 - (TF) COIL.GOTREND.GSTC063P-1R5MN	150	79.2	54.2
11. U46 - (TF) 6 Channel AC'97 Audio Codec.REALTEK.ALC655-LF	100	92.7	67.7
12. U40 - (TF) Low Dropout Regulator.Adj(1.2~4.8V).SEMTECH.SC1565IS-TRT	115	94.6	69.6
13. Memory (Wide Temp.)	85	84.1	59.1
14. Industrial HDD	80	72.8	47.8
PER-P02D Power Board			
15. U2 - (TF) Regulator.Vin 3.5-36V.LINEAR.LTC3728EUH#PBF	85	74.6	49.6
16. Q7 - (TF) PWR.N-Channel 30V MOSFET.VISHAY.SI4410BDY-T1-E3v	125	96.8	71.8
17. U11 - (TF) PWR.SSOP16 MOSFET.LINEAR-TECHNOLOGY.LTC1778EGN	110	82.3	57.3
Inverter			
18. Inverter – 1 (U1)	85	80.3	55.3
19. Inverter - 2	125	97.2	72.2
20. Control Box Internal Air Temperature	N/A	76.2	51.2
21. Control Box External Surface	N/A	70.1	45.1
22. Chabmber Air Temperature	N/A	55.1	30.1
Any Tm value showed in red words which meaning the value over the Tc degree C of this device specification.			

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Temperature rise test

Sample Configuration & Quantity Under Test:

Quantity: 1 (FOX-151)

Test Result:

No problem was found during the temperature rise operation test.

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Temperature cycle test

Test Date: 06-19~22-2009

Test Product: FOX-151

Test Site: AAEON QA Internal Lab.

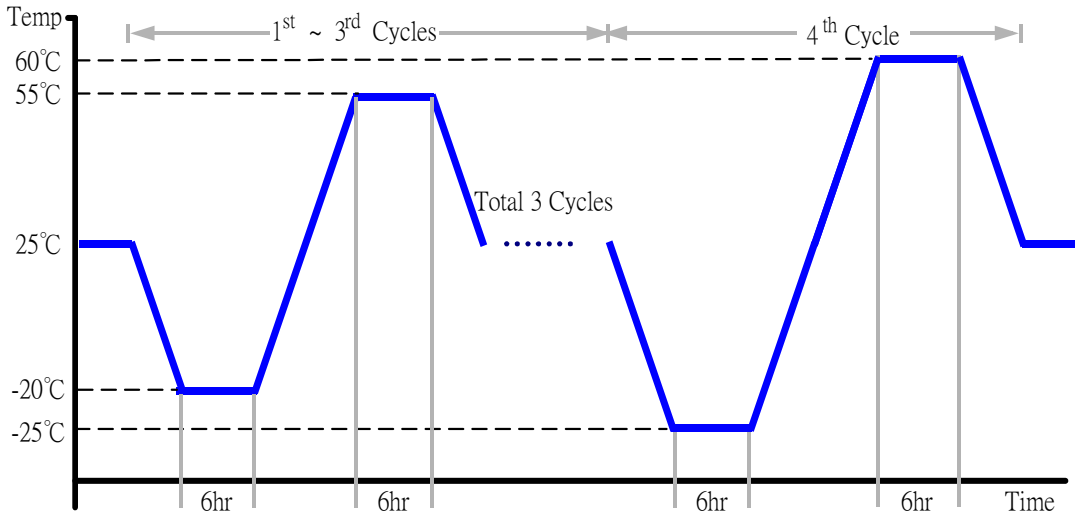
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-B6T-150+LN2
Date of Calibration: 04/10/09
Serial Number: 6487KT

Test Condition:

1. Test Low Temperature: -20℃ (1~3 cycles)
   -25℃ (4th cycle)
2. Test High Temperature: 55℃ (1~3 cycles)
   60℃ (4th 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 (FOX-151)

Test Result:

No problem was found during the temperature operation cycle test.

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

High temperature storage test

Test Date: 06-17~19-2009

Test Product: FOX-151

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-B6T-150+LN2
Date of Calibration: 04/10/09
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 (FOX-151)

Test Result:

No problem was found after the high temperature storage test.

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Low temperature storage test

Test Date: 06-15~17-2009

Test Product: FOX-151

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-B6T-150+LN2
Date of Calibration: 04/10/09
Serial Number: 6487KT

Testing Item:

1. Test Temperature: -30℃
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 (FOX-151)

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

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Humidity test

Test Date: 06-12~15-2009

Test Product: FOX-151

Test Site: AAEON QA Internal Lab.

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

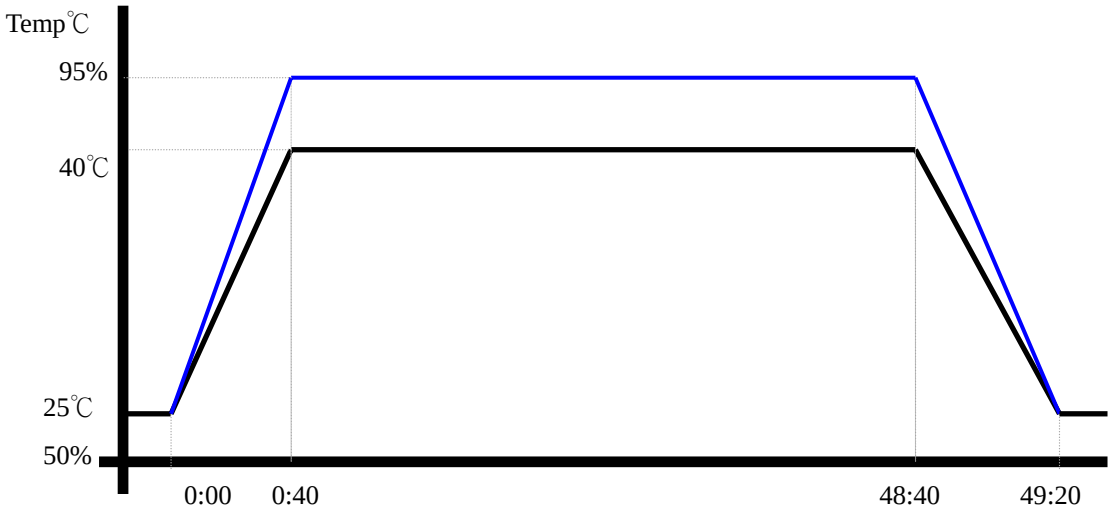
Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-B6T-150+LN2
Date of Calibration: 04/10/09
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 (FOX-151)

Test Result:

No problem was found after the humidity storage test.

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Cold start and hot start test

Test Date: 06-22~23-2009

Test Product: FOX-151

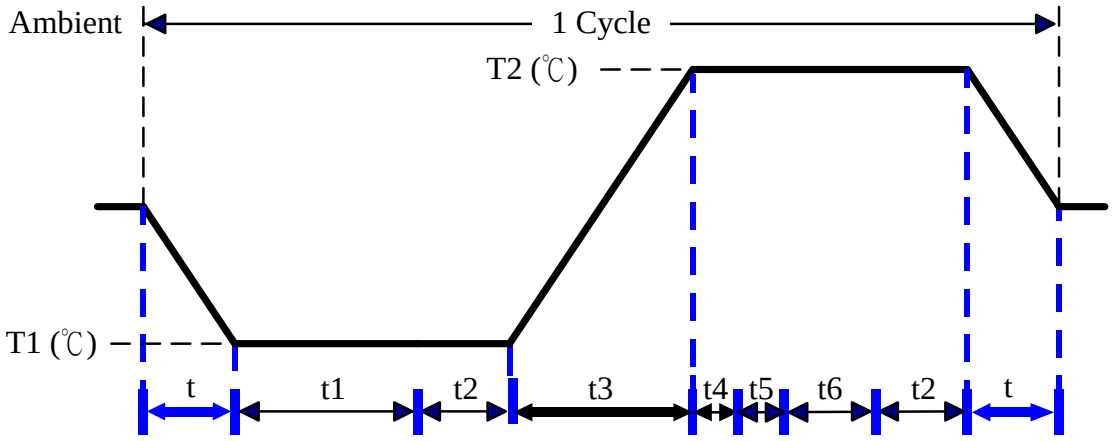
Test Site: AAEON QA Internal Lab.

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: 04/10/09
Serial Number: 6487KT

Test Condition:



Parameters	Description
T1	-25℃
T2	60℃
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.

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw