Onyx-219

Environment Test Report

Report NO: 06P020018

Issued by:	Rex Chang	/	*10/23/2006*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*10/23/2006*
	Manager		**Date**

Test item list

Num	Item	Spec
1.	**Low Noise Medical Station**:	Onyx-219
	1.LCD	TFT LCD.19". AU M190EN04 V7
	2.Power Adapter	SINPRO MPU50-105
	3. Inverter	INVERTER HWA YOUN QF132V1.16 (4LAMPS).
	4. A/D Board	BT-R08LDNQ REV:05
	5. USB Transfer Board	T040 REV: A1.1
	6. USB Board	1907YC0301 REV: A1.0
	7. CD-ROM Transfer Board	1907T04102 REV: A1.0
	8. Smart card Board	MR0103
	9. Card Reader Board	GS-2004-CR18801 V1.1
	10. CD-ROM	TEAC DV-28SL
2.	**Test System**	PCM-8150 A1.0 / 256MB(DDR333) / BIOS:1.4)

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Temperature cycle test

Test Date: 10-19~23-2006

Test Product: Onyx-219

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:

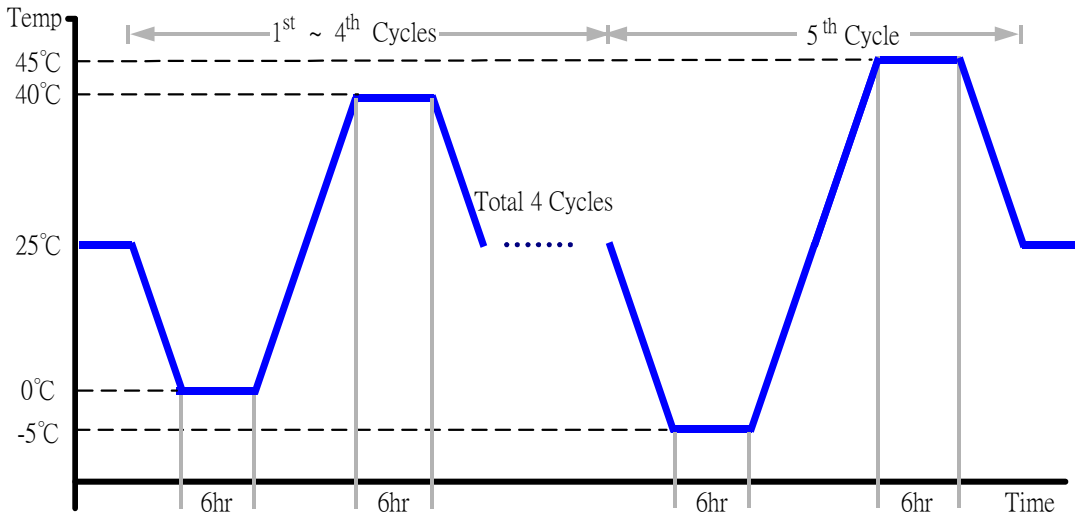
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 11/21/05
Serial Number: 2582

Temperature Measurement:

40 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/14/05
Serial Number: 12A323190

Test Condition:

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



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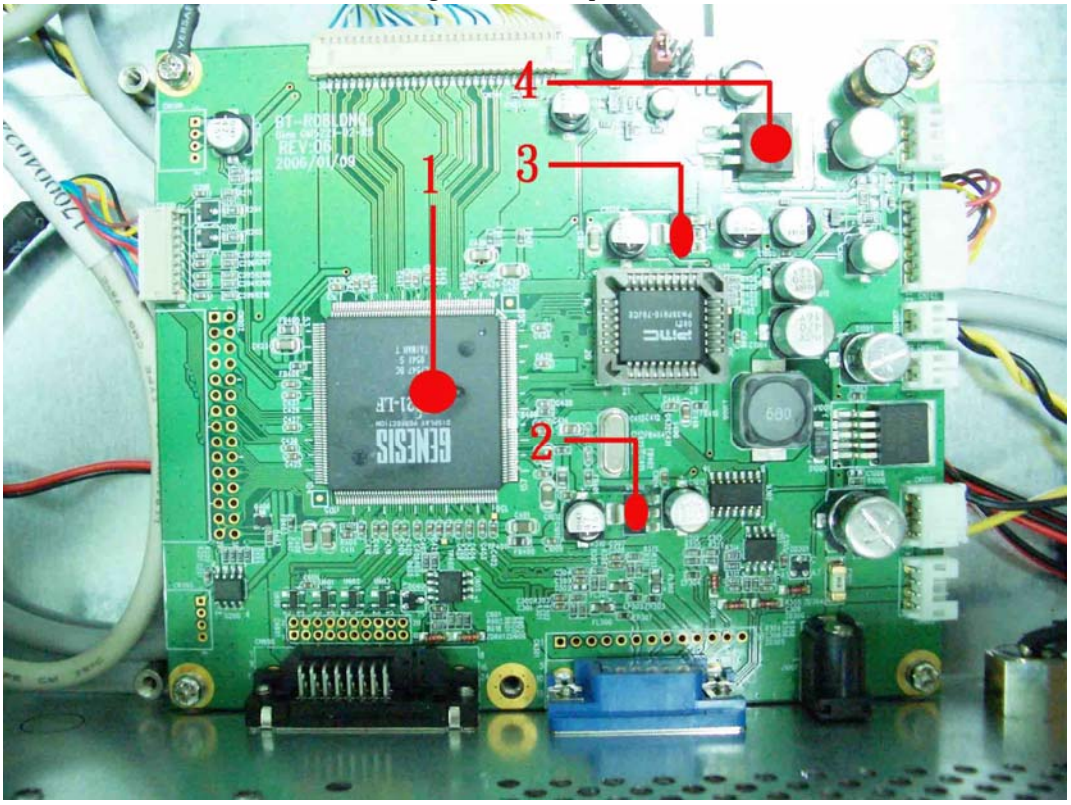
Temperature cycle test

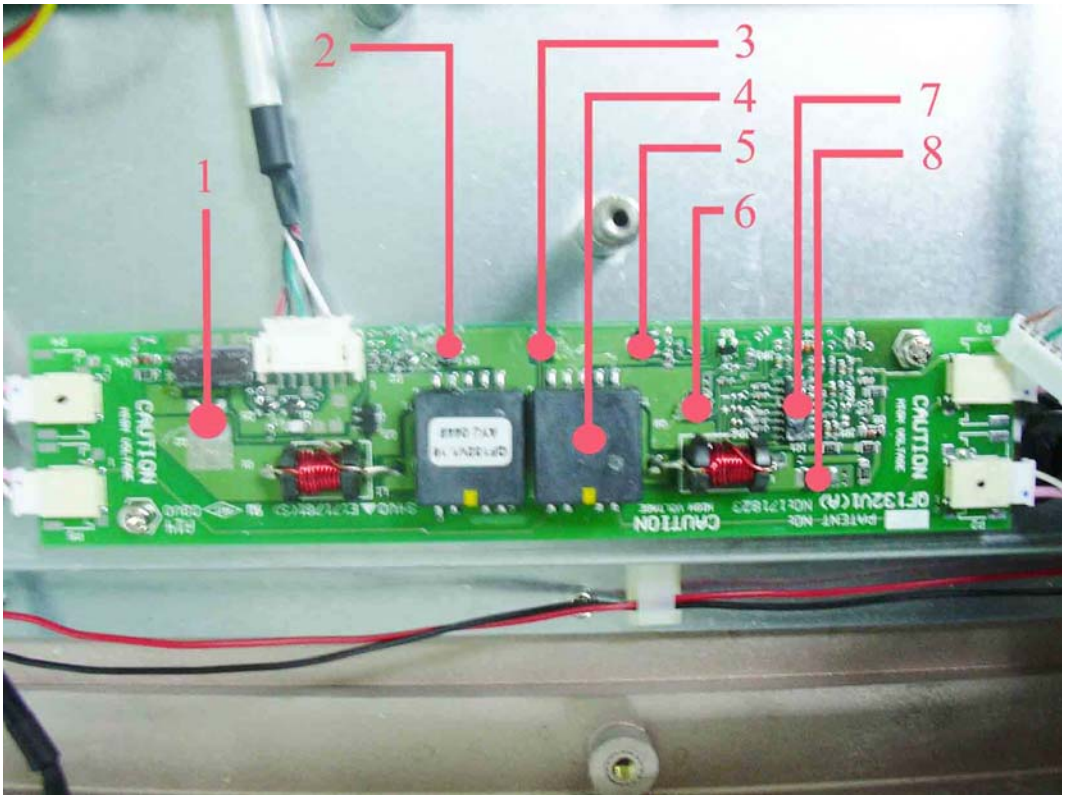
Test O.S. / Software:

Windows XP / Run PassMark Burn In Test Pro 4.0

Temperature Recorder:

Measuring Thermal Couple Position：





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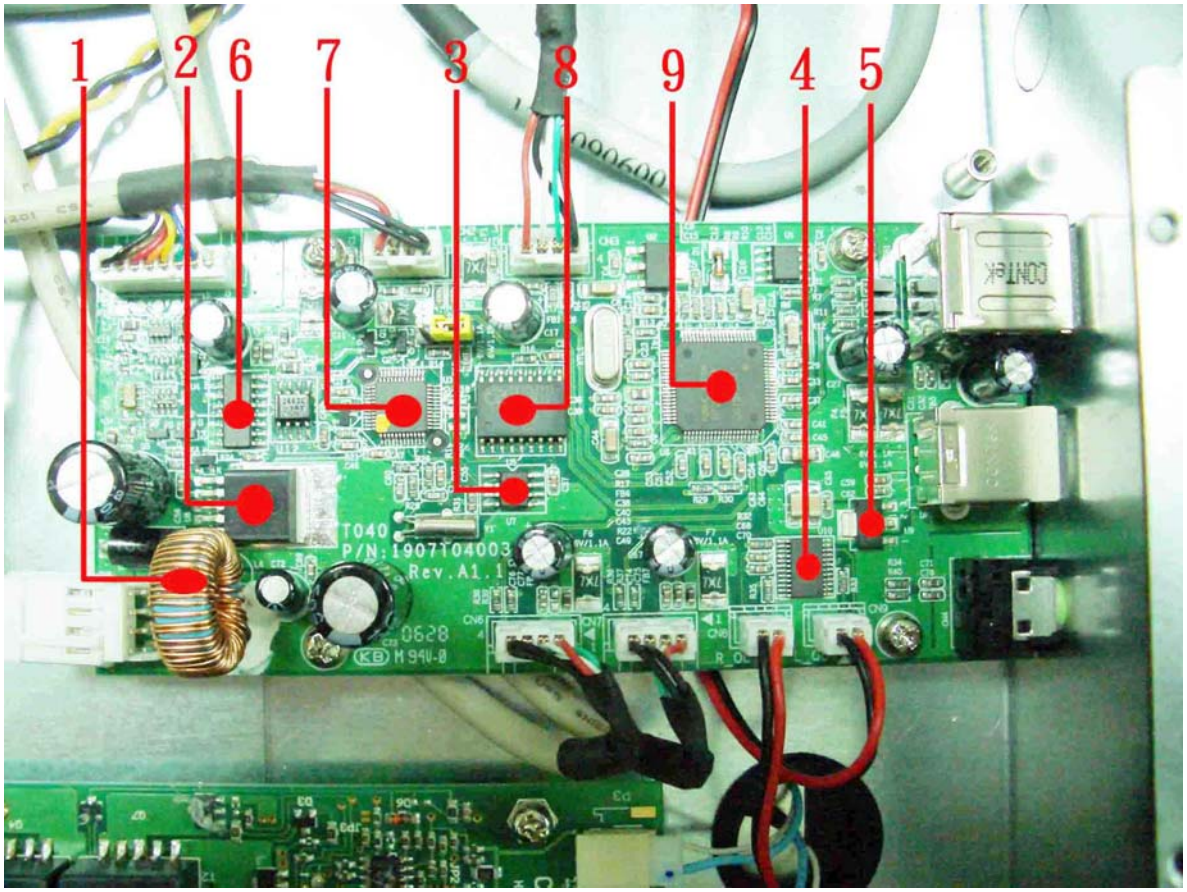
Temperature cycle test



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Temperature cycle test

Thermal profile data:

Onyx-219

Point / Temp. Stage(℃)	Spec	45	40	25	0	-5
AD Board - BT-R08LDNQ REV:05						
1. BT-R08LDNQ REV:05 - U401	100	71.7	66.7	51.7	26.7	21.7
2. BT-R08LDNQ REV:05 - U1002	100	74.7	69.7	54.7	29.7	24.7
3. BT-R08LDNQ REV:05 - U1000	100	77.4	72.4	57.4	32.4	27.4
4. BT-R08LDNQ REV:05 - AP1117 -U1004	125	60.1	55.1	40.1	15.1	10.1
USB Transfer Board - T040 REV:A1.1						
1. T040 REV: A1.1 - L6	115	73.3	68.3	53.3	28.3	23.3
2. T040 REV: A1.1 - U8	115	73.1	68.1	53.1	28.1	23.1
3. T040 REV: A1.1 - U7	155	67.6	62.6	47.6	22.6	17.6
4. T040 REV: A1.1 - U10	115	67.2	62.2	47.2	22.2	17.2
5. T040 REV: A1.1 - U9	100	66.9	61.9	46.9	21.9	16.9
6. T040 REV: A1.1 - U4	105	69.7	64.7	49.7	24.7	19.7
7. T040 REV: A1.1 - U3	105	72.4	67.4	52.4	27.4	22.4
8. T040 REV: A1.1 - U5	100	70.3	65.3	50.3	25.3	20.3
9. T040 REV: A1.1 - U6	100	70.5	65.5	50.5	25.5	20.5
Inverter - HWA YOUN QF132V1.16						
1. Inverter - Q2	150	97.1	92.1	77.1	52.1	47.1
2. Inverter - Q4	150	87.0	82.0	67.0	42.0	37.0
3. Inverter - Q6	150	79.4	74.4	59.4	34.4	29.4
4. Inverter - T2	200	87.9	82.9	67.9	42.9	37.9
5. Inverter - Q7	150	74.6	69.6	54.6	29.6	24.6
6. Inverter - Q8	150	77.6	72.6	57.6	32.6	27.6
7. Inverter - IC1	85	70.7	65.7	50.7	25.7	20.7
8. Inverter - SX14	125	71.9	66.9	51.9	26.9	21.9
Chamber Air Temperature	N/A	45.0	40.0	25.0	0.0	-5.0

1. Tm (Measured operation temperature) must less than Tc (Specified case temperature) + 5 degree C.
2. Any Tm value showed in red words which meaning the value over the Tc + 5 degree C of this device specification.

Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-219)

Test Result:

No problem was found during the temperature cycle test.

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High temperature storage test

Test Date: 10-16~18-2006

Test Product: Onyx-219

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-D4L+-100
Date of Calibration: 11/21/05
Serial Number: 2582

Testing Item:

1. Test Temperature: 60℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test Pro 4.0
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (Onyx-219)

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

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Low temperature storage test

Test Date: 10-09~11-2006

Test Product: Onyx-219

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-D4L+-100
Date of Calibration: 11/21/05
Serial Number: 2582

Testing Item:

1. Test Temperature: -20℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test Pro 4.0
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (Onyx-219)

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

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Humidity test

Test Date: 10-13~16-2006

Test Product: Onyx-219

Test Site: AAEON QA Internal Lab.

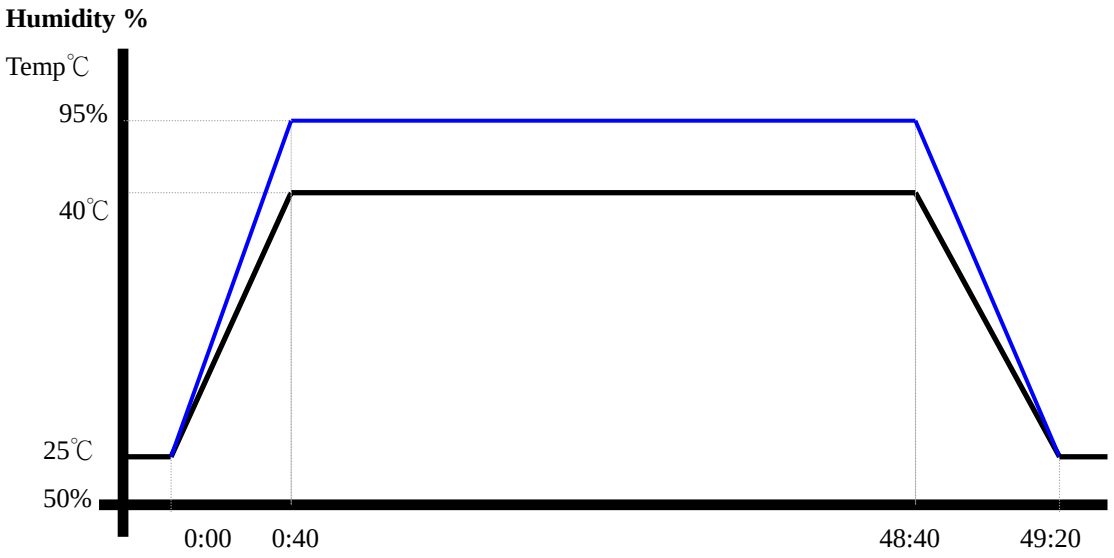
Performed By: Rex Chang

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-D4L+-100
Date of Calibration: 11/21/05
Serial Number: 2582

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 Pro 4.0
5. Test Environment Curve:



Sample Configuration & Quantity Under Test:
Quantity: 1 (Onyx-219)

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

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Cold Start test

Test Date: 10-11~12-2006

Test Product: Onyx-219

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

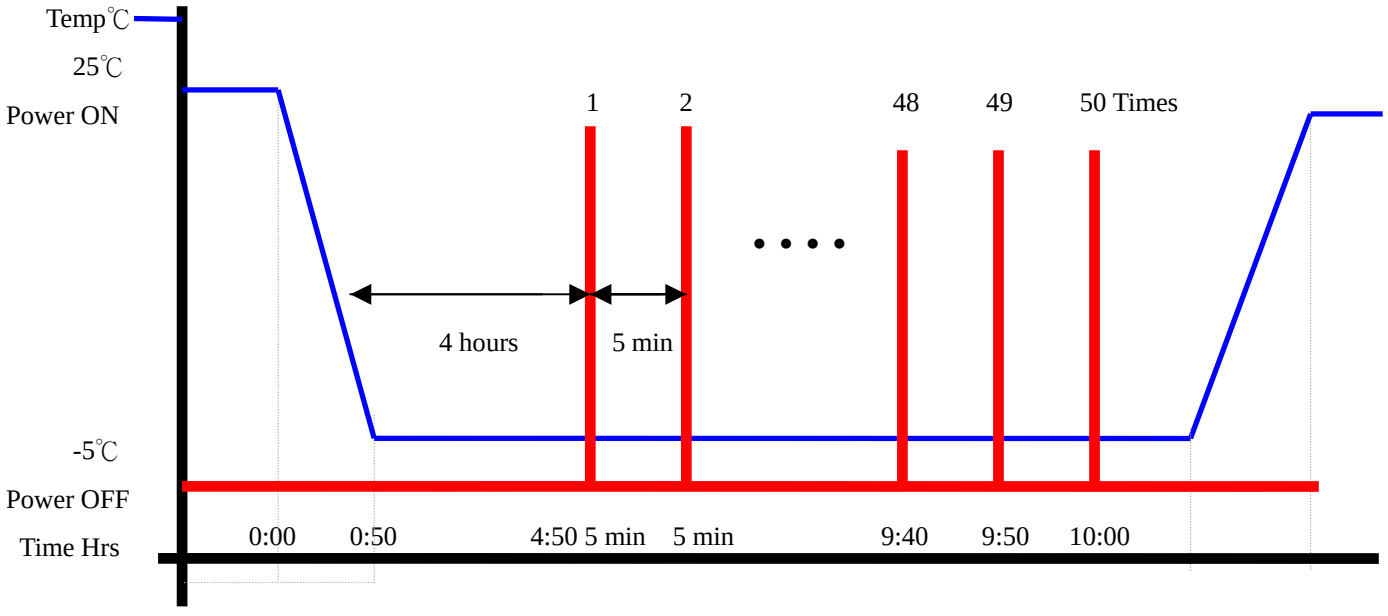
Test Standard: Reference IEC 68-2-1 Testing procedures
Test Ab: Cold Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 05/19/06
Serial Number: 1241

Test Condition:

1. Test Temperature: -5℃
2. Test Times: 5 Hours or 50 times of ON/OFF
   (1) Power off for 4 hours before 1'st power on. Then once complete boot, power off immediately.
   (2) After 5 min later power on again and wait until booting is completed.
   (3) Repeat (2) for around 4:50
   (4) Power off then wait for 5 min before final power on operation.
3. Number of test: 50 times
4. Test Software: Windows XP
5. Test Environment Curve:



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Cold Start test

Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-219)

Test Result:

No problem was found during the cold start test.

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