AGD-310D

Environment Test Report

Report NO: 11P020018

Summary	☑ **Pass** ☐ **Fail** Note : There is/are ___ defect(s) not list in the report, please check it in the DTS Website. ☐ **Pass with Deviation** **Comment: _____**

Issue date	Approval	Test Engineer
2011-07-11	**Jansin Lee**	**Rex Chang**

Test item list

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Testing Result

Num	Test item list	Result	Remark
1	Temperature rise test	Pass	
2	Temperature variation 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	

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Configuration of EUT

Num	Item	Spec
1.	Rugged Touch Display	AGP-310D
	1. LCD	10.4".AUO.G104SN02 V2 800*600 400nits
	2. Touch Screen Control Board	EETI control board (USB/RS232 auto-detect board)
	3. A/D Board	S2555L-011
2.	Adapter	FSP FSP060-DBAB1
3.	System PC Model	AEC-6625 A0.2
	1. Main Board	EPIC-QM57 A1.0
	6. BIOS Ver.	AEC-6625 1.0(01/06/2011)

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Temperature rise test

Test Date: 07-08-2011

Test Product: AGD-310D

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: 11/08/10
Serial Number: 12A323190

Test Condition:

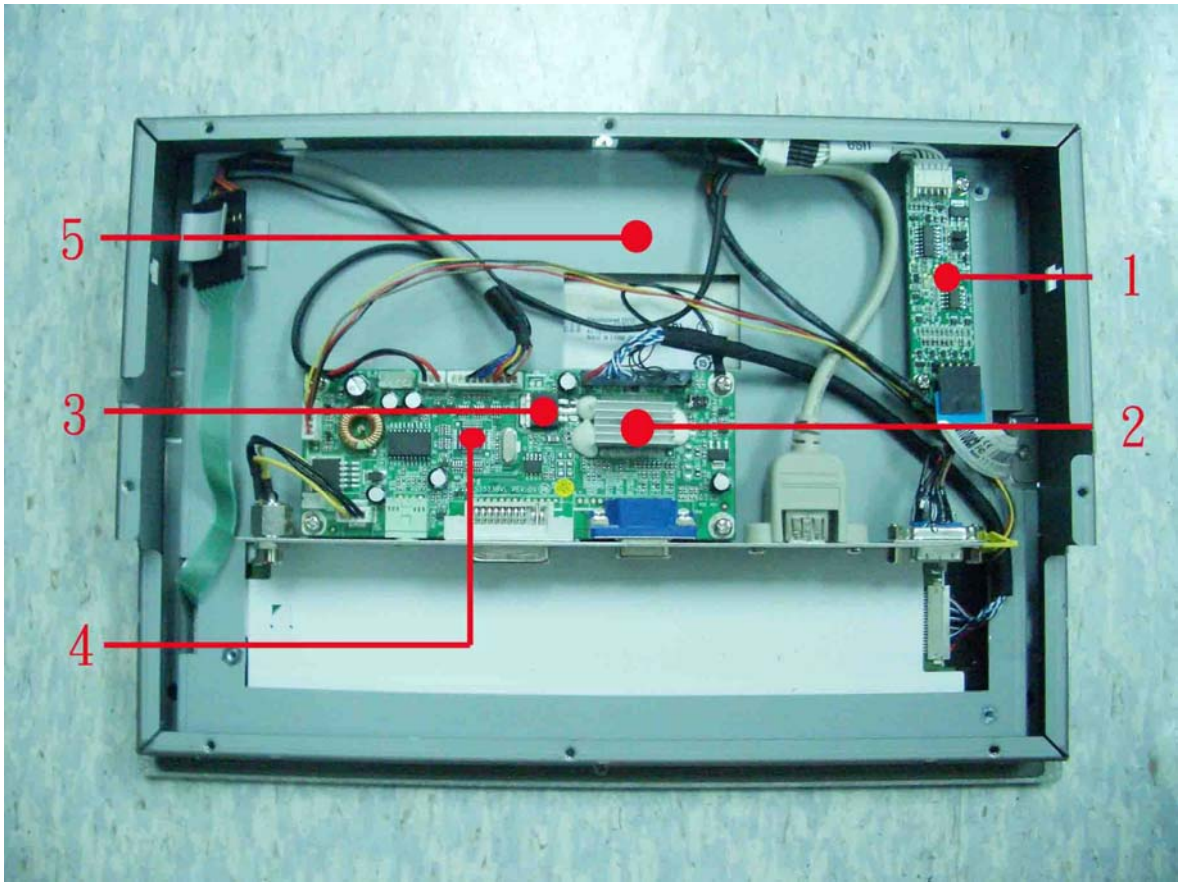
Ambient temperature: 55℃
Continuous running till thermal stability (within less than 1℃)

Test Software:

Windows XP / Run 3DMark06 Professional Edition 1.2.0

Terminal Recorder:

Measuring Thermal Couple Position：



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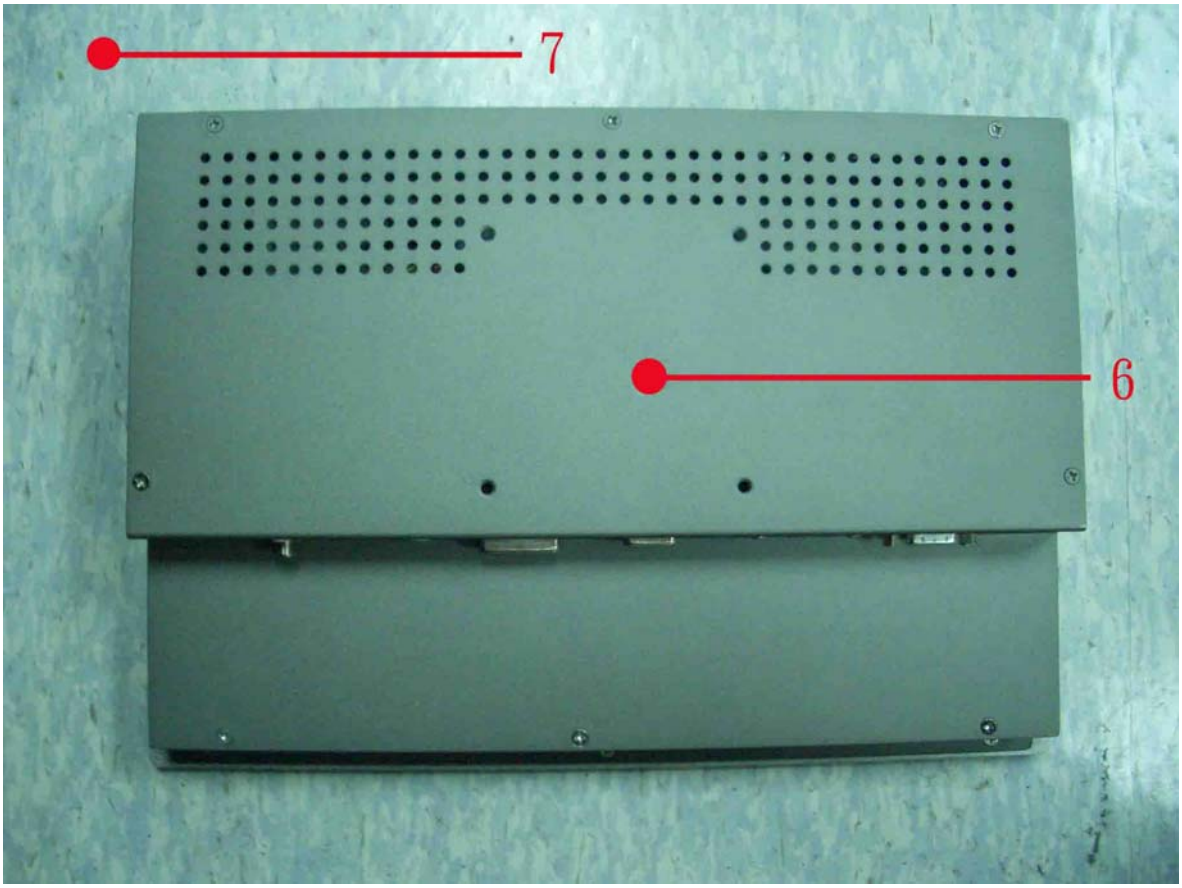
Temperature rise test



Thermal profile data:

AGD-310D

Point \ Temp. Stage(℃)	Spec	55	25
Touch Screen Control Board			
01. U4 – EETI S458XRUP	85	68.8	38.8
S2555L-011 AD Board			
02. U6 - REALTEK RTD2555LH	85	77.5	47.5
03. U5 - AIC 1084-33GM	100	78.7	48.7
04. U4 - REALTEK RTD2120L A6M2002	85	73.2	43.2
05. Control Box Inside Air Temperature	N/A	65.5	35.5
06. Control Box External Surface	N/A	62.3	32.3
07. Chamber Air Temperature	N/A	55.0	25.0
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 (AGD-310D)

Test Result:

No problem was found during the temperature rise operation test.

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Temperature variation operation test

Test Date: 07-05~07-2011

Test Product: AGD-310D

Test Site: AAEON QE Internal Lab.

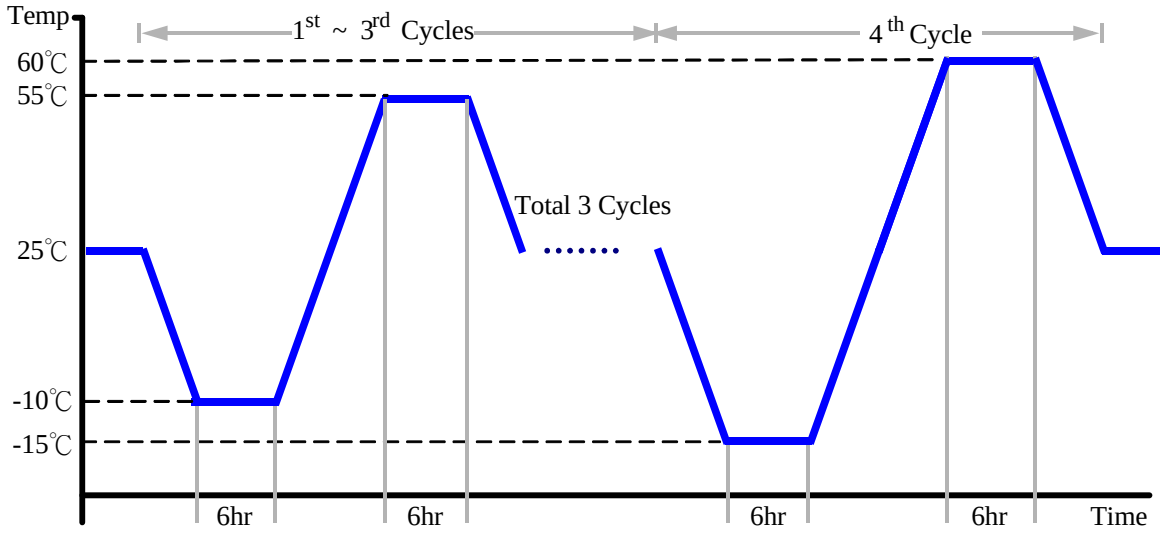
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/01/10
Serial Number: 3898

Test Condition:

1. Test Low Temperature: -10℃ (1~3 cycles)
   -15℃ (4^{th} cycle)
2. Test High Temperature: 55℃ (1~3 cycles)
   60℃ (4^{th} cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2℃/min
5. Test cycle: 4 cycles
6. Test Software: Windows XP / Run 3DMark06 Professional Edition 1.2.0
7. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGD-310D)

Test Result:

No problem was found during the temperature operation cycle test.

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High temperature storage test

Test Date: 06-27~29-2011

Test Product: AGD-310D

Test Site: AAEON QE Internal Lab.

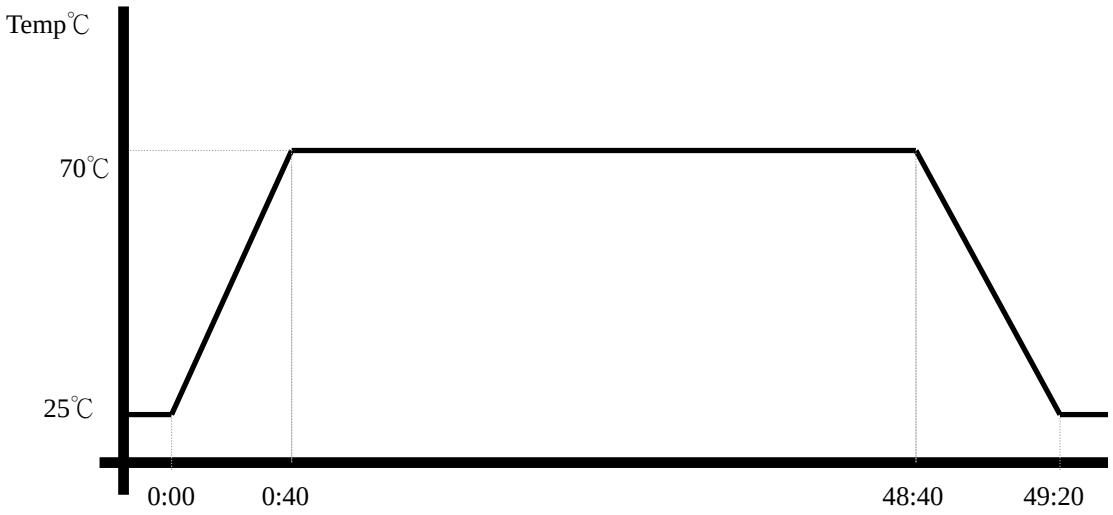
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/01/10
Serial Number: 3898

Testing Item:

1. Test Temperature: 70℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 6.0 Pro
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGD-310D)

Test Result:

No problem was found after the high temperature storage test.

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Low temperature storage test

Test Date: 06-29-2011 ~ 07-01-2011

Test Product: AGD-310D

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: 12/01/10
Serial Number: 3898

Testing Item:

1. Test Temperature: -20℃
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 6.0 Pro
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:

Quantity: 1 (AGD-310D)

Test Result:

No problem was found after the low temperature storage test.

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Humidity test

Test Date: 07-01~03-2011

Test Product: AGD-310D

Test Site: AAEON QE Internal Lab.

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

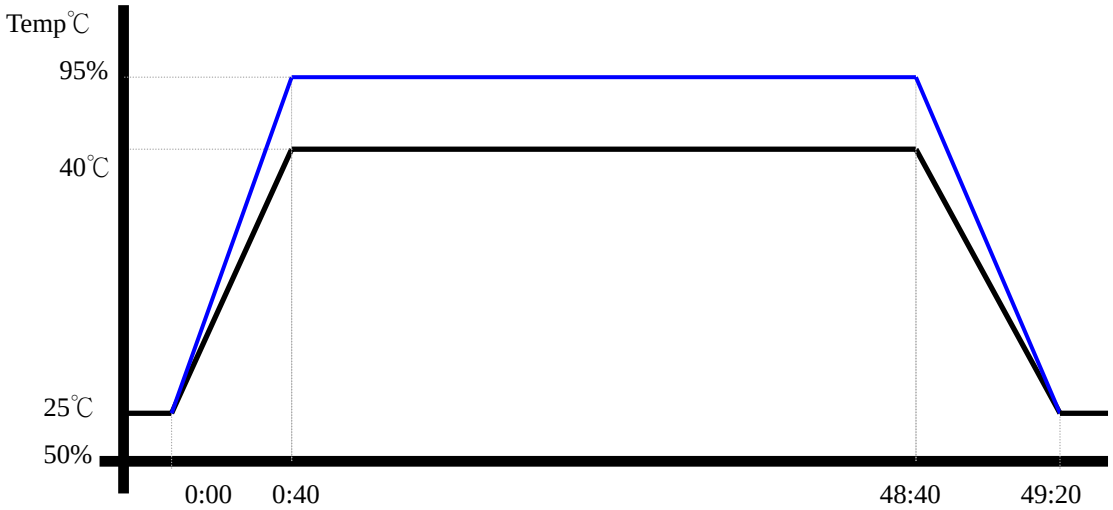
Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D7S-100+1 N2
Date of Calibration: 12/01/10
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 6.0 Pro
5. Test Environment Curve:

Humidity %



Sample Configuration & Quantity Under Test:
Quantity: 1 (AGD-310D)

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

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Cold start and hot start test

Test Date: 07-04~05-2011

Test Product: AGD-310D

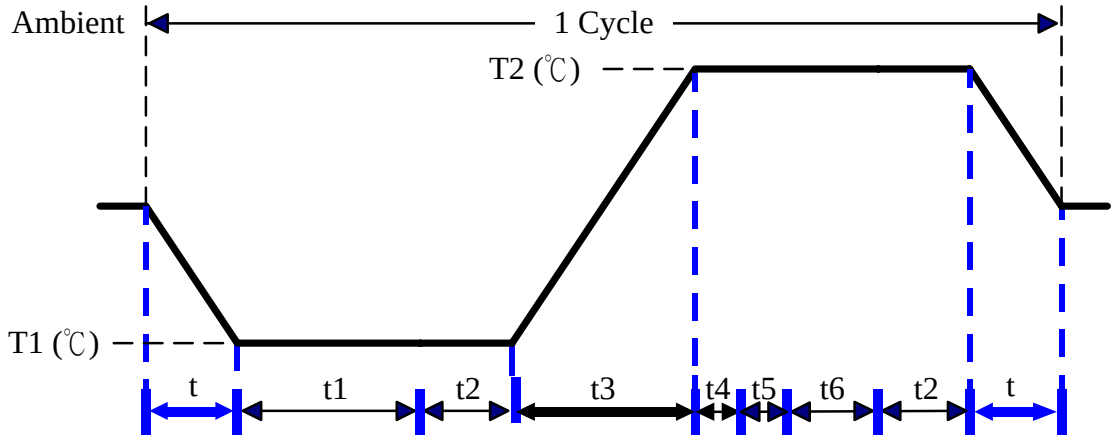
Test Site: AAEON QE Internal Lab.

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: 12/01/10
Serial Number: 3898

Test Condition:



Parameters	Description
T1	-15℃
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: Windows 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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