

AGD-315D

Environment Test Report

Report NO: 11P020023

Summary	<p><input checked="" type="checkbox"/> Pass</p> <p><input type="checkbox"/> Fail</p> <p>Note : There is/are ____ defect(s) not list in the report, please check it in the DTS Website.</p> <p><input type="checkbox"/> Pass with Deviation</p> <p>Comment: _____</p>
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Issue date

2011-08-11

Approval

Jansin Lee

Test Engineer

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	

Configuration of EUT

Num	Item	Spec
1.	Rugged Touch Display	AGD-315D
	1. LCD	TFT 15".AUO.G150XG03 V3.LVDS 18&24bits.250nits
	2. Inverter	HWA YOUN QF133v1.15I(S)
	3. Touch Screen Control Board	EETI control board (USB/RS232 auto-detect board)
	4. A/D Board	S2555L-011
2.	Adapter	FSP FSP060-DBAB1
3.	Equipment	Embedded motherboard with Intel Celeron M 440 /1.86GHz
	1. Main Board	EMB-9458T A1.0-B
	2. BIOS Ver.	EMB-9458T 1.3 (07/25/2009)

Temperature rise test

Test Date: 08-10-2011

Test Product: AGD-315D

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: 50°C

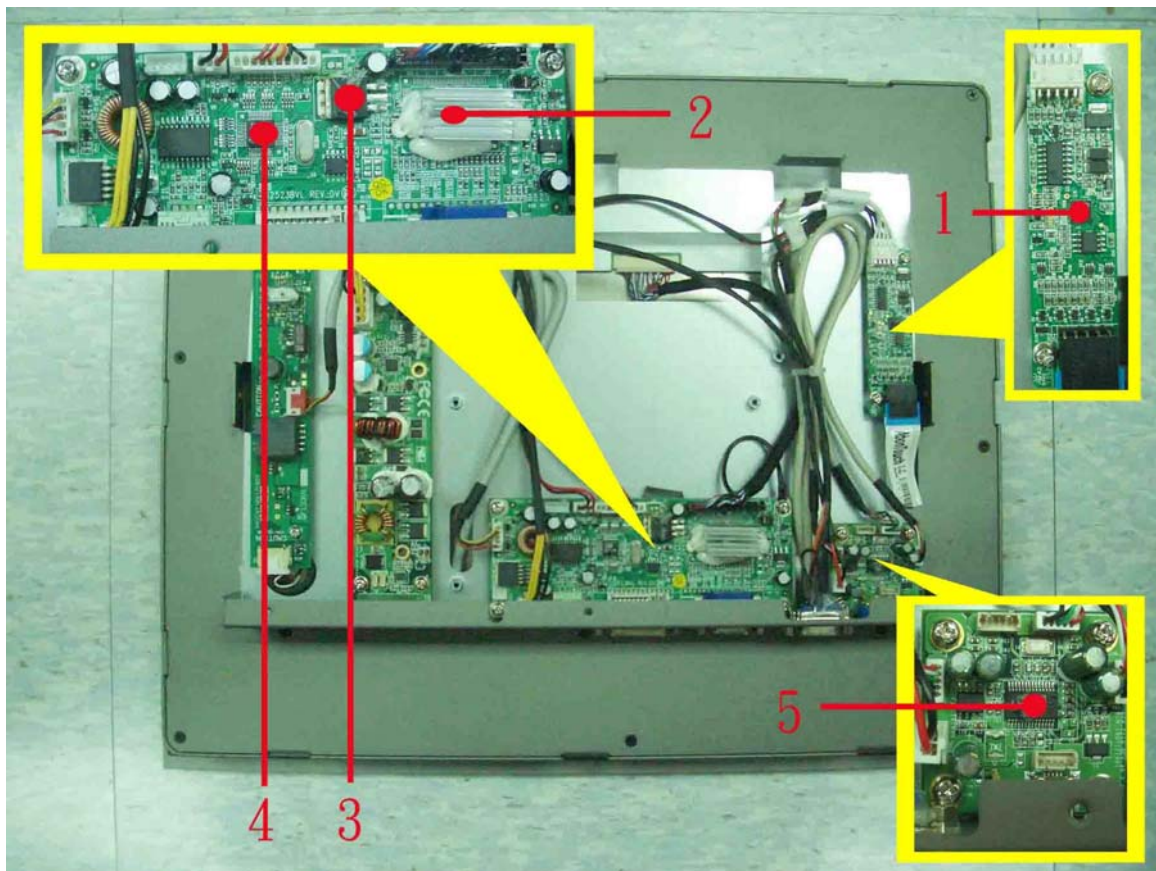
Continuous running till thermal stability (within less than 1°C)

Test Software:

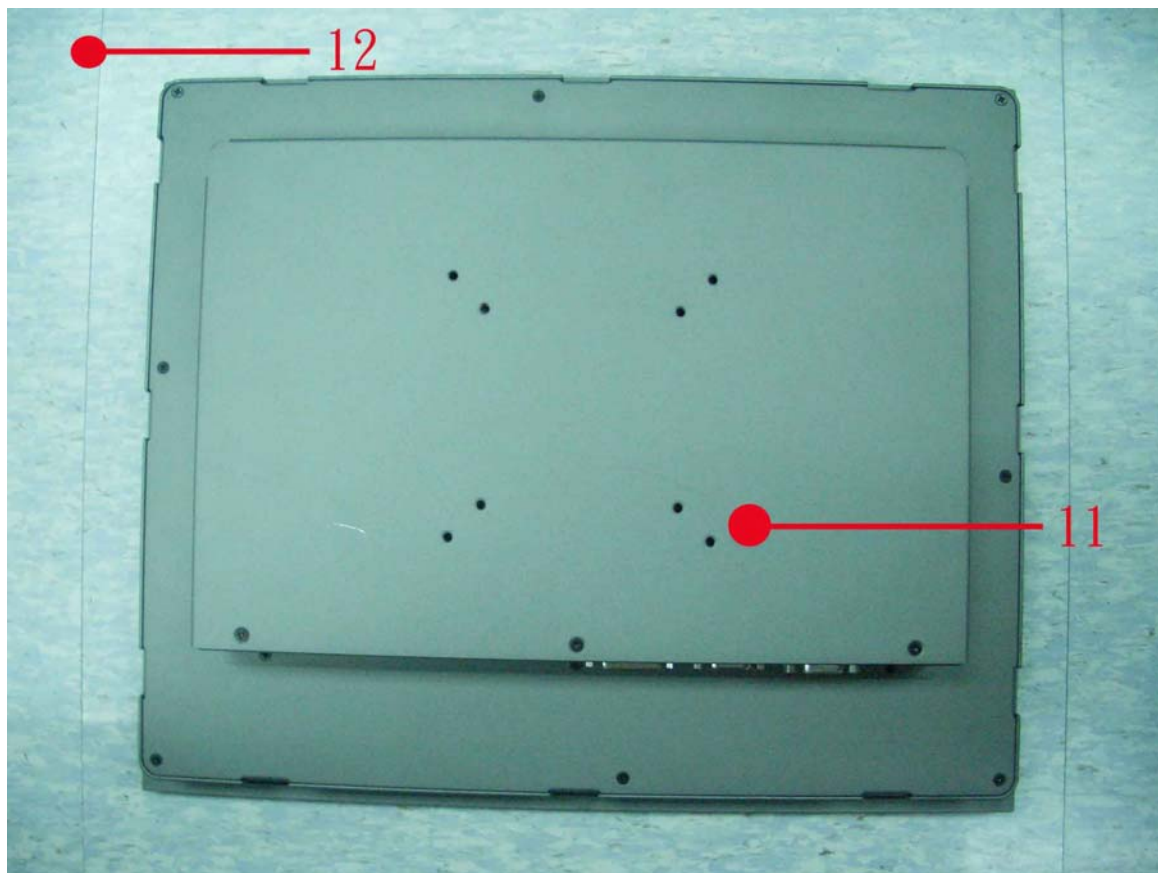
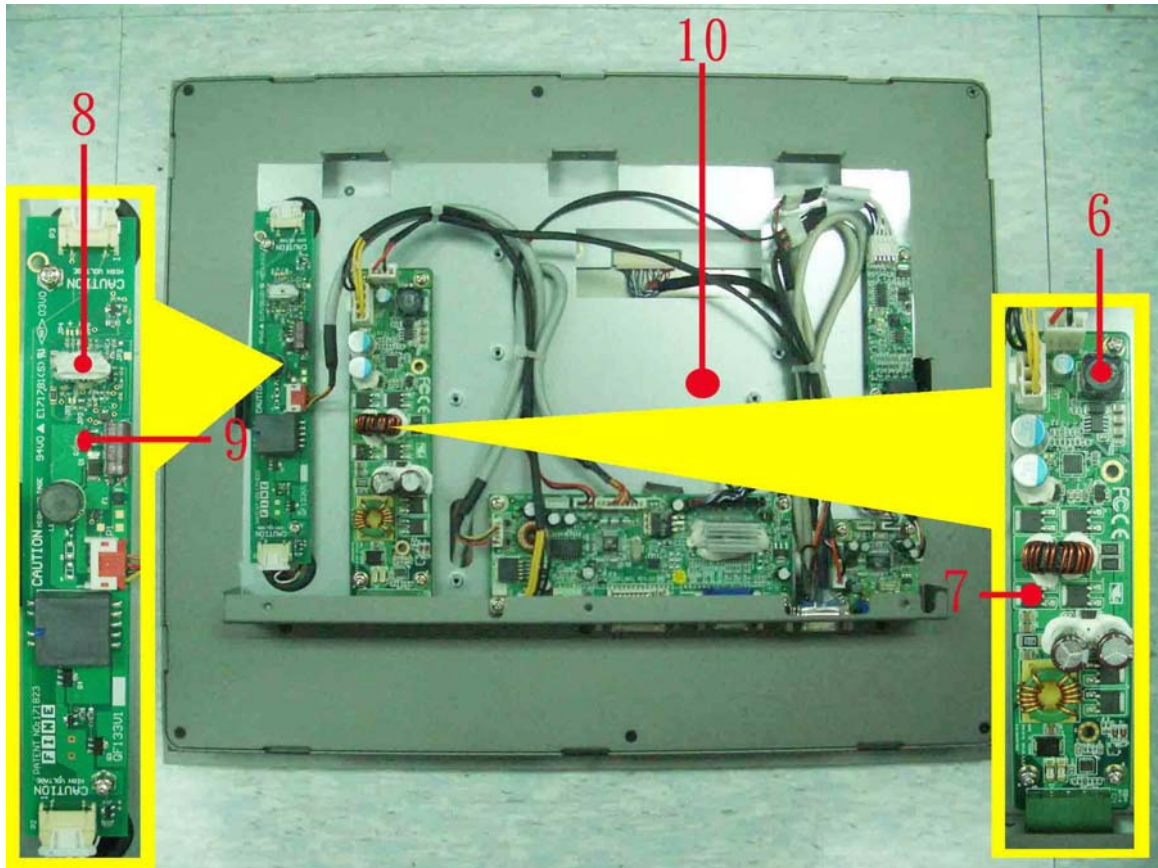
Windows XP / Run 3DMark05 Business Version 1.3.0

Terminal Recorder:

Measuring Thermal Couple Position :



Temperature rise test



Temperature rise test

Thermal profile data:

AGD-315D

Point	Temp. Stage(°C)	Spec	50	25
Touch Screen Control Board				
01. U4 - EETI S458XRUP		85	63.8	38.8
S2555L-011 AD Board				
02. U6 - REALTEK RTD2555LH		85	74.8	49.8
03. U5 - AIC 1084-33GM		100	84.6	59.6
04. U4 - REALTEK RTD2120L A6M2002		85	72.1	47.1
Mini USB Contact Touch Board.PER-T219 A0.1				
05. U2		85	56.7	31.7
POWER BORAD.PER-P17D B1_0_0				
06. L1		125	63.0	38.0
07. Q5		130	63.9	38.9
Inverter				
08. IC1		85	81.2	56.2
09. Q2		150	86.3	61.3
10. Control Box Inside Air Temperature		N/A	60.4	35.4
11. Control Box External Surface		N/A	56.3	31.3
12. Chamber Air Temperature		N/A	50.0	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-315D)

Test Result:

No problem was found during the temperature rise operation test.

Temperature variation operation test

Test Date: 08-03~05-2011

Test Product: AGD-315D

Test Site: AAEON QE Internal Lab.

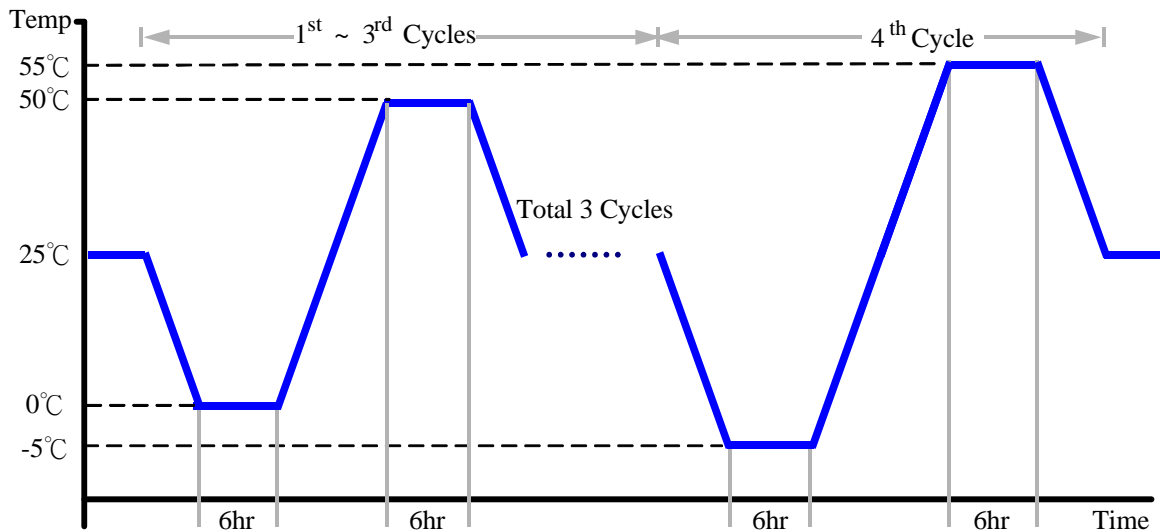
Test Standard: Reference IEC68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 11/03/10
Serial Number: 2582

Test Condition:

1. Test Low Temperature: 0°C (1~3 cycles)
-5°C (4th cycle)
2. Test High Temperature: 50°C (1~3 cycles)
55°C (4th cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2°C/min
5. Test cycle: 4 cycles
6. Test Software: Windows XP / Run 3DMark05 Business Version 1.3.0
7. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGD-315D)

Test Result:

No problem was found during the temperature operation cycle test.

High temperature storage test

Test Date: 08-01~03-2011

Test Product: AGD-315D

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.

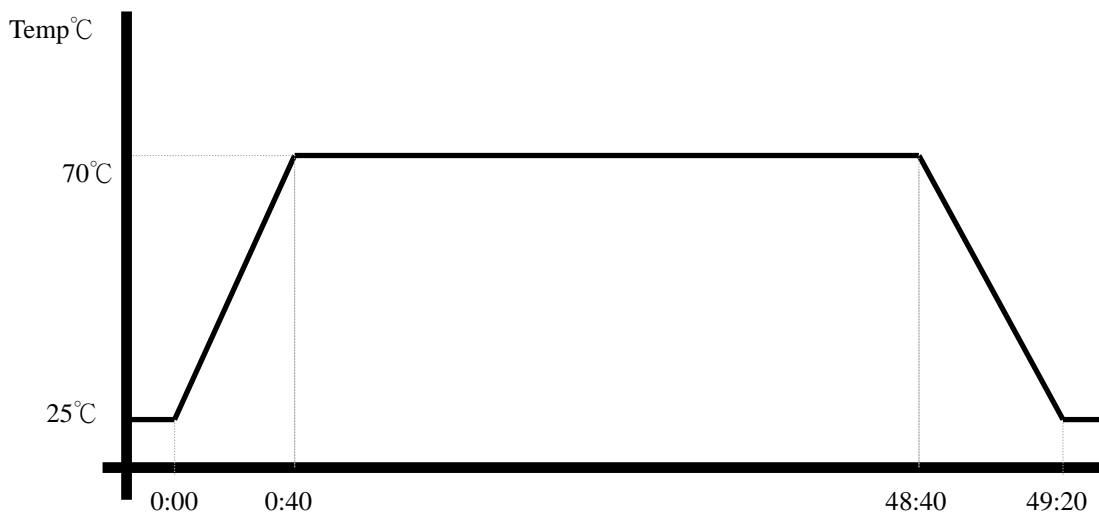
Model: THS-D4H+-100

Date of Calibration: 11/03/10

Serial Number: 2582

Testing Item:

1. Test Temperature: 70°C
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-315D)

Test Result:

No problem was found after the high temperature storage test.

Low temperature storage test

Test Date: 07-29-2011 ~ 08-01-2011

Test Product: AGD-315D

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-D4H+-100

Date of Calibration: 11/03/10

Serial Number: 2582

Testing Item:

1. Test Temperature: -20°C
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-315D)

Test Result:

No problem was found after the low temperature storage test.

Humidity test

Test Date: 08-05~08-2011

Test Product: AGD-315D

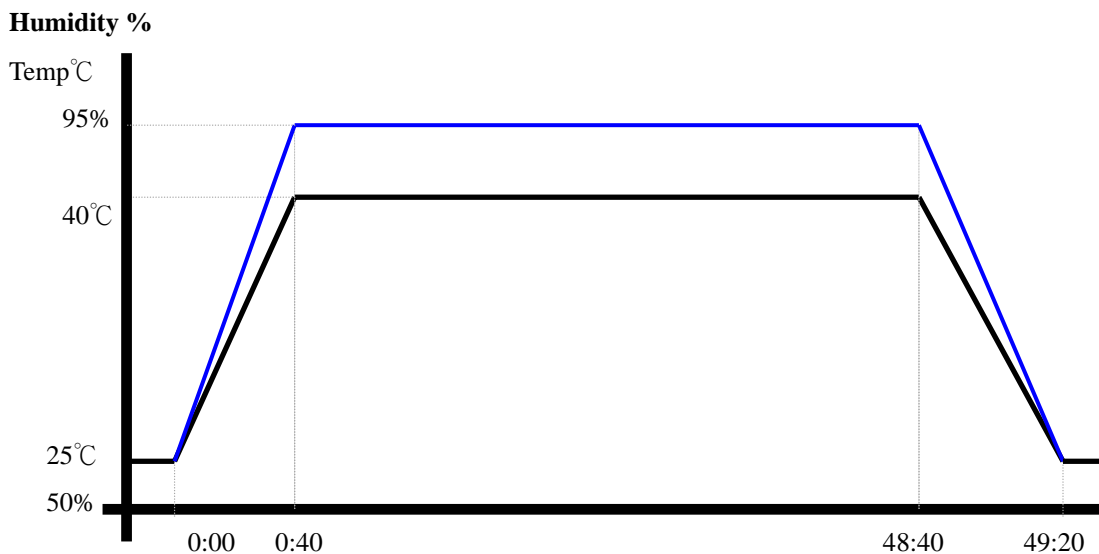
Test Site: AAEON QE Internal Lab.

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-D4H+-100
Date of Calibration: 11/03/10
Serial Number: 2582

Testing Item:

1. Test Temperature: 40°C
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:



Sample Configuration & Quantity Under Test:

Quantity: 1 (AGD-315D)

Test Result:

No problem was found after the humidity storage test.

Cold start and hot start test

Test Date: 08-08~09-2011

Test Product: AGD-315D

Test Site: AAEON QE Internal Lab.

Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

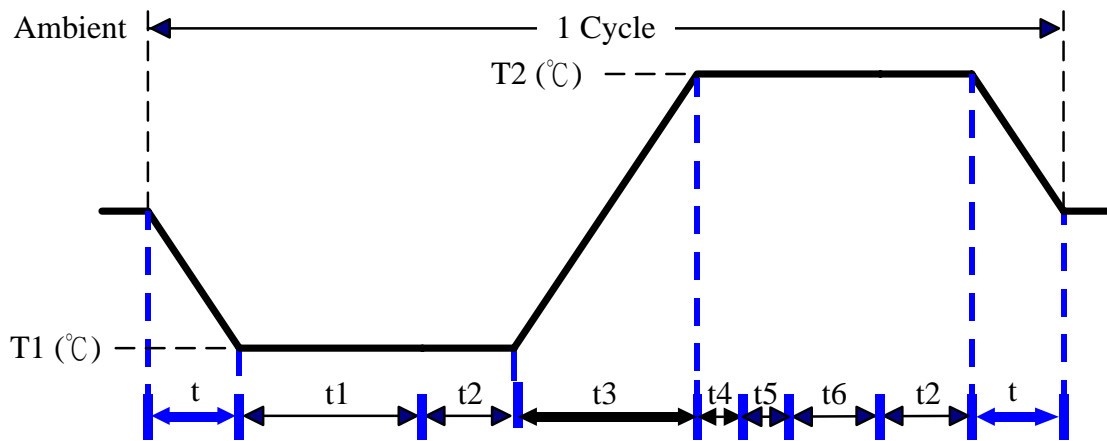
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.

Model: THS-D4H+-100

Date of Calibration: 11/03/10

Serial Number: 2582

Test Condition:



Parameters	Description
T1	-5°C
T2	55°C
t1	4 hrs
t2, t6	2 hrs
t4, t5	1hrs
t, t3	2°C/min
n (Cycle)	1

t = temperature 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.