

# AGD-312D

## 12" Rugged Touch Display

### P5 Verification Test Report

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation (Comment: _____)			
Test Results Category				
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	0
Defect Unsolved	0	0	0	0

Issue date	Approval	Test Engineer
2011/09/19	Jansin Lee	Mike Lee

**Version Released Records**

Date	Version	Change History	Note
2010/04/21	P3-1001	1. Re-composing test Items	
2010/06/01	P2P3-1001	1. New Test Report	
2010/06/21	P2P3-1002	1. Add BIOS -> SPI ROM Setting (South Bridge – GPIO)	
2010/12/02	P2P3-1003	1. New Test Report	
2011/02/23	P2P3-1101	1. Re-composing test Items	
2011/03/04	P2P3-1102	1. Add Specification Validation	

**Note :**

For all test items in this report, 3 results have been defined and described as following:

- Pass:**            Functionality work perfectly
- Fail:**             Functionality failed and must be resolved in the next version
- N/A:**             Functionality Not Applicable or Not Available

This test report would be updated when re-test completed in product next change version.

## Specification Verification

### Engineering Specification

Item	Specification	Result	Note
Product Name	AGD-312D-Ax-1010	Pass	
Display	12.1", 1024 x 768, 500 nit	Pass	
Touch Screen	5-wire resistive Touch screen	Pass	
Rear I/O panel	DC IN ( Power controller )	Pass	
	DVI port x 1	Pass	
	VGA port x 1	Pass	
	RS232 port x 1	Pass	
	Mini USB port x 1	Pass	
	Power Button x 1	Pass	
Front I/O panel	Power Button x 1	Pass	
	MENU x 1	Pass	
	AUTO x 1	Pass	
	UP x 1	Pass	
	DOWN x 1	Pass	
	USB 2.0 x 2	Pass	
AC / DC Adapter	DC Input 9~30 V w/ 3-in terminal bock Optional AC/DC power adapter , input voltage range 100~240 V, with 3-pin terminal block ( 12V / 3.33A-FSP040-DGAA1 )	Pass	

### O.S. Support

Item	Specification	Confirmed Result	Refer Chapter
Microsoft Embedded	Windows CE	N/A	
	Windows XP Embedded	N/A	
Microsoft Windows	Windows XP Professional English SP3 32 Bit	Pass	
	Windows 7 Ultimate English Version 32 Bit	Pass	
Linux	Linux Fedora Core 12 – Kernel 2.6.31.5-127.fc12	Pass	

### Environmental Specifications

Operating temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Storage temperature	-4° ~ 158° F (-20 ~ 70° C)
Storage humidity	5 ~ 90% @ 40C, non-condensing
Vibration	1Grms,random,5~500Hz, X/Y/Z axis
Shock	20G peak acceleration (11 ms duration)
Drop	High:76cm Weight:5.74Kg (1 Corner, 3 Edge, 6 Surface)
EMC	CE /FCC class A

**Note:** Please refer Environment Test Report for detail information

## Platform Information

Host 1 :

Item	Device Information	Test Item
SYSTEM PC Model / Ver.	AEC-6625 A0.2	1,2,3,4,5,6
CPU Board	EPIC-QM57 A1.0	1,2,3,4,5,6
BIOS / Version	AEC-6625 1.0(01/06/2011)	1,2,3,4,5,6
CPU Type	Intel Celeron P4500 1.87GHz(133x14)	1,2,3,4,5,6
Memory Type	DSL DDR3-1066 2GB(ELPIDA J1108BDSE-DJ-F)	1,2,3,4,5,6
SATA HDD	TOSHIBA 2.5" 160GB(MK1665GSX)	1,2,3,4,5,6
USB DVD-ROM	LITEON DX-20A4PU	1,2,3,4,5,6
LCD Monitor	AGD-312D	1,2,3,4,5,6
Operating System	<input checked="" type="checkbox"/> Windows XP Professional English SP3 32 Bit	6-3
DC Adapter	DC Power Input 12V / 5A	1,2,3,4,5,6
	Chipset Information with XP Professional English SP3 32 Bit Driver Version	
Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1020(2009/08/26)	
South Bridge	Intel QM57	
Super IO Chipset	ITE8781F	
VGA Chipset	Intel(R)GMA HD 6.14.10.5179(2009/11/9)	
Audio Chipset	VIA VT1708B 6.0.1.7300 (2009/07/10)	
Ethernet Chipset	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R)82574L Gigabit 11.1. 6.0(2009/07/13)	

Host 2 :

Item	Device Information	Test Item
SYSTEM PC Model / Ver.	E35M1-I DELUXE	1,2,3,4,5,6
CPU Board	E35M1- I DELUXE	1,2,3,4,5,6
BIOS / Version	0701	1,2,3,4,5,6
CPU Type	AMD E-350 Processor	1,2,3,4,5,6
Memory Type	DDRIII 1333 / 1G ECC	1,2,3,4,5,6
SATA HDD	SATA 3.5" HDD x 1(Seagate Barracuda 7200.10 / 80G)	1,2,3,4,5,6
USB DVD-ROM	LITEON DX-20A4PU	1,2,3,4,5,6
LCD Monitor	AGD-312D	1,2,3,4,5,6
Operating System	<input checked="" type="checkbox"/> English Fedora Core 12 – Kernel 2.6.31.5-127.fc12	6-1
	<input checked="" type="checkbox"/> Windows 7 Ultimate 32Bit	6-2
DC Adapter	DC Power Input 19V / 7.5A	1,2,3,4,5,6
	Chipset Information with XP Professional English SP3 32 Bit Driver Version	
Chipset Software	AMD E-350 Processor Chipset Device Software: 6.1.7600.16385 (2006/06/21)	
South Bridge	AMD® FCH A50 (Hudson M1) 6.1.7601.17514 (2006/6/21)	
VGA Chipset	ATI WRESTLER 9802 ( 8.792.0.0 (2010/11/9))	
Audio Chipset	ALC892 8-Channel High Definition Audio 6.0.1.6251 ( 2010/11/23 )	
Ethernet Chipset	Realtek® 8111E PCIe Gigabit LAN 7.31.1025.2010 ( 2010/10/25 )	

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# 1. OSD Control Function Test

## 1.1. OSD Control Test

OSD Control Function	Function			Note
	Pass	Fail	N/A	
Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MENU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
UP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DOWN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
POWER	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EXIT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 1.2. OSD On Screen Display Test

OSD –On Screen Display	Function			Note
	Pass	Fail	N/A	
Input Source	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Auto In Progress	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Contrast	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Brightness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sharpness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
User - RED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
User - Green	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
User - Blue	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OSD Position ( H & V )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Language	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Recall	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Save Exit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cancel Exit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 1.3. OSD Light Test

OSD Control Function	Function			Note
	Pass	Fail	N/A	
Power off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power on	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 1.4. Modular System Industrial Workstation Function Test

Test Item	Result			
	Pass	Fail	N/A	
AC power outlet / inlet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power On / Off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DC-IN CON ( +12V )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VGA – IN ( D – Sub )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI - I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Touch Screen ( USB Device )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Touch Screen ( RS-232 Device )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 2. Basic Function Test

### 2.1. Video Function Test

#### 2.1.1. Single Output Function Test

Hardware Information with XP Professional English SP3 32 Bit Driver Version										
CPU	Intel Celeron P4500 1.87GHz(133x14)									
Memory	DSL DDR3-1066 2GB(ELPIDA J1108BDSE-DJ-F)									
SATA HDD	TOSHIBA 2.5" 160GB(MK1665GSX)									
VGA	AGD-312D									
DVI	AGD-312D									
TV	N/A									
Color Quality	<input checked="" type="checkbox"/> 16bit <input checked="" type="checkbox"/> 32bit									
Resolution	VGA			DVI			LVDS			Note
	Pass	Fail	N/A	Pass	Fail	N/A	Pass	Fail	N/A	
640X480	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
800X600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1024X600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1024X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1152X864	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X600	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X720	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X1024	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1360X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1366X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1400X1050	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1440X900	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X900	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X1200	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X1050	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1792X1344	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1856X1392	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1080	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1200	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1440	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2048X1536	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rotation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rotation ( 0 / 90 /180 /270)

Note: Pay attention with Full Screen under POST screen and Text Mode.

### 2.1.2. Dual Output Function Test

Selection	Output	Result			Note
		Pass	Fail	N/A	
Dual Display Clone	VGA + DVI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dual Display Twin		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Extended Desktop		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 2.1.3. Video Resolution Test

Test points:

1. Power on without inserting any VGA connector until system reaches Windows desktop
2. Plug VGA connector into test machine while system reaches Windows then check VGA driver and display
3. Check VGA output Brightness is normal and it shows "Ghost Image" / "Flicker" or not

	Result			Note
	Pass	Fail	N/A	
In Windows Desktop	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 2.2. LCD Monitor Test

Monitor Integration Test			Result			Note
			Pass	Fail	N/A	
DVI	Win 7	1_Play 720P video file(RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		2_Play 720P video file(WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		3_Play 1080P video file (RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		4_Play 1080P video file (WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		5_Play 1080P video file (MPEG)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		6_Play 1080P video file(MKV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Win XP	1_Play 720P video file(RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		2_Play 720P video file(WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		3_Play 1080P video file (RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		4_Play 1080P video file (WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		5_Play 1080P video file (MPEG)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		6_Play 1080P video file(MKV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VGA	Win 7	1_Play 720P video file(RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		2_Play 720P video file(WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		3_Play 1080P video file (RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		4_Play 1080P video file (WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		5_Play 1080P video file (MPEG)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		6_Play 1080P video file(MKV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Win XP	1_Play 720P video file(RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		2_Play 720P video file(WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		3_Play 1080P video file (RM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		4_Play 1080P video file (WMV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		5_Play 1080i video file (MPEG)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		6_Play 1080P video file(MKV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



### 3. Integration Test

Hardware Information with XP Professional English SP3 32 Bit Driver Version	
CPU	Intel Celeron P4500 1.87GHz(133x14)
Memory	DSL DDR3-1066 2GB(ELPIDA J1108BDSE-DJ-F)
SATA HDD	TOSHIBA 2.5" 160GB(MK1665GSX)
Chipset Information with XP Professional English SP3 32 Bit Driver Version	
Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1020(2009/08/26)
South Bridge	Intel QM57
Super IO Chipset	ITE8781F
VGA Chipset	Intel(R)GMA HD 6.14.10.5179(2009/11/9)
Audio Chipset	VIA VT1708B 6.0.1.7300 (2009/07/10)
Ethernet Chipset	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R)82574L Gigabit 11.1. 6.0(2009/07/13)

#### 3.1. USB Port Integration Test

Item	USB Port	Boot			Function(XP)			Note
		Pass	Fail	N/A	Pass	Fail	N/A	
USB HDD		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB FDD Mitsumi D353GUE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SONY USB2.0 DVD-R/W DRX-830UL		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Hub Test (Connect USB Device) HUB Port1: USB Keyboard / HUB Port2: USB Mouse / HUB Port3: USB HDD								
USB 2.0 HUB Power Sync / USB 2.0 4 Port HU-155					<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### 3.1-1. Peripheral Devices Test List

USB Port Integration Test		Result			Note
		Pass	Fail	N/A	
USB KB	1_ Microsoft Wired Keyboard600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2_ Lemel 5105U	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3_ Logitech Y-BP62a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB MS	1_ Logitech M-UV94	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2_ Microsoft X820471-004	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3_ Lemel Mini WEEH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Flash	1_ JetFlash 2A 4G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2_ Sandisk Ccuzer micro / 8G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3_ JetFlash V30 / 2G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	4_ Kingston DataTravelerII PLUS / 256M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB DISK	1_ FUJITS4 / 40G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2_ WD WD1600BEVE / 160G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Card Reader	1_ Multi Card Reader P8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB DVD_ROM	1_ LITEON DX-20A4PU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2_ SONY USB2.0 DVD-R/W DRX-830UL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3_ MSI UO881-P-22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	4_ Pioneer DVD-XD01-W	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB FDD	1_ MITSUMI D353FUE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB HUB	Power Sync / USB 2.0 4 Port HU-155	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	eSENSE 01-USE216	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 3.2. Burn In Test

Under Room Temperature: 26 °C

Test Item	Result			Note
	Pass	Fail	N/A	
BurnIn Test V6.0 Pro	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows XP Professional English SP3 32 Bit

Note: COM PORT Speed Set to 115200.

## 4. Time Accuracy Test

### 4.1. System Clock & RTC Clock Test

Under Room Temperature: 26 °C

Item Function	Time Interval	Margin for error	Actual	Result			Note
				Pass	Fail	N/A	
RTC Clock in Power On Mode	24 hrs	+/-2 sec	0 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
RTC Clock in Power Off Mode	24 hrs	+/-2 sec	+1 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 4.2. Monitor Timer Test

Installation	Actual		Note
Power On	2	Sec	Press the Power Button till recovery signal
Power OFF	2	Sec	Press the Power Button till no signal

## 5. O.S. Compatibility Test

### 5.1. English Fedora Core 12 – Kernel 2.6.31.5-127.fc12

[ ] No Support

Driver Information:

Chipset Software	System default
Graphics Media	System default
Audio Driver	System default
LAN Driver	System default
Touch Driver	eGalax Touch Version 5.6.0.6806

Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Fedora Core 12 – Kernel 2.6.31.5-127.fc12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Type uname -a

Test Result:

Test Item	Result			Note
	Pass	Fail	N/A	
<b>Display Function Test</b>				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Base Function Test</b>				
Mouse Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Keyboard Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB 2.0 Removable Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>X Windows Application</b>				
Start Button Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Office function
X-Window	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Startx – Desktop in Linux
<b>Command Test On Text Mode: Attention Delay Phenomenon</b>				
uname -a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Show information
Shutdown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Init 0 or shutdown -h now
Restart the Computer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Init 6 or shutdown -r now
Halt	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Power Off Mode
ls / clear .....; cd /dev /ls -l	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Command instruction

## 5.2. Windows 7 Ultimate English Version 32 Bit

[ X ] x32 Driver Information:

Chipset Software	AMD E-350 Processor (6.1.7600.16385 (2006/06/21))
Graphics Media	ATI WRESTLER 9802 ( 8.792.0.0 (2010/11/9))
Audio Driver	ALC892 8-Channel High Definition Audio 6.0.1.6251 ( 2010/11/23 )
LAN Driver	Realtek® 8111E PCIe Gigabit LAN 7.31.1025.2010 ( 2010/10/25 )
Touch Driver	eGalax Touch Version 5.6.0.6806

### Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Windows 7 Ultimate ACPI Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Test Results:

Test Item	Result			Note
	Pass	Fail	N/A	
<b>Single Display</b>				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Boot - Windows 7 Ultimate Advanced Options Menu</b>				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Basic Function Test</b>				
USB Mouse and Keyboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB 2.0 Removable Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Start Menu</b>				
Log off User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shut down (S5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Restart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hibernate (S4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 5.3. Windows XP Ultimate English Version 32 Bit

[ X ] x32 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1020(2009/08/26)
Graphics Media	Intel(R)GMA HD 6.14.10.5179(2009/11/9)
Audio Driver	VIA VT1708B 6.0.1.7300 (2009/07/10)
LAN Driver	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R)82574L Gigabit 11.1. 6.0(2009/07/13)
Touch Driver	eGalax Touch Version 5.6.0.6806

#### Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Windows XP Ultimate ACPI Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Test Results:

Test Item	Result			Note
	Pass	Fail	N/A	
<b>Single Display</b>				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Boot - Windows XP Ultimate Advanced Options Menu</b>				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Basic Function Test</b>				
USB Mouse and Keyboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB 2.0 Removable Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Start Menu</b>				
Log off User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shut down (S5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Restart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hibernate (S4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 6. Performance Test

Hardware Information with XP Professional English SP3 32 Bit Driver Version	
CPU	AMD E-350 Processor
Memory	DSL DDR3 1333 / 4GB CL9 ( ELPIDA J2108BCSE )
SATA HDD	TOSHIBA SATA 2.5" 160GB-MK1665GSX

### 6.1. Performance Test

Test Result: (Display set 1024\*768 test)

Testing Software	Scope		Note
	AAEON	Ref.	
<b>PCMark2002</b>			Only for Win 7
CPU	N/A	-	
Memory	7597	-	
HDD	1609	-	
Benchmark (A)	-	-	
<b>PCMark2005</b>			Windows 7
PC Mark	3143	-	PC Marks
CPU	3044	-	
Memory	2205	-	
Graphics	2707	-	
HDD	4530	-	
Benchmark (B)	-	-	
Average Efficiency	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>3Dmark2003 v360</b>			Only for Win 7
3Dmark Score	6124	-	
CPU Score	474	-	
Benchmark (A)	-	-	
<b>3Dmark2006 v110</b>			Windows 7
3Dmark Score	2564	-	
CPU Score	1095	-	
Benchmark (B)	-	-	
Average Efficiency	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Final Reality V1.01—Bench Mark Test</b>			Windows 7
2D image	26.94	-	
3D	5.29	-	
Bus transfer	9.51	-	
Overall	12.42	-	Reality marks
Benchmark (A)	-	-	

### 6.2. NOKIA Monitor Test

Under Room Temperature: 26 °C

Result

	Pass	Fail	N/A	
Nokia Monitor test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows 7 Ultimate English Version 32 Bit

### 6.3. Performance Test

Under Room Temperature: 26 °C

	Result			
	Pass	Fail	N/A	
Performance 7.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows 7 Ultimate English Version 32 Bit

### 6.4. Screens Test

Under Room Temperature: 26 °C

	Result			
	Pass	Fail	N/A	
Test Screens	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows 7 Ultimate English Version 32 Bit

### 6.5. Monitor Test

Under Room Temperature: 26 °C

	Result			
	Pass	Fail	N/A	
Monitor Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows 7 Ultimate English Version 32 Bit