

Report NO: 12P010002

# FOX-12D

## 12.1" IP67 Touch Display

### P5 Verification Test Report

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

Issue date

2012/03/05

Approval

Wayne Chen

Test Engineer

Louie Lee

**Version Released Records**

<b>Date</b>	<b>Version</b>	<b>Change History</b>	<b>Note</b>
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 will be updated when re-test completed in product next change version.

## Specification Verification

### Engineering Specification

Item	Specification	Result			Note
		Pass	Fail	N/A	
Product Name	FOX-12D series	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Construction	Aluminum front bezel & back chassis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Display	12.1", 1024x768, 500 nit, LED B/L (FOX-12DHTT) 12.1", 1024x768, 1000 nit, LED B/L (FOX-12DSTT)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Touch Screen	5-wire resistive Touch screen w/bonding technology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Front I/O	MENU / AUTO / UP / DOWN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rear I/O	M12 x 1 for RS-232 (for T/S) M12 x 1 for VGA M12 x1(3-pin) for 9~30Vdc power input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Side I/O	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mounting	VESA mount	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power Supply	DC Input 9~30 V w/ 3-in M12 connector w/ power adaptor 100~240 V, with 3-pin M12 female connector	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dimensions	Follow FOX-12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Front Button	OSD function MENU / AUTO / UP / DOWN /	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## O.S. Support

Item	Specification	Result			Note
		Pass	Fail	N/A	
Microsoft Windows	Windows XP Pro (32-bit )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Microsoft Embedded	Windows Embedded Standard 7	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Microsoft Windows	Windows 7 (32-bit & 64-bit)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Linux	Linux kernel 2.6.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## Environmental Specifications

Operating temperature	-10°C ~ 60°C
Storage temperature	14 ~ 158° F (-10 ~ 70° C)
Storage humidity	5 ~ 90% @ 40C, non-condensing
Vibration	1Grms, random, 5~500Hz, X/Y/Z axis
Shock	20G peak acceleration (11 msec. duration)
Drop	TBD (1 Corner, 3 Edge, 6 Surface)
EMC	CE /FCC class A

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

## Platform Information

Host :

Item	Device Information	Test Item
System Model	GES-5500F	1,2,3,4,5,6,7,8,9
PCB Board	IMBI-QM57 A1.0	1,2,3,4,5,6,7,8,9
BIOS / Version	GES -5500F BIOS Rev0.4 11/23/2010 16:38:37	1,2,3,4,5,6,7,8,9
CPU Type	Intel(R) Core(TM) CPU i5-520M 2.40GHz	1,2,3,4,5,6,7,8,9
Memory Type	DSL DDR3-1066 CL7 2GB (ELPIDATWVJ1108BDSE-DJ-F 0937R90WS10) *1	1,2,3,4,5,6,7,8,9
SATA HDD	Fujitsu MH72080BH G2 80GB	1,2,3,4,5,6,7,8,9
Operating System	<input checked="" type="checkbox"/> English Fedora 14 – Kernel 2.6.35.6-45.fc14.i686	6-1
	<input checked="" type="checkbox"/> Windows 7 Ultimate SP1 English Version 32bit / 64bit	6-2
	<input checked="" type="checkbox"/> English Windows XP Ultimate ACPI Mode	6-3
DC Adapter	DC Power Input 12V / 5A	1,2,3,4,5,6,7,8,9
	Chipset Information with Windows 7 Ultimate SP1 English Version 32 Bit Driver Version	
Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(2009/11/2)	
PCH Bridge	Intel QM57	
Super IO Chipset	ITE IT8718F	
VGA Chipset	Intel(R) HD Graphics 8.15.10.2238(2010/11/4)	
Audio Chipset	Realtek HD Audio 6.0.1.5854(2009/05/15)	
Ethernet Chipset	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R) Gigabit CT Desktop Adatper 11.0.103.0(2009/07/14)	

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# 1. OSD Control Function Test

## 1.1. OSD Control Test

OSD Control Function	Function			Note
	Pass	Fail	N/A	
LCD Backlight on/off	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Up	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Down	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Menu	<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	
Sound volume(0~100)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Image setting				
Auto Adjust	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VGA
Color Adjust	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VGA
Contrast (0~100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Brightness (0~100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sharpness (0~4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VGA
H. Position	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VGA
V. Position	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VGA
Color				
9300	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6500	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SRGB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
User	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	B	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OSD Menu				
OSD H.Pos. (0~100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OSD V.Pos. (0~100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OSD Timer (0~27)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signal Source(VGA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reset	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Exit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Language				
English	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fran9ais	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Deutsch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Espanol	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
中文繁體	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
中文簡體	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
日本語	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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"/>	
Stand by	<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	
DC power outlet / inlet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power On / Off	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Power LED	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
DC-IN CON	<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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Audio in	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Touch Screen ( RS232 Device )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Hub	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### 1.5. Mechanism construction check

Test Item	Result			Note
	Pass	Fail	N/A	
Case construction check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VGA construction check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Audio In construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Component check	<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 Windows 7 Ultimate SP1 English Version 32Bit Driver Version										
CPU	Intel(R) Core(TM) CPU i5-520M 2.40GHz									
Memory	DSL DDR3-1066 CL7 2GB (ELPIDATWNJ1108BDSE-DJ-F 0937R90WS10) *1									
SATA HDD	Fujitsu MH72080BH G2 80GB									
VGA	FOX-12D									
DVI	N/A									
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 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"/>	
800X600	<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"/>	
1024X768	<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"/>	
1152X864	<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"/>	
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 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"/>	
1280X768	<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"/>	
1280X960	<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"/>	
1280X1024	<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"/>	
1360X768	<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"/>	
1366X768	<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"/>	
1400X1050	<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"/>	
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 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"/>	
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rotation ( 0 / 90 /180 /270)

Note: Pay attention to 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dual Display Twin		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Extended Desktop		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dual Display Clone	VGA + LVDS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dual Display Twin		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Extended Desktop		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### 2.1.3. Video Resolution Test

Test points:

1. Power on and VGA connector is not plugged in until system reaches Windows desktop
2. Plug VGA connector into tested machine while system reaches Windows; then check VGA driver and display
3. Check VGA output Brightness to see if 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"/>	

### 2.1.4. VGA EDID Test

	Result			Note
	Pass	Fail	N/A	
EDID resolution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1024*768
EDID name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Display device on VGA







## 2.2. Audio Function Test

[ X ] No Support

Function Test	Result			Note	
	Pass	Fail	N/A		
L (Left) Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
R (Right) Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CD_In	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Line In	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
MICROPHONE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
6-channel mode for 5.1 speaker output	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
8-channel mode for 7.1 speaker output	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
S/P DIF function Test	Input	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Output	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

## 2.3. LAN Function Test

[ X ] No Support

Connect two computers via different speed LAN HUB by using "Ping" instruction (1000 times)										
1000MBps LAN HUB			D-Link DGS-1008D							
100MBps LAN HUB			HP J4095A 24 Ports							
10MBps LAN HUB			SVEC FD916H							
OnBoard LAN1								MAC Address		
OnBoard LAN2								MAC Address		
LAN Speed	Link / Active LED	Speed LED	LAN 1			LAN 2			Note	
			Pass	Fail	N/A	Pass	Fail	N/A		
1000MBps			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
100MBps			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10MBps			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Wake On LAN			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Boot ROM to Novell 4.11 [RPL]			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
LAN Boot (PXE)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Internet Browser (DHCP Server)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

### 2.3.2. Throughput Test

[ X ] No Support

DUT Platform Information:

<input type="checkbox"/>	<b>Fedora Core 13</b>
<input type="checkbox"/>	<b>Cent 5.5</b>
<input type="checkbox"/>	<b>Ubuntu 10.1</b>
<input type="checkbox"/>	<b>Red Hat</b>

Note : Connection-Level Performance (Interaction Constants Duration Time Set to 60 Sec.)

Graphics Media	N/A
LAN	N/A
Audio Driver	N/A

SMB Platform Information:

Chassis	SPIRENT Smartbits 600B
Chassis Version	2.80.003 (Cur) 2.50.000
Chassis Serial #	06014047
Library	6.00-29
API	5.50.42.01
File	0550042
Module	2 * LAN-3324A SmartMetrics XD 4-Port 10/100/1000Base-T Gigabit Ethernet
Test Software	SmartFlow5.50.42.1

Test Result: No Support

### 2.4. Optional Function Test

[ X ] No Support

Function Test	Result			Note
	Pass	Fail	N/A	
3G Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GPRS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Wireless LAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bluetooth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 2.5. LCD Monitor Test

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

### 3. Integration Test

Hardware Information with Windows 7 Ultimate SP1 English Version 32 Bit Driver Version	
CPU	Intel(R) Core(TM) CPU i5-520M 2.40GHz
Memory	DSL DDR3-1066 CL7 2GB (ELPIDATWVJ1108BDSE-DJ-F 0937R90WS10) *1
SATA HDD	Fujitsu MH72080BH G2 80GB
Chipset Information with Windows 7 Ultimate SP1 English Version 32 Bit Driver Version	
Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(2009/11/2)
PCH Bridge	Intel QM57
Super IO Chipset	ITE IT8718F
VGA Chipset	Intel(R) HD Graphics 8.15.10.2238(2010/11/4)
Audio Chipset	Realtek HD Audio 6.0.1.5854(2009/05/15)
Ethernet Chipset	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R) Gigabit CT Desktop Adatper 11.0.103.0(2009/07/14)

#### 3.1. USB Port Integration Test

Item	USB Port	Boot			Function(Win7)			Note
		Pass	Fail	N/A	Pass	Fail	N/A	
USB HDD		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB FDD Mitsumi D353GUE		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ASUS SDRW-08D2S-U 8X DVD RW		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB Hub Test (Connect USB Device) HUB Port1: USB Keyboard / HUB Port2: USB Mouse / HUB Port3: USB HDD								
USB 2.0 HUB PowerSync / USB 2.0 4 Port HU-155					<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

#### Peripheral Devices Test List

USB Port Integration Test		Result			Note
		Pass	Fail	N/A	
USB KB	1_Microsoft Wired Keyboard600	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	2_Logitech Y-U0011	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB MS	1_Logitech M-U0003	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	2_Microsoft 1113	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB Flash	1_ADATA C801 4GB	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	2_ADATA C802 4GB	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB DISK	1_Transcnd TS500GSJ25D3 500GB	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	2_Generic External USB device 250GB	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB Card Reader	1_Transcnd Multi Card Reader M3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB DVD_ROM	1_ASUS SDRW-08D2S-U 8X DVD RW	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	2_Aopen EDR8865U DVD ROM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB FDD	1_MITSUMI D353FUE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB HUB	1_PowerSync / USB 2.0 4 Port HU-155	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	2_eSENSE 01-USE216	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### 3.2. Digital I/O Port Test

No Support

DIO Address ( ___ )	Result			Notes
	Pass	Fail	N/A	
DIO VCC +5V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 3.3. COM Port Integration Test

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
Serial Modem Dial Out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Serial Modem Ring In	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Modem
Serial Modem +12V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Multimeter
Serial Modem +5V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Multimeter

### 3.4. RS-422 / RS-485 Test

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
RS-422 for COM2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Use loopback and WINSSD.exe to test RS-422 port in Windows
RS-485 for COM2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Use ICP CON I-7044D D/IO Module in Windows(Support Auto flow control)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The communication between the RS-485 pots of two boards is linked by one 100m cable on Windows Terminal

### 3.5. LPT Port Test

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
XEROX Phaser 3124 Laser Printer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 3.6. 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 7 Professional English SP3 32 Bit

Note: COM PORT Speed Set to 115200.

## 4. Application Test

### 4.1. PCI Slot Function (PCI Adapter Card) Test

[ X ] No Support

Adapter VGA Card	Set Simultaneous Display and Reboot			Note
	Pass	Fail	N/A	
CHAINTECH NVIDIA GeForce4 MX440-8X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter Sound Card	Play Sound			Note
	Pass	Fail	N/A	
Creative Sound BLASTER Live5.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter SCSI Card	Copy files to SCSI HDD			Note
	Pass	Fail	N/A	
ADAPTEC Ultra160 SCSI ASC-29160	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter Image Capture Card	Connect to CCD			Note
	Pass	Fail	N/A	
I-VIEW CP-1400AS (with Age STD-477FAI CCD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter LAN Card	Connect to Internet			Note
	Pass	Fail	N/A	
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
INTEL PWLA8391GTBLK Pro/1000 Giga LAN Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter RAID Card	RAID 0 , 1 , 10 Function Test			Note
	Pass	Fail	N/A	
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 4.2. PCI-Express Function Test

[ X ] No Support

PCI-Express x1	Function Test			Note
	Pass	Fail	N/A	
SUNIX SATA1414 eSATA & SATAII x1Express card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sysconnect SK-9E21D 10 /100/1000 Base-T Adapter PCI-Express x1 LAN Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCI-Express x4	Function Test			Note
	Pass	Fail	N/A	
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCI-Express x16	Function Test			Note
	Pass	Fail	N/A	
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
WINFAST PX6200 TC TDH PCI-Express x16 VGA Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Express card	Function Test			Note
	Pass	Fail	N/A	
SUNIX SATA II Express card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SunBox 34mm Giga LAN Express Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mini PCI Express Card	Function Test			Note
	Pass	Fail	N/A	

Ralink RT2571WF WLAN Mini Card (USB Interface)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sil3132 Mini PCI-E Function Test Card (USB Interface)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### 4.3. Mini PCI Card Compatibility Test

No Support

Device Item	Function Test			Note
	Pass	Fail	N/A	
Mini PCI.10/100 Base-Tx LAN (W/Intel.82551QM .A1.0) (Model:PER-C10L)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ADLINK mPCI-8750 ATI Rage XL Mini PCI VGA Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### 4.4. CardBus (PCMCIA) Compatibility Function Test

No Support

Device Item	Bit	Function Test			Note
		Pass	Fail	N/A	
Intel PRO/Wireless 2011B LAN PC Card (WPC2011BWW)	Slot 1 (Up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200200]
	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Kingston datapack DP-PCM2 / 2GB (PC Card TypeII HDD)	Slot 1 (Up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200201]
	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II	Slot 1 (Up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200502]
	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200502]

#### 4.5. ISA Slot Function Test

No Support

Test Item	Result	Result			Note
		Pass	Fail	N/A	
SCSI Card Adaptec AHA-1520B SCSI Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[SS-002]
LAN Card NE2000 Compatible LAN Card (RTL8019AS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[NW-014]
VGA Card CIRRUS LOGIC 5429 FCC ID:ICUVGA-GWV27A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[VC-008]

#### 4.6. Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104

##### 4.6.1. Device List: PC/104 Module

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PCM-3660	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### 4.6.2. Device List: PC/104+ Module

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PCM-3430	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.6.3. Device List: PCI-104 Module**

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PCM-3730	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.6.4. Device List: PCI/104 Express Module**

No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PER-123	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.7. SSD Modules Compatibility Test**

SSD HDD Compatibility Test:  No Support.

Cable Type:  IDE  SATA2  MLC  SLC

Test Item	Result			Notes
	Pass	Fail	N/A	
Transcend SSD 16G - TS16GSSD25S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.8. Peripheral Compatibility- Storage Device Test**

**4.8.1. Disk on Chip (DOC) Test**  No Support.

Test Item		Result			Notes
		Pass	Fail	N/A	
DOC 2000 Model	16MB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M-System / MD2200-D16
DOC 2000 Onboard Address	CC00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	D000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	D400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	D800	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DC00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.8.2. Disk on module (DOM) Test**

No Support.

Test Item	Result			Notes
	Pass	Fail	N/A	
Transcend / TS512MDOM40V / 512MB / IDE 40 Pin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Transcend / TS512MDOM44V / 512MB / IDE 44 Pin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



#### 4.9. Riser Card Function Test

No Support.

Test Item	Result			Note
	Pass	Fail	N/A	
LAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCI Slot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCI-e Slot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 5. Time Accuracy Test

#### 5.1. System Clock & RTC Clock Test

No Support.

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	Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
RTC Clock in Power Off Mode	24 hrs	+/-2 sec	Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

#### 5.2. Monitor Timer Test

No Support

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

#### 5.3. Watchdog Timer Test

No Support.

Use Function as below:

Time-Out Interval	Margin for error	Actual	Result			Note
			Pass	Fail	N/A	
10 sec	+/-2 sec	Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
60 sec	+/-2 sec	Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
255 sec	+/-2 sec	Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Note : Under Room Temperature: 26°C / DOS Mode

## 6. O.S. Compatibility Test

### 6.1. English Fedora 14 – Kernel 2.6.35.6-45.fc14.i686

[ ] No Support

Driver Information:

Chipset Software	System default
Graphics Media	System default
Audio Driver	System default
LAN Driver	System default

Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Fedora 14 – Kernel 2.6.35.6-45.fc14.i686	<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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Network Function Test</b>				
Connect to Internet – LAN 1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Connect to Internet – LAN 2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Audio Function Test</b>				
Line Out Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line In Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Touch Function Test</b>				
Left key Function Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Right key Function Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Draw Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Multi-touch	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Base Function Test</b>				
Mouse Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Keyboard Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Console Redirection	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CD-ROM Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB 2.0 Removable Devices	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>X Windows Application</b>				
Start Button Office	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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

## 6.2. Windows 7 Ultimate SP1 English Version 32/64Bit

[ X ] x32 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(2009/11/2)
Graphics Media	Intel(R) HD Graphics 8.15.10.2238(2010/11/4)
Audio Driver	Realtek HD Audio 6.0.1.5854(2009/05/15)
LAN Driver	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R) Gigabit CT Desktop Adatper 11.0.103.0(2009/07/14)

[ X ] x64 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(2009/11/2)
Graphics Media	Intel(R)GMA HD 8.15.10.1995(2009/11/6)
Audio Driver	Realtek HD Audio 6.0.1.5854(2009/05/15)
LAN Driver	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R) Gigabit CT Desktop Adatper 11.0.103.0(2009/07/14)

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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LVDS -- Full Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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>				
PS/2 Mouse and Keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB Mouse and Keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
COM Port Mouse detect	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LPT1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB 2.0 Removable Devices	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Touch Function Test</b>				
Left key Function Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Right key Function Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Draw Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Beep	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Beep from sound card
<b>Audio Function Test</b>				
Line Out Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line In Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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(S1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby(S3)	<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"/>	

### 6.3. Windows XP Professional English Version 32bit

[ X ] x32 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(2009/11/2)
Graphics Media	Intel(R)GMA HD 6.14.10.5179(2009/11/9)
Audio Driver	Realtek HD Audio 5.10.0.5854(2009/05/15)
LAN Driver	Intel(R)82577LM Gigabit 11.2.19.0(2009/09/23) Intel(R) Gigabit CT Desktop Adatper 11.1.6.0(2009/07/13)

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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LVDS -- Full Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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>				
PS/2 Mouse and Keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB Mouse and Keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
COM Port Mouse detect	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LPT1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB 2.0 Removable Devices	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>LAN Function Test</b>				
LAN1 --- Auto	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LAN2 --- Auto	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Touch Function Test</b>				
Left key Function Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Right key Function Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Draw Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Beep	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Audio Function Test</b>				
Line Out Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line In Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Microphone Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
S/P DIF Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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(S3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby(S1)	<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"/>	

## 7. BIOS Function Test

[ X ] No Support.

Hardware Information with XP Professional English SP3 32 Bit Driver Version	
CPU	N/A
Memory	N/A
HDD/CFD	N/A

### 7.1. Boot Sequence Test

Test Item	Result			Note
	Pass	Fail	N/A	
Floppy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hard Disk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removable (All Device Priority)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CDROM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB HDD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Floppy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB CD-ROM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN [ Boot From LAN First ]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Check "Halt on" item – All error but K/B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 7.2. Power Management Test

#### 7.2.1. APM Power Management Test

Test Item	Setting Test	Result			Note
		Pass	Fail	N/A	
Suspend Mode	Function Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power Button	Delay 4 Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soft-Off By PWRBTN
Power Button	Instant-Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soft-Off By PWRBTN

#### 7.2.2. ACPI Power Management Test

Test Item	Result			Note
	Pass	Fail	N/A	
Enable ACPI Auto Configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Enable Hibernation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	From Windows 7
ACPI - S1 (POS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Resume from PS/2 keyboard or mouse.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Resume from USB keyboard or mouse.
ACPI - S3 (STR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Suspend Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 7.3. Power On after Power Failure Test

Test Item	Result			Note
	Pass	Fail	N/A	
Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
On	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Former-Sts (Auto)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 7.4. AAEON Tag Check Utility

Test Item	Result			Note
	Pass	Fail	N/A	
Check AAEON BIOS OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AONCHECK.EXE

### 7.5. TPM Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
No Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Enable & Active	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Disable & Disactive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detect TPM device under Windows.

### 7.6. IAMT Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
IAMT Function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 7.7. Supervisor / User Password Test

Test Item	Result			Note
	Pass	Fail	N/A	
Supervisor Password	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
User Password	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 7.8. CAN port Function Test

Basic Function Test					
Test Item	Interrupt: Polling or IRQ	Result			Note
		Pass	Fail	NA	
CAN1 transmits CAN2	CAN1:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	CAN2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CAN2 transmits CAN1	CAN2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	CAN1:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Note: Sets the interrupt for each port. Be sure that this setting matches the IRQ

## 8. Performance Test

Hardware Information with Windows 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel(R) Core(TM) CPU Celeron B810 1.6GHz
Memory	DSL DDR3 1333/4GB CL9 ELPIDA J2108BCSE-DJ-F
SATA HDD	TOSHIBA MK1676GSX 160G 2.5"

### 8.1. Performance Test

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

Testing Software	Scope		Note
	AAEON	Ref.	
<b>PCMark2002</b>			Only for Win 7
CPU	-	-	
Memory	21100	-	
HDD	2433	-	
Benchmark (A)	-		
<b>PCMark2005</b>			Windows 7
PCMark	4491	-	PCMarks
CPU	4256	-	
Memory	5651	-	
Graphics	2604	-	
HDD	5219	-	
Benchmark (B)	-		
Average Efficiency	-		

Testing Software	Scope		Note
	AAEON	Ref.	
<b>3Dmark2003 v360</b>			Only for Win 7
3Dmark Score	5780	-	
CPU Score	1006	-	
Benchmark (A)	-		
<b>3Dmark2006 v110</b>			Windows 7
3Dmark Score	2746	-	
CPU Score	1652	-	
Benchmark (B)	-		
Average Efficiency	-		

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Final Reality V1.01—BenchMark Test</b>			Windows 7
2D image	33.87	-	
3D	4.86	-	
Bus transfer	38.7	-	
Overall	18.64	-	Reality marks
Benchmark (A)	-		

## 8.2. 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 [Nokia monitor] is the test program.

## 8.3. 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

## 8.4. 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

## 8.5. 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



## 9. Battery Test

[ X ] No Support.

### 9.1. Power Charge LED Test

Power Charge LED Test	Result			Note
	Pass	Fail	N/A	
Plug the AC Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Unplug the AC Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Windows Battery icon Test	Result			Note
	Pass	Fail	N/A	
Plug the AC Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Unplug the AC Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 9.2. Battery Life/Thermal Test

Battery Charge Time	Actual		SPEC		Note
Windows XP SP3 Without running any Software		mins		mins	Power level 0% charge to 99%
Battery Thermal Test					(Power level charge to 99%)
Battery Life Time	Actual		SPEC		Note
Windows XP SP3 with Prime 95 Full Loading Test		mins		mins	Power used 99% to 0%
Windows XP SP3 Without running any Software		mins		mins	Power used 99% to 0%

### 9.3. Power Option Alarm Test

Low Battery Alarm Actions	Result			Note
	Pass	Fail	N/A	
Display the low power message (Power level reach to 30%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby (Power level reach to 20%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hibernate (Power level reach to 10%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shut down (Power level reach to 3%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	