

# QE 【Workstation / Panel PC】

## P5 Verification Test Plan

Release No : 07P010008

Product Model	<b>AEC-6860</b>
Description	<b>AEC-6860 Embedded Controller</b>
Test Configuration	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> System : BOXER AEC-6860 A1.0 (GENE-9310 A1.0-A) <input checked="" type="checkbox"/> BIOS : AEC-6860 BIOS Rev 1.0(03/30/2007) <input checked="" type="checkbox"/> I/O Board : PCB:1907T06802 A0.3  <input checked="" type="checkbox"/> M/B Chipset : <input checked="" type="checkbox"/> CPU Type : Intel Core 2 Duo CPU(FSB533/667MHz) <input checked="" type="checkbox"/> North Bridge : Intel 945GM <input checked="" type="checkbox"/> South Bridge : ICH7-M DH (82801 GHM) <input checked="" type="checkbox"/> VGA Chipset : Intel 945GM <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655-LF <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82573l <input checked="" type="checkbox"/> I/O Chipset : ITE IT-8712KX <input checked="" type="checkbox"/> TV Chipset : Intel 945GM  <input checked="" type="checkbox"/> Remark : AEC-6860 A1.0 QE NPDP P5 External Report
<b>Test Result Summary</b>	
<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____ _____	

*2007/06/08*

Issue date

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**There are 3 test results in this document; they are described as follows:**

- Pass: Function worked perfectly
- Fail: Function failed and must be modified in the next version
- N/A: Outside of specification or no test equipment

**Platform Information:**

Item	Device Information	Test Item
PCB Model / Version	BOXER AEC-6860 A1.0 (GENE-9310 A1.0-A)	1,2,3,4,5,6,7,8,9,10,11
BIOS / Version	AEC-6860 BIOS Rev 1.0(03/30/2007)	1,2,3,4,5,6,7,8,9,10,11
CPU Type	Intel Core 2 Duo T5500 / 1.66GHz	1,2,3,4,5,6,7,8,9,10,11
Memory Type	Apacer DDRII 533 MHz 512MB	1,2,3,4,5,6,7,8,9,10,11
Primary IDE Master	Fujitsu 2.5" MHV2040AT 40GB	1,2,3,4,5,6,7,8,9,10,11
Primary IDE Slave	TEACD-224E-N83 Slim CD-ROM	N/A
CRT	ViewSonic E70 17"	1,2,3,4,5,6,7,8,9,10,11
LCD	N/A	N/A
Compact Flash	N/A	N/A
I/O Board	PCB:1907T06802 A0.3	1,2,3,4,5,6,7,8,9,10,11
Riser Card	N/A	1,2,3,4,5,6,7,8,9,10,11
Operating System	[ ] Linux-RedHat 9.0 or [X ] Fedora Core 6.0	9
	Windows Server 2003 English Version / Standard Edition 5.2.3790	N/A
	Windows XP Professional English Version V2002 Service Pack 2	1,2,3,4,5,6,7,8,9,10,11
	Windows 2000 Professional English Version V5.00.2195 Service Pack 4	9
	Windows 98SE English Version V4.10.2222A	N/A
	Windows NT Workstation 4.0 English Version Service Pack6	N/A
	MS-DOS 6.22	N/A
Power Supply	ATX Power	N/A
	AT Power	N/A
	DC Input 9~30V (Phoenix connector)	1,2,3,4,5,6,7,8,9,10,11
	Optional AC power adapter , input voltage range 100~240 V	

## Test Result for Certification

### 1. Dynamic / Boot\_UP Burn\_In Test

PCB Model / Version	BOXER AEC-6860 A1.0 (GENE-9310 A1.0-A)
BIOS	AEC-6860 BIOS Rev 1.0(03/30/2007)
Operating System	Windows XP / Run PassMark Burn In Test Pro 4.0
CPU	Intel Core 2 Duo T5500 / 1.66GHz
Memory	Twin Mos DDRII 533 512MB SDRAM / V59C1512804QBF31(Wide Temp)
Primary IDE Master	Fujitsu 2.5" MHT2040AC 40GB
Primary IDE Slave	TEACD-224E-N83 Slim CD-ROM
CRT	ViewSonic E653 15"
LCD	N/A
Compact Flash	PQI Type I 4GB
Backplane	N/A
Riser Card	N/A
I/O Board	PCB:1907T06802 A0.3
Inverter	N/A
Touch Panel	N/A
Chipset Software	Intel Chipset Software Installation Utility Ver:8.1.1.1001(05/23/2006)
VGA Chipset / Driver Version	Mobile Intel(R) 945GM Express Chipset Family Ver:6.14.10.4670(2006/08/14)
LAN Chipset / Driver Version	Intel(R) PRO/1000PL Network Connection Ver:9.5.12.0(7/26/2006)
Audio Chipset / Driver Version	Realtek AC97 Audio Ver:5.10.0.6180(10/13/2006)
DC Power	DC Input 9~30V (Phoenix connector)
Adapter	FSP FSP120-AAB AC Power Adapter ,input voltage range 100V~240V (DC Output: 19V)

#### 1.1. HDD (Wide Temp.)

Test Method	Test Condition	Result		
		Pass	Fail	N/A
Diagnostics Software Burn-In Test.	-5°C ~55°C , 0%RH~90%RH, 48 hrs	X		
Power On/Off Test.	-15°C ~50°C , 0%RH~90%RH, 24hrs			X
High Temperature Storage Test (Just for PPC)	70 °C (48 Hours)	X		
Low Temperature Storage Test (Just for PPC)	-20 °C (48 Hours)	X		
Humidity Test (Just for PPC)	40 °C/95%RH (48 Hours)	X		
Cold Start Test (Just for PPC)	-5 °C (Doing 50 times Power On/Off)	X		

#### 1.2. Compact Flash

Test Method	Test Condition	Result		
		Pass	Fail	N/A
Diagnostics Software Burn-In Test.	-20°C ~60°C , 0%RH~90%RH, 48 hrs	X		
Power On/Off Test.	-15°C ~50°C , 0%RH~90%RH, 24hrs			X
High Temperature Storage Test (Just for PPC)	70 °C (48 Hours)	X		
Low Temperature Storage Test (Just for PPC)	-20 °C (48 Hours)	X		
Humidity Test (Just for PPC)	40 °C/95%RH (48 Hours)	X		
Cold Start Test (Just for PPC)	-20 °C (Doing 50 times Power On/Off)	X		

## 2. Power On and Reset Test

Test Method	Test Condition	Result		
		Pass	Fail	N/A
Power On/Off Test in DOS Mode-100V Power Function Test	10 times in Room Temperature	X		
Power On/Off Test in DOS Mode-210V Power Function Test	10 times in Room Temperature	X		
KB Reset in Dos Mode-110V Power Function Test	20 times in Room Temperature	X		
Hardware Reset in Dos Mode-110V Power Function Test	20 times in Room Temperature	X		

## 3. OSD Control Function Test

Test Method	Test Condition	Result		
		Pass	Fail	N/A
OSD Control Test	OSD Control Function			X
OSD – On Screen Display Test	OSD –On Screen Display			X
OSD Light Test	OSD Control Function			X

## 4. I/O Peripheral Function Test

I/O Peripheral Function Test –I/O Function	Result		
	Pass	Fail	N/A
Floppy Connector / Driver A:			X
Primary IDE Master	X		
Primary IDE Slave	X		
Secondary IDE Master (Reserved for CF Card)			X
Secondary IDE Slave (Reserved for CF Card)			X
Third IDE Master			X
Third IDE Slave			X
RAID 0 Function Test	X		
RAID 1 Function Test	X		
SATA1 / Serial ATA Connector 1	X		
SATA2 / Serial ATA Connector 2	X		
SATA3 / Serial ATA Connector 3			X
SATA4 / Serial ATA Connector 4			X
Compact Flash – Type I	X		
Compact Flash – Type II	X		
DOC (Disk On Chip)			X
DOM (Disk On Module) – 40 Pin			X
DOM (Disk On Module) – 44 Pin	X		
COM 1	X		
COM 2-232	X		
COM 2-422	X		
COM 2-485	X		
COM 2-Ring /+5V /+12V	X		
COM 3	X		
COM 4	X		
COM 5			X
COM 6			X

PS/2 Mouse & Keyboard (Internal)			X
PS/2 Mouse & Keyboard (External)	X		
Audio Connector	X		
Audio 5.1 Channel / S/P DIF			X
LPT 1			X
LPT 2			X
SIR / 115.2 Kbps			X
FIR / 4M bps			X
USB 1/2 Ports	X		
USB 3/4 Ports	X		
USB 5/6 Ports			X
USB 7 Ports			X
USB 2.0 1/2 Ports	X		
USB 2.0 3/4 Ports	X		
USB 2.0 5/6 Ports			X
USB 2.0 7 Ports			X
DVI Function	X		
DIO Connector			X
Card Bus			X
PC/104			X
PC/104-Plus			X
PCI-104			X
TFT TTL LCD			X
TFT LVDS LCD	X		
TV-out / S Terminal	X		
TV-out / AV Terminal			X
Touch Screen – 8 Wire			X
Touch Screen – 5 Wire			X
DIMM Slots	X		
Watchdog IRQ n			X
Watchdog Software Control	X		
CPU FAN Connector			X
System FAN Connector			X
Onboard IDE LED			X
Onboard Power LED			X
<b>Front Panel</b>	<b>Result</b>		
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
Power On Button	X		
IDE LED	X		
External Buzzer			X
On Board Buzzer	X		
Power LED	X		
Reset Switch	X		
Keyboard Lock			X
<b>Jumpers Function</b>	<b>Result</b>		
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>

ATX simulates AT				X
Audio Out Selection (W/O & W/ Amplifier)				X
LCD Power Select				X
COM1-Ring/5V/12V Selection				X
COM2-Ring/5V/12V Selection		X		
COM2 RS-232/422/485 Selection (Depends on BIOS)				X
COM3-Ring/5V/12V Selection				X
COM4-Ring/5V/12V Selection				X
Clear CMOS				X
Touch Screen Operating Mode Selection				X
Clock Shift of TFT LCD				X
<b>Power Connector &amp; Function</b>		<b>Result</b>		
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
5V only Power for Big 4P				X
ATX Power Connector				X
ATX Power_12V Connector				X
AT Power Connector				X
Big 4P Power Connector				X
Mini 4P Power Connector				X
External Power Connector(9v~30V)		X		
Option ATX Power Connector (PS-ON / +5VSB)				X
<b>LAN Connector &amp; Function</b>		<b>Result</b>		
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
LAN Speed LED	LAN1	X		
	LAN2			X
LAN Active LED	LAN1	X		
	LAN2			X
LAN Link LED	LAN1	X		
	LAN2			X
LAN 10/100 Ethernet		X		
LAN 1G Ethernet		X		
<b>PCI Connector &amp; Function</b>		<b>Result</b>		
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
Mini PCI Slots		X		
PCI Slots				X
PCI Express				X

### 5. Power Consumption Test (Run Prime95 Program)

Model	Test Environment				Note
	DC Power Supply: INSTEK PSH-3630				
	CPU: Intel Core 2 DuoT7200 2.0G		CPU: Intel Core 2 DuoT55001.66G		
Os Environment	English Windows XP Professional SP2		English Windows XP Professional SP2		
Normal Mode (+9V)	4.03	A	3.60	A	
Suspend Mode (+9V)	2.04	A	2.03	A	
Normal Mode (+12V)	3.01	A	2.63	A	
Suspend Mode (+12V)	1.23	A	1.52	A	
Normal Mode (+24V)	1.52	A	1.40	A	
Suspend Mode (+24V)	0.87	A	0.82	A	
Normal Mode (+28V)	1.19	A	1.16	A	
Suspend Mode (+28V)	0.75	A	0.68	A	

### 6. Timer Accuracy Test

System Clock & RTC Clock Test					
Test Method	Margin for error	Result			
		Pass	Fail	N/A	
System Clock in Power On Mode	±3 second during 24 hours	X			
RTC Clock in Power On Mode	±3 second during 24 hours	X			
RTC Clock in Power Off Mode	±3 second during 24 hours	X			
Watchdog Timer Test		Result			
		Pass	Fail	N/A	
Time-out Interval	10 sec	X			
	60 sec	X			
	255 sec	X			

### 7. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1 LED		Active LED				X		
		Link LED				X		
		Speed LED				X		
LAN2 LED		Active LED						X
		Link LED						X
		Speed LED						X
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
Onboard LAN1	10/1000 Mbps	HP J4095A 24 Ports	100M	100 Mbps	100 Mbps	X		
		D-Link DGS-1008T	100M	1Gbps	1Gbps	X		
		Intel InBusiness 8 Ports	100M	100 Mbps	100 Mbps	X		
		LEMEL LM-S5 5 Ports	100M	100 Mbps	100 Mbps	X		
		Accton Desktop-3005	100M	100 Mbps	100 Mbps	X		
		SVEC FD916H	100M	10 Mbps	10 Mbps	X		



## 8. Hardware Compatibility

CPU Compatible Test						
Type	Clock Speed	FSB	Prime95 Version	Result		
				Pass	Fail	N/A
Intel Core 2 Duo T7200	2.00GHz	533MHz	V2414	X		
Intel Core 2 Duo T5500	1.66GHz	533MHz	V2414	X		
Memory Compatibility Test						
Brand / Memory Size	Chipset	Frequency	MemTest86 Version	Result		
				Pass	Fail	N/A
DSL/512MB	ELPIDA E5108AGBG	667MHz	V1.65	X		
Apacer/512MB	V59C1512804QBF31	533 MHz	V1.65	X		
Apacer/1GB	V59C1512804QBF31	667 MHz	V1.65	X		
Audio Basic Function Test				Result		
				Pass	Fail	N/A
System Sound				X		
CD_In						X
CD_In Sound Recorder						X
Play Sound Recorder				X		
Line Out				X		
Line In				X		
Line In Sound Record				X		
MIC Speaker		Dynamic		X		
		Condenser		X		
MIC Sound Recorder		Dynamic		X		
		Condenser		X		
Audio 5.1 Channel with S/P DIF Function Test				Result		
				Pass	Fail	N/A
2-channel mode for stereo speaker output						X
4-channel mode for 4 speaker output						X
6-channel mode for 5.1 speaker output						X
8-channel mode for 7.1 speaker output						X
S/P DIF function Test		Input				X
		Output				X
On Board TV Function Test				Result		
				Pass	Fail	N/A
NTSC		AV Terminal				X
PAL						X
NTSC		S Terminal		X		
PAL				X		
On Board LCD Function Test						

TFT LCD	Type	Voltage	Result		
			Pass	Fail	N/A
LVDS	AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	3.3V	X		
	AU B104SN02 / 10.4" / 800*600 / 18bit (4:3)	3.3V	X		
	Hyundai HT12X11-200 / 12.1" / 1024*768 / 18bit (4:3)	3.3V	X		
	AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)	3.3V			X
	AU M170EG01 / 17" / 1280*1024 / 48bit (4:3)	5V			X
	AU M201UN02 V.5 / 20.1" / 1600x1200 / 48bit (4:3)	5V			X
TTL	Toshiba LTM10C209A / 10.4" / 640*480 / 18bit (4:3)	5V			X
	NEC NL8060AC31-12 / 12.1" / 800*600 / 18bit (4:3)	3.3/5V			X
	Sharp LQ121S1DG11 / 12.1" / 800*600 / 18bit (4:3)	3.3V			X
	LG LM151X2-C2TH / 15.1" / 1024x768 / 18bit (4:3)	3.3V			X
	Fujitsu FLC38XGC6V-06 / 15" / 1024*768 / 36bit (4:3)	5V			X

**PCI Slot Function (PCI Adapter Card) Test**

Model	Type	Result		
		Pass	Fail	N/A
CECUBE GC-R9250PCI-D3 (ATI REDEON9250 256MB)	VGA Card			X
CHAINTECH NVIDIA GeForce4 MX440-8X	VGA Card			X
SC3000 CMI8738/C3DX	Sound Card			X
Takram DC-395U V1.02	SCSI Card			X
ADAPTEC Ultra160 SCSI ASC-29160	SCSI Card			X
I-VIEW CP-1400AS (with Age STD-477FAI CCD)	Capture Card			X
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN Card			X
ADMtek AN983B Ethernet Adapter	LAN Card			X
D-Link DGE-530T 1000BASE-T Gigabit Ethernet Adapter	LAN Card			X
D-Link DWL-520+ Wireless LAN	LAN Card			X
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	RAID Card			X
D-Link DU-520 USB 2.0	USB Hub Card			X
Tekram TR-822 Serial ATA 150 [SA-001] + SATA HDD Seagate ST3120026AS 120GB	SATA Card			X

**ISA Slot Function Test**

	Result		
	Pass	Fail	N/A
Creative CT4170 Sound Blaster Sound Card			X
Adaptec AHA-1510/20/22B SCSI Card			X

**PCI-Express Function Test**

Model	Result		
	Pass	Fail	N/A
SksKconnect SK-9E21D 10/100/1000Base-T Adapter PCI-Express X1 LAN Card			X
WinFast PX6200 TC TDH PCI-Express X16 VGA Card			X
ASUS EAX1600PRO PCI-Express x16 VGA Card			X

**HDD Compatibility Test**

Model	Result

	Pass	Fail	N/A
FUJITSU / MHT 2020AC / 20GB / ATA-100	X		
FUJITSU / MHV 2040AT / 40GB / ATA-100	X		
FUJITSU / MHV 2040BT / 40GB / ATA-100/S-ATA	X		
Seagate / ST98823AS / 80GB / ATA100/S-ATA	X		
Seagate / ST3160811AS / 160GB/ATA100/S-ATA	X		
Quantum / Fireball Plug AS / 30GB / ATA-100			X
Seagate / ST380013A / 80GB / ATA-100			X
Western Digital/WD400BB-75DEA0 / 40GB / ATA-100			X
Western Digital/WD8800JD-00LSA0 / 80GB / ATA-100/SATA			X

### IDE and SATA Device Full Loading Test

Model	Result		
	Pass	Fail	N/A
TEAC CD-ROM CD-540E 40X			X
BenQ DW1655 OB2 16 x DVD ReWriter			X
Acer DVP1640A / 16X / DVD-ROM / ATA33			X
Pioneer / DVR-A11FXC1 / 8X DVD-RW / 6X DVD-RW / ATA66			X
Pioneer / DVD-126D / 16X / DVD-ROM / ATA66			X
Pioneer / DVD-121 / 16X / DVD-ROM / ATA66			X
SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X / ATA33			X
IBM HL-DT-ST / GCR 8480B-48X /CD-ROM ATA33			X

### IDE Cable Function test

IDE Model	Result		
	Pass	Fail	N/A
40 Pin Cable ATA100			X
44 Pin Cable ATA33	X		
80 Pin Cable ATA100			X

### USB Function Test

USB Basic Function Test	Result		
	Pass	Fail	N/A
USB Controller	X		
USB 2.0 Controller	X		
USB Keyboard Support	X		
USB Mouse Support			X
USB 1.1 Compatible Test	Result		
	Pass	Fail	N/A
USB 1.1 Compatible Test	X		
USB 2.0 Compatible Test	Result		
	Pass	Fail	N/A
USB 2.0 Compatible Test	X		

USB 2.0 Function Test		Result		
		Pass	Fail	N/A
Use High Speed Device USB2.0 CD-R/W Ben-Q / 4824W1-ON2 to play Nero CD/DVD Speed		X		
USB Device Full Loading Test		Result		
Model		Pass	Fail	N/A
IBM 2.5"HDD				X
Kingston DataTraveler II				X
BENQ 4824WI-ON2				X
USB Card Reader + CF Card 512MB				X
USB Mouse		X		
USB Thumb drive Transcend 256MB		X		
Floppy Disk Controller Function Test		Result		
		Pass	Fail	N/A
Copy and compare file between C: and A / B:				X
Change Floppy to None value				X
Swap FDD				X
Peripheral Compatibility-Storage Device				
Model	Interface	Result		
		Pass	Fail	N/A
FUJITSU MCB3064SS	SCSI			X
IO-Mega zip 100 parallel port	Parallel			X
IO-Mega zip 100MB Internal ATAPI Drive	IDE			X
PQI FC512 512MB	Type-I CF Card	X		
HITACHI / HMS360402D5CF00	Type- II CF Card	X		
Modular System Industrial Workstation Function Test		Result		
		Pass	Fail	N/A
AC power outlet / inlet				X
Power On / Off		X		
CD-ROM & Floppy drive included				X
Lockable front-panel door				X
Finger mouse				X
Front USB Port		X		
59 Data-entry&20/24 Function keys				X
Digital brightness controller				X
OSD Function Test				X
Remote LCD Function Test				X
Mechanism construction check		Result		
		Pass	Fail	N/A
Panel construction check		X		
Case construction check		X		
PCMICA construction check				X
I/O Port connector check		X		
USB connector check		X		
Component check		X		

<b>On-Board RAID Function Test</b>				
Model	Interface	Result		
		Pass	Fail	N/A
Set SATA HDDs as RAID 0	SATA	X		
Set SATA HDDs as RAID 1	SATA	X		
<b>COM Port Send / Receive Test</b>		Result		
		Pass	Fail	N/A
Use software program: COMTEST.exe		X		
Use software program: LL5.exe		X		
<b>Disk On Module [DOM] Compatibility Test</b>				
Model	Interface	Result		
		Pass	Fail	N/A
DOM-256-026P Rev: A1K20	IDE 40 Pin			X
DOM-064-426P Rev: A2A11	IDE 44 Pin	X		
<b>Mini PCI Card Compatibility Test</b>				
Model	Interface	Result		
		Pass	Fail	N/A
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	LAN	X		
PER -C20S Mini PCI RAID Card	SATA	X		
<b>COM/LPT Ports &amp; RS-232/422/485 Function Test</b>		Result		
		Pass	Fail	N/A
RS-422 for COM2		X		
RS-485 for COM2		X		
COM1		X		
COM2		X		
COM3		X		
COM4		X		
COM5				X
COM6				X
LPT1				X
LPT2				X
<b>Card Bus(PCMCIA) Compatibility Function Test</b>				
Model	Result			
	Pass	Fail	N/A	
PQI 16MB Compact Flash Adapter (64MB PQI CF Card inserting)			X	
Kingston datapack DP-PCM2 / 2GB (PC Card TypeII HDD)			X	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II			X	
PQI 16MB Compact Flash Adapter (64MB PQI CF Card inserting)			X	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II			X	

## 9. O.S. Compatibility Test

Installation Operation System Compatibility Test		Result			
		Pass	Fail	N/A	
Linux-Red-Hat 9.0 Kernel 2.4.20-8				X	
Fedora Core 4				X	
Fedora Core 6		X			
Windows Server 2003 English Version / Standard Edition 5.2.3790				X	
Windows XP Professional English Version V2002 Service Pack 2		X			
English Windows XP Professional x64 Edition with Service Pack 2 V2002 (Award says that 64bit OS does not support APM Mode)				X	
Windows 2000 Professional English Version V5.00.2195 Service Pack 4		X			
English Windows 2000 Professional Service Pack 4 / 5.00.2195 (Server)				X	
Windows 98SE English Version V4.10.2222A				X	
Windows NT Workstation 4.0 English Version Service Pack6				X	
MS-DOS 6.22				X	
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Fedora Core 6 (2.6.18-1.2798.fc6xen)	Chipset Software	Default Driver	X		
	Graphics Media	Default Driver	X		
	LAN Driver	Default Driver	X		
	Audio Driver	Default Driver	X		
Windows Server 2003 English Version / Standard Edition 5.2.3790	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				X
Windows XP Professional English Version V2002 Service Pack 2	Chipset Software	Intel Chipset Software Installation Utility Ver:8.1.1.1001(05/23/2006)	X		
	Graphics Media	Mobile Intel(R) 945GM Express Chipset Family Ver:6.14.10.4670(2006/08/14)	X		
	LAN Driver	Intel(R) PRO/1000 PL Network Connection Ver:9.5.12.0(2006/07/26)	X		
	Audio Driver	Realtek AC97 Audio Ver:5.10.0.5820(2005/03/25)	X		
Windows XP Professional x64 Edition with Service Pack 2 V2002 English Version	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				X
Windows 2000 Professional English Version V5.00.2195 Service Pack 4	Chipset Software	Intel Chipset Software Installation Utility Ver:8.1.1.1001(05/23/2006)	X		

	Graphics Media	Mobile Intel(R) 945GM Express Chipset Family Ver:6.14.10.4670(2006/08/14)	X		
	LAN Driver	Intel(R) PRO/1000 PL Network Connection Ver:9.5.12.0(2006/07/26)	X		
	Audio Driver	Realtek AC97 Audio Ver:5.10.0.5820(2005/03/25)	X		
Windows 98SE English Version V4.10.2222A	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				X
Windows NT Workstation 4.0 English Version 4.00.1381 Service Pack6	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				X

## 10. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test	X		
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
Power Management Test(APM Power Management Test+ ACPI Power Management Test)	X		
Power On Function Test			X
Wake Up Event Test	X		
Power On after Power Failure Test	X		
CMOS Backup / Clear CMOS Test			X
Boot ROM Test (RPL / PXE)	X		
Supervisor / User Password Test	X		
CRT / LCD / TV Function Test	X		
TV Standard Function Test	X		
Init Display First Function Test	X		
On-Chip Serial ATA Function Test	X		
SATA Mode-IDE/RAID Function Test	X		
PC Health Status Monitor	X		
Swap Floppy Drive & Boot up Floppy Seek Function Test			X
USB Onboard Device Function Test	X		
COM Address / IRQ Test	X		
LPT Address / IRQ Test			X
BIOS AWDFLASH Program Test	X		

## 11. Performance Test

### 11-1. Environment

O.S.	English Windows XP Professional SP2 V2002
Memory	At least 256MB
Resolution / Depth	1024x768x32bit / 60Hz
DirectX	9.0

### Test Result

ZD WinBench 99 V2.0	Result	Unit
Business Disk WinMark99	3780	Thousand bytes/sec
High-End Disk WinMark99	12600	Thousand bytes/sec
Business Graphics WinMark99	389	
High-End Graphics WinMark99	1240	
<b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>		
2D Image	44.57	
3D	6.94	
Bus transfer	60.71	
Overall	26.29	Reality marks
<b>ZD 3D Winbench 2000 V1.1</b>		
3D WinMark 2000	94.1	Frames / sec
<b>ZD Multimedia Content Creation Winstone 2004 V1.0.1</b>		
Multimedia Content Creation Winstone 2004	29.7	
<b>3Dmark2001SE Pro (Demo version)</b>		
3DMark2001SE Build 330_Benchmark mode	5479	
<b>Business Winstone 2004 v1.0.1</b>		
Business Winstone2004	17.1	