

# QE 【Workstation / Panel PC】

## P5 Verification Test Plan

Release No : 07P010013

Product Model	<b>ONYX-170</b>
Description	<b>Fanless Medical Station P-M 1.1GHz 17" 300 nits TFT LCD</b>
Test Configuration	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> System : ONYX-170 A0.2 (PCM-8200 A1.1) <input checked="" type="checkbox"/> BIOS : ONYX-170 BIOS Rev 1.0(08/22/2007) <input checked="" type="checkbox"/> I/O Board: Y010 A1.3 <input checked="" type="checkbox"/> Riser Card : PER-1109 A1.1  <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> CPU Type : Intel® Pentium-M processor 1.10GHz (100x11.0) <input checked="" type="checkbox"/> North Bridge : Intel 855GME <input checked="" type="checkbox"/> South Bridge : HR+ITE8712 <input checked="" type="checkbox"/> VGA Chipset : Intel 855GME <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC650 AC97 CODEC <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82551ER 10/100Mb <input checked="" type="checkbox"/> I/O Chipset : HR+ITE8712  <input checked="" type="checkbox"/> Remark : ONYX-170 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: _____ _____	

*2007/09/17*

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	ONYX-170 A0.2(PCM-8200 A1.0)	1,2,3,4,5,6,7,8,9,10
BIOS / Version	ONYX-170 BIOS Rev. 1.0(08/22/2007)	1,2,3,4,5,6,7,8,9,10
CPU Type	Intel® Pentium-M processor 1.10GHz (100x11.0)	1,2,3,4,5,6,7,8,9,10
Memory Type	DSL DDR333 512MB	1,2,3,4,5,6,7,8,9,10
Primary IDE Master	FUJITSU MHV2080BH 80GB	1,2,3,4,5,6,7,8,9,10
Primary IDE Slave	TEAC DV-28SL-DVD-ROM	1,2,3,4,5,6,7,8,9,10
CRT	ViewSonic E70 17"	1,2,3,4,5,6,7,8,9,10
LCD	CPT 1280*1024 17" Touch Screen	1,2,3,4,5,6,7,8,9,10
Compact Flash	N/A	N/A
I/O Board	Y010 A1.3	1,2,3,4,5,6,7,8,9,10
Riser Card	1907110801 A1.0	3,7,8
Operating System	[ ] Linux-RedHat 9.0 or [ ] Fedora Core 4.0	
	Windows Server 2003 English Version / Standard Edition 5.2.3790	N/A
	Windows Server 2003 English Version /Standard x64 Edition	N/A
	Windows XP Professional English Version V2002 Service Pack 2	1,2,3,4,5,6,7,8,9,10
	Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2	8
	Windows XP Professional Japanese Version V2002 Service Pack 2	8
	Windows XP Professional English Version /Standard x64 Edition	N/A
	Windows 2000 Professional English Version V5.00.2195 Service Pack 4	8
	Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4	8
	Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4	8
	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
	SINPRO AC/IN 100~240V 47~63Hz 1.25~0.5A ,DC/OUT 24VDC 4.16A	1,2,3,4,5,6,7,8,9,10

## Test Result for Certification

### 1. 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

### 2. 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		

### 3. 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 (For Touch Screen)	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 Ports	X		
USB 6 Ports			X
USB 2.0 1/2 Ports	X		
USB 2.0 3/4 Ports	X		
USB 2.0 5 Ports	X		
USB 2.0 6 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(24VDC)		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

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

Model	Test Environment		Power Supply:		Note
			SINPRO AC/IN 100~240V 47~63Hz 1.25~0.5A ,DC/OUT 24VDC 4.16A		
Os Environment	English Windows XP Professional SP2		English Windows XP Professional SP2		
Normal Mode (+9V)	N/A	A	N/A	A	
Suspend Mode (+9V)	N/A	A	N/A	A	
Normal Mode (+15V)	2.73	A	N/A	A	
Suspend Mode (+15V)	N/A	A	N/A	A	
Normal Mode (+18V)	2.33	A	N/A	A	
Suspend Mode (+18V)	N/A	A	N/A	A	
Normal Mode (+24V)	1.82	A	N/A	A	
Suspend Mode (+24V)	N/A	A	N/A	A	

#### 5. 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		

#### 6. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1 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	100 Mbps	X		
		D-Link DES-1316 PoE Switch	100M	100 Mbps	100 Mbps	X		
		Intel InBusiness 8 Port	100M	100 Mbps	100 Mbps	X		
		LEMEL LM-S5 5 Port	100M	100 Mbps	100 Mbps	X		
		Accton DeskTop-3005	100M	100 Mbps	100 Mbps	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 Mbps	10 Mbps	X		

## 7. Hardware Compatibility

CPU Compatible Test							
Type	Clock Speed	FSB	Prime95 Version	Result			
				Pass	Fail	N/A	
Intel Pentium M	1.1GHz	333MHz	V2414	X			
Memory Compatibility Test							
Brand	Memory Size(MB)	Chipset	Frequency	MemTest86 Version	Result		
					Pass	Fail	N/A
DSL	512	hynix HY5DU12822CTP-D43	333	V1.65	X		
Kingston	512	hynix HY5DU56822AT-H	266	V1.65	X		
ValueRAM	256	D328DL0322PT16	333	V1.65	X		
Kingston	1024	ELPIDA D5108AFTA-5B-E	400	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**

Model	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 / MHW 2080BH / 80GB / SATA HDD	X		
WD 800BEVS-22RSTO 80GB/SATA HDD	X		
Seagate /ST940815A/40GB/ATA-100			X
SILICONDRIVE/SSD-DO8GI-3500 /8GB/Flash Disk			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
<b>IDE and SATA Device Full Loading Test</b>			
Model	Result		
	Pass	Fail	N/A
FUJITSU / MHW 2080BH / 80GB / SATA HDD	X		
Hitachi / HDS722525VLAT80 / 250GB / ATA-100			X
FUJITSU / MPE 3136AH / 13.6GB / ATA-66			X
Maxtor 4G160J8 / 160GB / ATA-133			X
FUJITSU / MHV 2040BT / 40GB / ATA-100/S-ATA			X
Seagate / ST3120827AS 120GB / ATA-100 / SATA			X
Seagate / ST3120827AS 120GB / ATA-100 / SATA			X
Seagate / ST3120827AS 120GB / ATA-100 / SATA			X
<b>CD/DVD-ROM Compatibility Test</b>			
Model	Result		
	Pass	Fail	N/A
TEAC DV-28SL-DVD-ROM	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
<b>USB Function Test</b>			
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		
<b>USB 1.1 Compatible Test</b>	<b>Result</b>		

	Pass	Fail	N/A	
USB 1.1 Compatible Test	X			
<b>USB 2.0 Compatible Test</b>	<b>Result</b>			
	Pass	Fail	N/A	
USB 2.0 Compatible Test	X			
<b>USB 2.0 Function Test</b>	<b>Result</b>			
	Pass	Fail	N/A	
Use High Speed Device USB2.0 CD-R/W Ben-Q / 4824W1-ON2 to play Nero CD/DVD Speed	X			
<b>USB Device Full Loading Test</b>	<b>Result</b>			
<b>Model</b>	Pass	Fail	N/A	
ASUS/CB-5216A-U USB2.0CD-RW/DVD ROM	X			
Kingston DataTraveler II 256MB	X			
Kingston SD Card 512MB	X			
Apacer Compact Flash Card 512MB	X			
IBM 2.5" 20GB USB HDD	X			
Transcend Jet V30 1GB Flashdisk	X			
<b>Floppy Disk Controller Function Test</b>	<b>Result</b>			
	Pass	Fail	N/A	
Copy and compare file between C: and A / B:			X	
Change Floppy to None value			X	
Swap FDD			X	
<b>Peripheral Compatibility-Storage Device</b>				
Model	Interface	Result		
		Pass	Fail	N/A
IO-Mega zip 100 parallel port	Parallel	X		
Compact Flash Card	USB Card read	X		
Multi Medic Card	USB Card read	X		
SD Card	USB Card read	X		
Memory Stick Card	USB Card read	X		
<b>Modular System Industrial Workstation Function Test</b>	<b>Result</b>			
	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	
<b>Mechanism construction check</b>	<b>Result</b>			

		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-100 WLAN 11g Mini PCI Card (Model: Sky Thru GC-100)	LAN	X		
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 (For Touch Screen)		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

## 8. O.S. Compatibility Test

<b>Installation Operation System Compatibility Test</b>		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 Server 2003 English Version /Standard x64 Edition				X
Windows XP Professional English Version V2002 Service Pack 2		X		
Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2		X		
Windows XP Professional Japanese Version V2002 Service Pack 2		X		
Windows XP Professional English Version /Standard x64 Edition				X
Windows 2000 Professional English Version V5.00.2195 Service Pack 4		X		
Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4		X		
Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4		X		
Windows 98SE English Version V4.10.2222A				X
MS-DOS 6.22				X

## Utility and Driver Test

OS	Drivers Version	Result		
		Pass	Fail	N/A
Fedora Core 4 (2.6.11-1.1396_FC4)	Chipset Software			X
	Graphics Media			X
	LAN Driver			X
	Audio 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 Server 2003 English Version /Standard x64 Edition	Chipset Software			X
	Graphics Media			X
	LAN Driver			X
	Audio Driver			X

Windows XP Professional English Version V2002 Service Pack 2	Chipset Software	Intel(R) Chipset Software Installation Utility Ver:5.0.1.1008(9/18/2003)	X		
	Graphics Media	Intel(R) 82852/82855 GM/GME Graphics Controller Ver:6.14.10.3762(2/10/2004)	X		
	LAN Driver	Intel(R) 8255xER PCI Adapter Ver:1.0.0.1(5/29/1999)	X		
	Audio Driver	Realtek AC'97 Audio Ver:5.10.0.5761(12/6/2004)	X		
Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2	Chipset Software	Intel(R) Chipset Software Installation Utility Ver:5.0.1.1008(9/18/2003)	X		
	Graphics Media	Intel(R) 82852/82855 GM/GME Graphics Controller Ver:6.14.10.3762(2/10/2004)	X		
	LAN Driver	Intel(R) 8255xER PCI Adapter Ver:1.0.0.1(5/29/1999)	X		
	Audio Driver	Realtek AC'97 Audio Ver:5.10.0.5761(12/6/2004)	X		
Windows XP Professional Japanese Version V2002 Service Pack 2	Chipset Software	Intel(R) Chipset Software Installation Utility Ver:5.0.1.1008(9/18/2003)	X		
	Graphics Media	Intel(R) 82852/82855 GM/GME Graphics Controller Ver:6.14.10.3762(2/10/2004)	X		
	LAN Driver	Intel(R) 8255xER PCI Adapter Ver:1.0.0.1(5/29/1999)	X		
	Audio Driver	Realtek AC'97 Audio Ver:5.10.0.5761(12/6/2004)	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(R) Chipset Software Installation Utility Ver:5.0.1.1008(9/18/2003)	X		

	Graphics Media	Intel(R) 82852/82855 GM/GME Graphics Controller Ver:6.14.10.3762(2/10/2004)	X		
	LAN Driver	Intel(R) 8255xER PCI Adapter Ver:1.0.0.1(5/29/1999)	X		
	Audio Driver	Realtek AC'97 Audio Ver:5.10.0.5761(12/6/2004)	X		
Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4	Chipset Software	Intel(R) Chipset Software Installation Utility Ver:5.0.1.1008(9/18/2003)	X		
	Graphics Media	Intel(R) 82852/82855 GM/GME Graphics Controller Ver:6.14.10.3762(2/10/2004)	X		
	LAN Driver	Intel(R) 8255xER PCI Adapter Ver:1.0.0.1(5/29/1999)	X		
	Audio Driver	Realtek AC'97 Audio Ver:5.10.0.5761(12/6/2004)	X		
Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4	Chipset Software	Intel(R) Chipset Software Installation Utility Ver:5.0.1.1008(9/18/2003)	X		
	Graphics Media	Intel(R) 82852/82855 GM/GME Graphics Controller Ver:6.14.10.3762(2/10/2004)	X		
	LAN Driver	Intel(R) 8255xER PCI Adapter Ver:1.0.0.1(5/29/1999)	X		
	Audio Driver	Realtek AC'97 Audio Ver:5.10.0.5761(12/6/2004)	X		
Windows 98SE English Version V4.10.2222A	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				X
MS-DOS 6.22	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				X

## 9. 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		

## 10. Performance Test

### Platform Information:

PCB Model / Version	ONYX-170 A0.2(PCM-8200 A1.0)
BIOS	ONYX-170 BIOS Rev. 1.0(08/22/2007)
Operating System	Windows XP Professional English Version V2002 Service Pack 2
CPU	Intel® Pentium-M processor 1.10GHz (100x11.0)
Memory	DSL DDR333 512MB
SATA HDD	N/A
Primary IDE Master	FUJITSU MHV2080BH 80GB
Primary IDE Slave	TEAC DV-28SL-DVD-ROM
CRT	ViewSonic E70 17"
LCD	CPT 1280*1024 17" Touch Screen
Compact Flash	N/A
I/O Board	Y010 A1.3
Riser Card	PER-1109 A1.1
Power Supply	SINPRO AC/IN 100~240V 47~63Hz 1.25~0.5A ,DC/OUT 24VDC 4.16A



## Test Result

	<b>Result</b>	<b>Unit</b>
<b>ZD WinBench 99 V2.0</b>		
Business Disk WinMark99	<b>5230</b>	Thousand bytes/sec
High-End Disk WinMark99	<b>16900</b>	Thousand bytes/sec
Business Graphics WinMark99	<b>257</b>	
High-End Graphics WinMark99	<b>710</b>	
<b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>		
2D Image	<b>19.02</b>	
3D	<b>5.99</b>	
Bus transfer	<b>29.15</b>	
Overall	<b>13.38</b>	Reality marks
<b>ZD 3D Winbench 2000 V1.1</b>		
3D WinMark 2000	<b>62.3</b>	Frames / sec
<b>3Dmark2001SE Pro (Demo version)</b>		
3DMark2001SE Build 330_Benchmark mode	<b>1985</b>	
<b>ZD Multimedia Content Creation Winstone 2004 V1.0.1</b>		
Multimedia Content Creation Winstone 2004	<b>15.4</b>	
<b>Business Winstone 2004 v1.0.1</b>		
Business Winstone2004	<b>12</b>	