

# QE 【Workstation / Panel PC】

## P5 Verification Test Plan

Release No : 07P010011

Product Model	<b>AOP-8060XT</b>
Description	6.4" XP Embedded, Ethernet Operator Panel
Test Configuration	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> System : AOP-8060XT A1.0 <input checked="" type="checkbox"/> PCB : Gene-8310 A1.1 <input checked="" type="checkbox"/> BIOS : AOP-8060XT BIOS Rev:1.0 (08/27/2007)  <input checked="" type="checkbox"/> Chipset <input checked="" type="checkbox"/> North Bridge : Intel 82852GM(E) <input checked="" type="checkbox"/> South Bridge : Intel ICH4 <input checked="" type="checkbox"/> VGA Chipset : Intel 852GME <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 <input checked="" type="checkbox"/> Ethernet Chipset : Intel EP82562ET <input checked="" type="checkbox"/> I/O Chipset : ITE IT 8712F-A <input checked="" type="checkbox"/> Touch Screen : Eely Penmount DMC 9000  <input checked="" type="checkbox"/> Remark : QE P5 Report for AOP-8060XT A1.0
<b>Test Result Summary</b>	
<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation  Comment: _____ _____	

2007/08/30

Issue date

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Manager

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## Summary Table of contents :

Summary Table of contents	2
Platform Information	3
1. I/O Peripheral Function Test	4
2. Power Consumption Test	6
3. Certification Function Test	7
4. BIOS Function Test	11
5. Performance Test	12

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:**

<b>Equipment</b>	
<b>System</b>	<b>AOP-8060XT A1.0</b>
<b>PCB</b>	<b>Gene-8310 A1.1</b>
<b>BIOS</b>	<b>AOP-8060XT BIOS Rev:1.0 (08/272007)</b>
<b>XPE Scale</b>	<b>Large Scale</b>
<b>CPU</b>	<b>Intel(R) Celeron(R) M processor 1.3GHz</b>
<b>Memory</b>	<b>DSL DDR 333 SODIMM 256MHz (SAMSUNG K4H561638H-UCCC)</b>
<b>Primary IDE Master</b>	<b>N/A</b>
<b>Primary IDE Slave</b>	<b>N/A</b>
<b>Secondary IDE Master</b>	<b>PQI Compact Flash Card 2GB</b>
<b>Secondary IDE Slave</b>	<b>N/A</b>
<b>LCD Panel</b>	<b>LG. Philips 6.4" TFT LB064V02-A1 640*480 18 bit</b>
<b>CRT</b>	<b>ViewSonic E70 17"</b>
<b>PS/2 Keyboard</b>	<b>LEMEL KB-5201-P PS/2 Keyboard</b>
<b>PS/2 Mouse</b>	<b>AOpen O-70G(Silver) PS/2 Mouse</b>
<b>USB Devices</b>	<b>List as following</b>
<b>Power Supply Type</b>	<b>FSP025-1ADF01A 100~240V, 0.9A, 50~60Hz ,DC output :5V</b>
<b>Operating System Environment</b>	
<b>Microsoft Windows XP Embedded Version 2002 Service Pack 1 for English Version</b>	

## Test Result for Certification

### 1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
Floppy Connector / Driver A:			X	
IDE Channel 0 Master			X	
IDE Channel 1 Slave			X	
Secondary IDE Master			X	
Secondary IDE Slave			X	
Third IDE Master			X	
Third IDE Slave			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			PQI Compact Flash Card 2GB
Compact Flash – Type II			X	HITACHI/HMS360402D5CF00/2G (Device bad)
DOC (Disk On Chip)			X	
DOM (Disk On Module) – 40 Pin			X	Type: DOM-256-026P
DOM (Disk On Module) – 44 Pin			X	Type: DOM-064-426P
COM 1			X	
COM 2-232			X	
COM 2-422			X	
COM 2-485			X	
COM 2	X			For Touch Screen
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			Line out
Audio 5.1 Channel / S/P DIF			X	
LPT 1			X	
LPT 2			X	
SIR / 115.2 Kbps			X	
FIR / 4M bps			X	
USB 0&1 Ports	X			
USB 2&3 Ports			X	
Front USB Port			X	
USB 6 Ports			X	
USB 2.0 0 & 1 Ports	X			
USB 2.0 2 & 3 Ports			X	
USB 2.0 Front USB Port			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	
Touch Screen – 4 Wire	X			
DIMM Slots	X			
Watchdog IRQ n			X	
Watchdog Software Control	X			
CPU FAN Connector			X	
System FAN Connector	X			
Front Panel	Result			Notes
	Pass	Fail	N/A	
Power On Button			X	
IDE LED			X	
External Buzzer			X	
On Board Buzzer	X			
Power LED	X			
Reset Switch			X	
Keyboard Lock			X	
Jumpers Function	Result			Notes
	Pass	Fail	N/A	
ATX simulates AT			X	
Audio Out Selection (W/O & W/ Amplifier)			X	
LCD Voltage Selection			X	
COM1			X	
COM2			X	For Touch Screen
COM2 RS-232/422/485 Selection			X	
COM5-Ring/5V/12V Selection			X	
COM6-Ring/5V/12V Selection			X	
Clear CMOS	X			
Touch Screen Operating Mode Selection			X	
Clock Shift of TFT LCD			X	
Power Connector & Function	Result			Notes
	Pass	Fail	N/A	
DC Power Connector	X			
ATX Power Connector			X	
ATX Power_12V Connector			X	
AT Power Connector (P8 & P9)			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	
LAN Connector & Function	Result			Notes
	Pass	Fail	N/A	
LAN Speed LED	LAN1		X	
	LAN2		X	
LAN Active LED	LAN1	X		
	LAN2		X	
LAN Link LED	LAN1	X		

	T.AN2			X	
LAN 10/100 Ethernet		X			
LAN 1G Ethernet				X	
PCI Connector & Function	Result			Notes	
	Pass	Fail	N/A		
PCI Slot				X	
Mini PCI Slot		X			
PCI Express				X	

## 2. Power Consumption Test

### Platform Information

Equipment	
System	AOP-8060XT A0.2
PCB	Gene-8310 A1.1
BIOS	AOP-8060XT BIOS Rev:0.1 (5/3/2007)
XPE Scale	Large Scale
CPU	Intel(R) Celeron(R) M processor 600MHz / 1.3GHz
Memory	DSL DDR 333 SODIMM 512MHz (ELPIDA D5116AFTA-6B-E)
Primary IDE Master	N/A
Primary IDE Slave	N/A
Secondary IDE Master	SanDisk SDCFJ-1024 1.0GB
Secondary IDE Slave	N/A
LCD Panel	LG Philips 6.4" TFT LB064V02-A1 640*480 18bit
CRT	ViewSonic E70 17"
PS/2 Keyboard	LEMEL KB-5201-P PS/2 Keyboard
PS/2 Mouse	AOpen O-70G(Silver) PS/2 Mouse
USB Devices	List as following
Power Supply Type	Magic Power MPM-9561 100~250V DC Power
Operating System Environment	
Microsoft Windows XP Embedded Version 2002 Service Pack 1 for English Version	

### Test Equipment:

Equipment	AC/DC Clamp Meter
Manufacturer	PROVA
Model name	CM-01
Standard	Reference to CE EN 61010 Test Procedure
	Reference to UL Test Procedure

### Equipment Certified Calibration:

Calibrated Company	IPE (儀寶)
S/N	00004072 (DM215)
Report No	6118P016
Calibration Date	19, January, 2007
Next Calibration Date	18, January, 2008
Test By	Mick

- Test Point: 1. Power on machine and boot into Windows environment
2. Run test software: Play media file to make system heavy loading in order to measure its maximum current

3. Use Prova EN61010(set as 40A) to measure each current of system different mode

Environment Model	DC Power: Magic Power MPM-9561				AT Power:				Note
	CPU: Intel(R) Celeron(R) M processor 600MHz		CPU: Intel(R) Celeron(R) M processor 1.3GHz		CPU:		CPU:		
OS Environment	Windows XP Embedded		Windows XP Embedded						
Normal Mode (+5V)	2.67	A	3.14	A		A		A	
Suspend Mode (+5V)	N/A	A	N/A	A		A		A	
5VSB in Power Off Mode (just for ATX)	N/A	A	N/A	A	-----	A	-----	A	
5VSB in Power On Mode (just for ATX)	N/A	A	N/A	A	-----	A	-----	A	
Normal Mode (+12V)	N/A	A	N/A	A		A		A	
Suspend Mode (+12V)	N/A	A	N/A	A		A		A	
Normal Mode (+3.3V) (just for ATX)	N/A	A	N/A	A	-----	A	-----	A	
Suspend Mode (+3.3V) (just for ATX)	N/A	A	N/A	A	-----	A	-----	A	
Normal Mode (-12V)	N/A	A	N/A	A		A		A	
Suspend Mode (-12V)	N/A	A	N/A	A		A		A	
Normal Mode (-5V)	N/A	A	N/A	A		A		A	
Suspend Mode (-5V)	N/A	A	N/A	A		A		A	

### 3.Certification Function Test

**Test Procedure:**

1. Please make sure the partition of CFD or HDD is active.
2. First we must format CFD or HDD in our own PC. These 2 devices file system can be chosen as following

Device	CFD	HDD
NTFS	Support	Support
FAT	Support	Support
FAT32	Support	Support

3. Uncompressed the XPE image located at SAP in NOTES into CFD or HDD
4. Copy file BOOTPREP.exe into Win98 bootable disk
5. Insert CFD or HDD into tested machine then boot up by Win98 bootable disk with file BOOTPREP.exe in it
6. Execute the instruction SYS C: to transfer files while in DOS command prompt A:\>
7. Execute the instruction BOOTPREP.exe then press Y key for 2 times while in DOS command prompt A:\>
8. Pull out the floppy disk and restart then system would enter into OS Windows XP Embedded V2002 normally

Power On machine and boot into OS to check Release/Evaluation version, Device Manager and shutdown function				
Machine Model	XPE Version	PASS	FAIL	N/A
System : AOP-8060XT	Evaluation			X

PCB : Gene-8310 A1.1 BIOS : AOP-8060XT BIOS Rev.1.0(08/27/2007)	Release	X		
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Boot Test	PASS	FAIL	N/A
Boot system to Windows Desktop	X		
No "Evaluation Copy" shown on screen if OS is released version	X		
Check Device Manager Status	PASS	FAIL	N/A
No exclamation mark shown on the list	X		
Check XPE Expired problem if the image is "Evaluation Copy"	PASS	FAIL	N/A
In BIOS set the target machine's date the same as XPE image's release date before the first time you enter XPE desktop and check if the image can be boot to XPE desktop successfully.(The expected answer is YES)			X
In BIOS set the target machine's date to 115 days after XPE image's release date and check if the image can be boot to XPE desktop successfully. (The expected answer is YES)			X
In BIOS set the target machine's date to 125 days after XPE image's release date and check if the image can be boot to XPE desktop successfully. (The expected answer is NO)			X
<b>Start Function Check</b>	<b>PASS</b>	<b>FAIL</b>	<b>N/A</b>
1. My Documents Icon Check	X		
2. My Recent Documents Icon Check			X
3. My Pictures Icon Check	X		
4. My Music Icon Check	X		
5. My Computer Function Check	X		
6. Control Panel Icon Check	X		
7. Printer and Faxes Icon Check	X		
8. Search Icon Check	X		
9. Run Function Check	X		
10. Log Off Function Check	X		
11. Turn Off Computer Function Check	X		
12. Internet Function Check	X		
13. Outlook Express E-Mail (msimn.exe)	X		
14. All Programs Icon Check	X		
<b>Control Panels Function Check</b>	<b>PASS</b>	<b>FAIL</b>	<b>N/A</b>
Accessibility Options	X		
Add Hardware	X		
Add or Remove Programs	X		
Administrative Tools	X		
Data Sources (ODBC)	X		
Date and Time	X		
Display	X		
Folder Options	X		
Fonts	X		
Game Controllers	X		
Intel® Extremes Graphics	X		
Internet Options	X		
Keyboard	X		
Mouse	X		
Network Connections	X		
Phone and Modem Options	X		
Power Options	X		
Printers and Faxes	X		
Regional and Language Options	X		
Sound Effect Manager	X		



Sounds and Audio Devices	X		
System	X		
Taskbar and Start Menu	X		
User Accounts	X		
TCP/IP Utilities	PASS	FAIL	N/A
Ping	X		
IPConfig	X		
TracerT	X		
Finger	X		
Hostname	X		
Rcp	X		
Rexec	X		
Route	X		
Rsh	X		
PathPing	X		
Netstat	X		
Arp	X		
TCP/IP over 1394			X
IPv6	X		
Telnet	X		
Ftp			X
Administrative Tools	PASS	FAIL	N/A
Component Services	X		
Computer Management	X		
Data Sources (ODBC)	X		
Event Viewer	X		
Internet Information Services	X		
Services	X		
DOS Command Prompt Function Test	PASS	FAIL	N/A
Write in Character	X		
Clear Screen (cls)	X		
Close icon function	X		
Make DOS Full Screen (ALT+Enter)	X		
Internet Explorer and LAN Function Test	PASS	FAIL	N/A
File Icon Function	X		
Edit Icon Function	X		
View Icon Function	X		
Favorites Icon Function	X		
Tools Icon Function	X		
Help Icon Function	X		
Connect to local Internet that matches the OS language and print it out			X
Windows Media Player Function Test	PASS	FAIL	N/A
File Icon Function	X		
View Icon Function	X		
Play Icon Function	X		
Favorite Icon Function	X		
Go Icon Function	X		
Tools Icon Function	X		
Help Icon Function	X		
Quickly move VCD seek bar and view the display	X		
Multimedia Function Test	PASS	FAIL	N/A
Record using build in Sound Recorder			X
Adjust volume using build in Volume Control	X		
Play Audio CD	X		

Play VCD (.DAT File)	X		
Play DVD using (CyberLink Power DVD V5.0 with DirectX 9.0)	X		
Play DVD using (CyberLink Power DVD V4.0 with DirectX 8.1)			X
Play AVI file	X		
Play MP3 file	X		
WordPad Function Test	PASS	FAIL	N/A
File Icon Function	X		
Edit Icon Function	X		
View Icon Function	X		
Insert Icon Function	X		
Format Icon Function	X		
Help Icon Function	X		
NotePad Function Test	PASS	FAIL	N/A
File Icon Function	X		
Edit Icon Function	X		
Format Icon Function	X		
View Icon Function	X		
Help Icon Function	X		
Internet Explorer \ Favorites Function	PASS	FAIL	N/A
Add to Favorites Function	X		
Organize Favorites	X		
Control Panel \ Taskbar and Start Menu Properties	PASS	FAIL	N/A
Auto-hide the taskbar	X		
Keep the taskbar on top of other windows	X		
Group similar taskbar buttons	X		
Show Quick Launch	X		
Show the clock	X		
Hide inactive icons	X		
Run Function Test	PASS	FAIL	N/A
Explorer Application (explorer.exe)	X		
Cmd Application (cmd.exe)	X		
Control Application (control.exe)	X		
Registry Editor Application (regedit.exe)	X		
Registry Editor Application (regedt32.exe)	X		
Windows Installer Support	PASS	FAIL	N/A
Install a Windows Driver for Test (USB EPSON STYLUS C61)	X		
Install a Windows Application for Test (CyberLink Power DVD V4.0)	X		
Dial-up to Internet Function Test	PASS	FAIL	N/A
By COM Port Modem (LEMEL 336SVD) – COM1			X
By COM Port Modem (LEMEL 336SVD) – COM2			X
By COM Port Modem (LEMEL 336SVD) – COM3			X
By COM Port Modem (LEMEL 336SVD) – COM4			X
Printing Function Test	PASS	FAIL	N/A
By LPT Port Printer (EPSON STYLUS C61)			X
Screen Saver Test	PASS	FAIL	N/A
Enter Screen Saver and wake up	X		
Windows Advanced Options Menu	PASS	FAIL	N/A
Safe Mode	X		
Safe Mode with Networking	X		
Safe Mode with Command Prompt	X		
Enable Boot Logging	X		
Enable VGA Mode	X		
Last known Good Configuration (your most recent settings that worked)	X		
Directory Services Restore Mode (windows domain controllers only)	X		

Debugging Mode		X		
Start Windows Normally		X		
Reboot		X		
Return to OS Choices Menu		X		
Shutdown from Start Menu		PASS	FAIL	N/A
Shutdown		X		
Restart		X		
Log Off User		X		
USB Device Compatibility Test		PASS	FAIL	N/A
USB Hub	PowerSync USB2.0 4 Port (HB-200403)	X		
USB Mouse	Logitech Wheel Mouse / M-BB48 / MS-028	X		
USB Keyboard	Microsoft Comfort Curve Keyboard 2000[KB-200601]	X		
	BTC 7923 [KE-019]	X		
USB HDD	2.5" USB 2.0 HDD Box [1394B-200601] Include	X		
	2.5" HDD IBM IC25N020ATCS04-020GB			
USB CD-ROM	BenQ CRW4824WI [CD-200304]	X		
USB DVD-ROM	ASUS DVD+RW DRW-1604P-D [CD-200501]	X		
USB ZIP	IOMEGA ZIP 750 Z750USB			X
USB Floppy	Mitsumi D353GUE (FL-200201)	X		
USB Thumb drive	Kingston DT/2GB FE 2.0GB	X		
USB Printer	EPSON STYLUS C61	X		
USB IR Device	CyberLink PowerDVD XP 4.0 Remote Control [IR-200200]			X

#### 4. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test	X		
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
<b>Power Management Test</b>			
APM Power Management Test	X		
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 (PXE / RPL)	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
<b>PC Health Status</b>			
Voltage Monitor Test	X		
FAN Speed Monitor Test	X		
Temperature Monitor Test	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		

## 5. Performance Test

### Platform Information

Equipment	
System	AOP-8060XT A0.2
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XPE Scale	Large Scale
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Primary IDE Slave	N/A
Secondary IDE Master	SanDisk SDCFJ-1024 1.0GB
Secondary IDE Slave	N/A
LCD Panel	LG Philips 6.4" TFT LB064V02-A1 640*480 18bit
CRT	ViewSonic E70 17"
PS/2 Keyboard	LEMEL KB-5201-P PS/2 Keyboard
PS/2 Mouse	AOpen O-70G(Silver) PS/2 Mouse
USB Devices	List as following
Power Supply Type	Magic Power MPM-9561 100~250V DC Power
Operating System Environment	
Microsoft Windows XP Embedded Version 2002 Service Pack 1 for English Version	

### Test result:

ZD WinBench 99 V2.0	Result	Unit
Business Disk WinMark99	N/A	Thousand bytes/sec
High-End Disk WinMark99	N/A	Thousand bytes/sec
Business Graphics WinMark99	N/A	
High-End Graphics WinMark99	N/A	
<b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>		
2D Image	2.84	
3D	N/A	
Bus transfer	N/A	
Overall	N/A	Reality marks
<b>ZD 3D Winbench 2000 V1.1</b>		
3D WinMark 2000	N/A	Frames / sec
<b>3Dmark2001SE Pro (Demo version)</b>		
3DMark2001SE Build 330_Benchmark mode	1316	
<b>Business Winstone 2004 v1.0.1</b>		
Business Winstone2004	N/A	