

# QE Verification Test Plan

Release No : 07E010004

<b>Product Model</b>	<b>PCM-5895</b>
<b>Description</b>	<b>Compact Board</b>
<b>Test Configuration</b>	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : PCM-5895 A0.2 <input checked="" type="checkbox"/> BIOS : PCM-5895 BIOS Rev.1.0 (01/29/2007)  <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> North Bridge : AMD /Geode LX800 <input checked="" type="checkbox"/> South Bridge : AMD / CS5536AD <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC203 CODEC <input checked="" type="checkbox"/> Ethernet Chipset : Realtek / RTL8139DL <input checked="" type="checkbox"/> I/O Chipset : IT-8712-I + IT8888G <input checked="" type="checkbox"/> TV Chipset : N/A  <input checked="" type="checkbox"/> Remark : 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: _____ _____	

*2007/02/12*

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	PCM-5895 Rev:A0.2	1,2,3,4,5,6,7,8,9,10,11
BIOS / Version	PCM-5895 BIOS Rev.1.0 (01/29/2007)	1,2,3,4,5,6,7,8,9,10,11
CPU Type	Geode -LX 500MHz	1,2,3,4,5,6,7,8,9,10,11
Memory Type	Transcend / 0636SR V58C2512804SBI /DDR400 /1GB	1,2,3,4,5,6,7,8,9,10,11
Primary IDE Master	IBM / IC35L060AVV207-0 /61.4GB / ATA33	1,2,3,4,5,6,7,8,9,10,11
Primary IDE Slave	TEAC / CD-540E / 40X	1,2,3,4,5,6,7,8,9,10,11
CRT	ViewSonic E773	1,2,3,4,5,6,7,8,9,10,11
LCD	N/A	
Compact Flash	N/A	
Riser Card	N/A	
Backplane	N/A	
Operating System	[ ] Linux-RedHat 9.0 or [ X ] Fedora Core 4	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	N/A
	Windows 98SE English Version V4.10.2222A	N/A
	Windows NT Workstation 4.0 English Version Service Pack 6	N/A
	MS-DOS 6.22	1,2,3,4,5,6,7,8,9,10,11
	Power Supply	ATX Power : AOpen /FSP300-60ATV /300W
	AT Power : LEMACS /LP2-4250F 250W	1,2,3,4,5,6,7,8,9,10,11

## Test Result for Certification

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

Test Method	Test Condition	Result		
		Pass	Fail	N/A
Diagnostics Software Burn-In Test.	0°C ~60°C, 30%RH~80%RH, 48 hrs	X		
Power On/Off Test.	0°C ~60°C, 30%RH~80%RH, 24hrs	X		
High Temperature Storage Test (Just for PPC)	60 °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

### 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. 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			X
Secondary IDE Slave			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 (PQI Industrial 2GB)	X		
Compact Flash – Type II (HITACHI / HMS360402D5CF00 /2GB)	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 7/8 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 7/8 Ports			X
DVI Function			X
DIO Connector	X		
Can Bus	X		
PC/104	X		
PC/104-Plus			X
PCI-104			X
CD-In Connector			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		

Front Panel		Result		
		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		
		Pass	Fail	N/A
ATX simulates AT		X		
Audio Out Selection (W/O & W/ Amplifier)				X
LCD Voltage Selection		X		
COM2-Ring/5V/12V Selection		X		
COM2 RS-232/422/485 Selection				X
Clear CMOS		X		
Touch Screen Operating Mode Selection				X
Clock Shift of TFT LCD		X		
Power Connector & Function		Result		
		Pass	Fail	N/A
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 (-12/-5V)				X
Option ATX Power Connector (PS-ON / +5VSB)				X
LAN Connector & Function		Result		
		Pass	Fail	N/A
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
PCI Connector & Function		Result		
		Pass	Fail	N/A
PCI Slots		X		
PCI Express				X

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

Test Environment Mode	ATX Power: AOpen /FSP300-60ATV /300W			AT Power: LEMACS /LP2-4250F 250W			
	CPU: Geode- LX 500MHz	CPU:		CPU: Geode -LX 500MHz	CPU:		
OS Environment	WIN XP			WIN XP			
Normal Mode (+5V)	1.43	A	A	1.23	A		A
Suspend Mode (+5V)	1.35	A	A	1.10	A		A
5VSB in Power Off Mode (ATX Mode)	0.10	A	A	-----	A	-----	A
5VSB in Power On Mode (ATX Mode)	0.02	A	A	-----	A	-----	A
Normal Mode (+12V)		A	A		A		A
Suspend Mode (+12V)		A	A		A		A
Normal Mode (+3.3V) (ATX Mode)		A	A	-----	A	-----	A
Suspend Mode (+3.3V) (ATX Mode )		A	A	-----	A	-----	A
Normal Mode (-12V)		A	A		A		A
Suspend Mode (-12V)		A	A		A		A
Normal Mode (-5V)		A	A		A		A
Suspend Mode (-5V)		A	A		A		A

#### 5. Power Connector Test (110V / 220V )

Test Method	Result		
	Pass	Fail	N/A
ATX Connector - Power On/Off for 10 times in DOS	X		
AT Connector - Power On/Off for 10 times in DOS			X
5V Only - Power On/Off for 10 times in DOS	X		

#### 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	±1 second during 24 hours	X		
RTC Clock in Power On Mode	±1 second during 24 hours	X		
RTC Clock in Power Off Mode	±1 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
LAN1	10/100/1000 Mbps	HP J4095A 24 Ports	100M	100 Mbps	100	X		
		D-Link DGS-1008T	100M	1Gbps	100	X		
		Intel InBusiness 8 Ports	100M	100 Mbps	100	X		
		LEMEL LM-S5 5 Ports	100M	100 Mbps	100	X		
		Accton Desktop-3005	100M	100 Mbps	100	X		
		SVEC FD916H	100M	10 Mbps	100	X		
Location	Speed	Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
LAN2	10/100/1000 Mbps	HP J4095A 24 Ports	100M	100 Mbps	100	X		
		D-Link DGS-1008T	100M	1Gbps	100	X		
		Intel InBusiness 8 Ports	100M	100 Mbps	100	X		
		LEMEL LM-S5 5 Ports	100M	100 Mbps	100	X		
		Accton Desktop-3005	100M	100 Mbps	100	X		
		SVEC FD916H	100M	10 Mbps	100	X		

## 8. Hardware Compatibility

CPU Compatible Test						
Type	Clock Speed	FSB	Prime95 Version	Result		
				Pass	Fail	N/A
Geode-LX 500MHz			V2414	X		
Memory Compatibility Test						
Brand / Memory Size	Chipset	Frequency	MemTest86 Version	Result		
				Pass	Fail	N/A
Kingston / 512 MB DDR400	Kingston D3208DLECTG5AU		V1.65	X		
Transcend / 1GB DDR400	636SR V58C2512804SBI		V1.65	X		
SAMSUNG /512 DDR333	K4H560838C-TCB3		V1.65	X		



<b>On Board Audio Function Test</b>					
<b>Audio Basic Function Test</b>			<b>Result</b>		
			<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
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		
<b>Audio 5.1 Channel with S/P DIF Function Test</b>			<b>Result</b>		
			<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
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
S/P DIF function Test	Input				X
	Output				X
<b>On Board TV Function Test</b>			<b>Result</b>		
			<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
	NTSC	AV Terminal			X
	PAL				X
	NTSC	S Terminal			X
	PAL				X
<b>On Board LCD Function Test</b>					
<b>TFT LCD</b>	<b>Type</b>	<b>Voltage</b>	<b>Result</b>		
			<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
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 M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	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

<b>PCI Slot Function (PCI Adapter Card) Test</b>				
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		
Realtek RTL8139B Ethernet	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		
<b>PCI-Express Function Test</b>				
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	
<b>HDD Compatibility Test</b>				
Model	Result			
	Pass	Fail	N/A	
Hitachi / HDS722525VLAT80 / 250GB / ATA-100	X			
IBM / DTLA-307045 / 46.1GB / ATA-100	X			
FUJITSU / MPE 3136AH / 13.6GB / ATA-66	X			
Seagate / ST340014A / 40GB / Barracuda 7200.7	X			
Seagate / ST3160812A / 160GB	X			
Quantum / Fireball Plug AS / 30GB / ATA-100	X			
Seagate / ST310210A / 10.2GB / ATA-66	X			
Western / WD400BB-75DEA0 / 40GB / ATA-100	X			
Seagate / ST3120026AS / 120GB / ATA-100 / S-ATA			X	
<b>CD/DVD-ROM Compatibility Test</b>				
Model	Result			
	Pass	Fail	N/A	
Acer DVP1640A / 16X / DVD-ROM	X			
Creative DVD1240E / 12X / DVD-ROM	X			
IBM HL-DT-ST / GCR-8480B / 48X / CD-ROM	X			
Pioneer / DVD-121 / 16X / DVD-ROM	X			
PHILIPS CDD5301 / PBC03210G / 32X10X40 / 12X DVD / CD-RW / DVD-ROM	X			

SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X	X			
NEC / ND-2500A / DVD R/RW / +R8X-R8X	X			
TEAC / CD-540E / 40X / CD-ROM	X			
<b>IDE Cable Function test</b>				
<b>IDE Model</b>	<b>Result</b>			
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
40 Pin Cable ATA33	X			
44 Pin Cable ATA33			X	
80 Pin Cable ATA100			X	
<b>USB Function Test</b>				
<b>USB Basic Function Test (USB1/2 on USBRJ1 connector)</b>	<b>Result</b>			
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
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>			
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
USB 1.1 Compatible Test	X			
<b>USB 2.0 Compatible Test</b>	<b>Result</b>			
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
USB 2.0 Compatible Test	X			
<b>USB 2.0 Function Test</b>	<b>Result</b>			
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
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>Model</b>	<b>Type</b>	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
CyberLink Power DVD XP4.0	Remote Control	X		
BENQ 4824WI-ON2	CD-RW	X		
Thumb Device	Storage	X		
USB HDD IBM IC25N020ATCS04-0 / 20GB / 4200RPM (1394b + USB2.0 External Box (MP-FBHUB20P-V2.0 E10-7073161D60))	HDD	X		
Mitsumi FL3.5D353GUE/FUE	Floppy	X		
ASUS DRW-1604P	DVD-RW	X		
<b>Floppy Disk Controller Function Test</b>				
	<b>Result</b>			
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
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			
DOC2000 M-System / MD2200-D16		X			
PQI Industrial 2GB	Type-I CF Card	X			
HITACHI / HMS360402D5CF00 /2GB	Type- II CF Card	X			
Digital I/O Connector Test		Result			
		Pass	Fail	N/A	
Input Address: ( 801H )		X			
Output Address: ( 801H )		X			
VCC: ( 5V )		X			
DIO-1 Function Test		X			
DIO-2 Function Test				X	
Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules					
Interface	Model	Type	Result		
			Pass	Fail	N/A
PC/104	AAEON PCM-5600	Modem Module	X		
	AAEON PCM-3115B	PCMCIA Module	X		
PC/104+	AAEON PCM-3430	SCSI Module			X
PCI-104	AAEON PCM-3730	Intel 82559 LAN Module			X
On-Board SCSI Function Test					
Model	Interface	Result			
		Pass	Fail	N/A	
RICOH MP7060S	SCSI-CDROM 24X			X	
Fujitsu MCB3064SS	SCSI-MO Device			X	
Seagate 32155W	SCSI-HDD 2.15GB			X	
IBM DNES-309170	SCSI-HDD 9GB			X	
Seagate ST39205LW/P	9GB / Ultra160 / LVD			X	
COM Port Send / Receive Test		Result			
		Pass	Fail	N/A	
Use software program: COMTEST.exe		X			
Use software program: LL3.exe		X			
Disk On Module [DOM] Compatibility Test					
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)	Wireless LAN	X		
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	Wireless LAN	X		
PER-C200 4 Port USB 2.0 Mini PCI Card (Chip: NEC D720101GJ)	USB 2.0	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

<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		
Windows Server 2003 English Version / Standard Edition 5.2.3790				X
Windows XP Professional English Version V2002 Service Pack 2		X		
Windows 2000 Professional English Version V5.00.2195 Service Pack 4				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 4	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	Graphics Media	Advanced Micro Devices Win XP Graphics Driver Ver :3.0.2.0	X		
	LAN1 Drive	Realtek RTL8139 PCI Fast Ethernet Ver: 5.398.613.2003	X		
	LAN2 Driver	Realtek RTL8139 PCI Fast Ethernet Ver: 5.398.613.2003	X		
	Audio Driver	GeodeLX Audio Driver Ver: 2.3.0.0	X		
Windows 2000 Professional English Version V5.00.2195 Service Pack 4	Chipset Software				X
	Graphics Media				X
	LAN Driver				X
	Audio Driver				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		
<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 (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
<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		

## 11. Performance Test

<b>English Windows 2000 Professional with SP4 5.00.2195 + 1024x768x32bit / 60Hz + Direct 9.0</b>		
<b>ZD WinBench 99 V2.0</b>		<b>Unit</b>
Business Disk WinMark99	4580	Thousand bytes/sec
High-End Disk WinMark99	20800	Thousand bytes/sec
Business Graphics WinMark99	115	
High-End Graphics WinMark99	213	
<b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>		
2D Image	3.92	
3D	0.48	
Bus transfer	8.39	
Overall	2.70	Reality marks
<b>ZD 3D Winbench 2000 V1.1</b>		
3D WinMark 2000	N/A	Frames / sec
<b>ZD Multimedia Content Creation Winstone 2004 V1.0.1</b>		
Multimedia Content Creation Winstone 2004	N/A	
<b>3Dmark2001SE Pro (Demo version)</b>		
3DMark2001SE Build 330_Benchmark mode	N/A	
<b>English Windows XP Professional with SP2 V2002 + 1024x768x32bit / 60Hz + Direct 9.0</b>		
<b>Business Winstone 2004 v1.0.1</b>		
Business Winstone2004	N/A	