

Test Report

FS-977 VER : A

Chipset	BIOS	CPU
Intel 82845G(MCH) Intel 82801DB(ICH4)	AWARD 6.00PG 08/09/2002-i845G-AD-6A69VTPIC-00	Socket478



On Board Compact Flact, DiskOnChip Interfaces
On Board Dual Intel PRO/100+LAN Ethernet Controller

FS-977

Product Name : *FS-977*

BIOS File Name : *AWARD BIOS*

BIOS Revision : *Rev. 1.1*

Released on : *08/19/2002*

PCB Board : *VER.A*

Sampling Quantity : *30 Sampling Boards*

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Checker by :

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1. Reliability Test :**1.01 CPU Test**

Model	Windows 98 SE (English)	Windows 2000 Professional	Windows NT 4.0	Windows ME (English)	Windows XP Professional	Windows XP Home Edition	Linux Red Hat 7.1
Socket 478 P4-1.6GHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Socket 478 Celeron 1.7GHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Socket 478 P4-1.8GHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Socket 478 P4-1.8AGHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Socket 478 P4-2.26GHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Socket 478 P4-2.4GHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Socket 478 P4-2.53GHz	PASS	PASS	PASS	PASS	PASS	PASS	PASS

1.02 DIM Model Test

No.	Model Size	DDR266	Chip Model No	Result
1	DDRAM 512MB	DDR-266	K4H60838C-TCB0	PASS
2	DDRAM 256MB	DDR-266	W942508AH-75	PASS
3	DDRAM 256MB	DDR-266	HY5DU28822T-H	PASS
4	DDRAM 256MB	DDR-266	MT46V16M8	PASS
5	DDRAM 256MB	DDR-266	N2DS12880AT-75B	PASS
6	DDRAM 128MB	DDR-266	K4H280838C-TCB0	PASS
7	DDRAM 128MB	DDR-266	HY5DU28822T-H	PASS

1.03 DIM Module Test Procedures

No	DIM Model	Operating System	Procedure	Result
1	SAMSUNG 512MB DDRAM (PC-2100)	1. Windows 98 SE 2. Windows 2000	1. Install OS 2. RUN C.C Winston2001	PASS
2	WINBOND 256MB DDRAM (PC-2100)	1. Windows ME 2. Windows NT4.0	1. Install OS 2. RUN CCWinston2001	PASS
3	HYUNDAI 256MB DDRAM (PC-2100)	1. Windows 98 SE 2. Windows NT4.0	1. Install OS 2. RUN CCWinston2001	PASS
4	HYUNDAI 256MB DDRAM (PC-2100)	1. Windows ME 2. Windows 2000	1. Install OS 2. RUN CCWinston2001	PASS
5	ELIXIR 256MB DDRAM (PC-2100)	1. Windows 98 SE 2. Windows NT4.0	1. Install OS 2. RUN CCWinston2001	PASS
6	HYUNDAI 128MB DDRAM (PC-2100)	1. Windows 98 SE 2. Windows XP	1. Install OS 2. RUN CCWinston2001	PASS
7	SAMSUNG 128MB DDRAM (PC-2100)	1. Windows 98 SE 2. Windows 2000	1. Install OS 2. RUN CCWinston2001	PASS

1.04 Temperature and Humidity Test**Hardware Device list:**

System Board	FS-977
CPU	Intel Pentium 4 1.6GHz with 400MHz
Memory	TwinMOS 128MB DDR266
HDD	IBM 30.7GB Model:DTLA 307030
KEYBOARD	MAGITRONIC KB-6923
MOUSE	Logitech M-CAA43
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	BCM

Test Result:**1. Storage Test**

Temperature: -20~80 Centigrade

2. Burning Test

Temperature: 0~60 Centigrade

Humidity: 0~90%(RH)

2. Software Compatibility Testing :**2.01 Operating System**

No	Operating System	Test Key point	Test Environment	Result
1	Windows NT4.0 (English Workstation)	1. Client Server test 2. Ccwinstone2001 3. Play win bench 99	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
2	Windows 98 SE (English)	1. CcWin stone 2001 2. 3DMARK2000 3. Win bench 2000 4. 3D MARK2001	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
3	Windows ME (English)	1. C.Cwinstone2001 2. 3D MARK2000 3. 3D MARK2001	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
4	Windows 2000 (Professional English)	1. Client Server test 2. Ccwinstone2001 3. Play win bench 99	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
5	Windows XP (Professional Chinese)	1. Client Server test 2. 3DMARK 2001	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	PASS

No	Operating System	Test Key point	Test Environment	Result
6	Windows 2000 (SEVER)	1. Client Server test 2. 3DMARK 2001	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
7	Windows 98 SE (Chinese)	1. 3D Mark2001 2. 3DMARK2000 3. Win bench 2000	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
8	Windows XP (Professional English)	1. Ccwinstone2001 2. 3D MARK2001 3. Bzwinstone2001	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
9	Windows XP (Home Edition)	1. Ccwinstone2001 2. 3D MARK2001	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
10	Linux Red Hat 7.1	PLAY VCD	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-ISA ET600 VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

No	Operating System	Test Key point	Test Environment	Result
11	Windows NT4.0 (Sever)	1. Client Server test 2. Play win bench 99	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
12	Solaris	PLAY VCD	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
BIOS : Version 1.0 Load Setup				

2.02 Windows Application

No	Software	Version	Test Key point	Test Environment	Result
1	Adobe After Effects	4.1	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
2	Adobe Illustrator	9.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
3	Adobe In Design	1.5	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
4	Adobe Page Make	6.5	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
5	Adobe Dimensions	3.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS

No	Software	Version	Test Key point	Test Environment	Result
6	Adobe Photoshop	6.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
7	Paint Shop Professional	6.0.2	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
8	U lead Photo Impact 6	6.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
9	MGI Photo vista	2.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
10	Dream weaver Ultra Dev	4.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS

No	Software	Version	Test Key point	Test Environment	Result
11	Cool 3D	3.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
12	SiSoftware Sandra2001	Professional	1. Installation 2. Test Program	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
13	Macromedia Flash	5.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
14	Macromedia Fireworks	4.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
15	PC ANYWHERE 32	8.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS

No	Software	Version	Test Key point	Test Environment	Result
16	Norton Antivirus 2002	Workstation	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
17	Norton Personal Firewall 2001	Professional	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
18	Norton Speed Disk 2001		Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
19	Norton Ghost 2001		Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
20	Norton Internet Security 2001		Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS

No	Software	Version	Test Key point	Test Environment	Result
21	PC-CILLIN 2002	2002	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
22	Real player	8.0	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
23	Dr.eye2001	2001	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
24	Dr.eye2002	2002	Installation	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
25	Cyber Link Power DVD XP	4.0	1. Installation 2. Play DVD	CPU : Intel P4 Socket478 2.4GHz DIMM1 : WINBOND 256MB DDRAM DIMM2 : WINBOND 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
BIOS : Version 1.0 Load Setup					

2.03 Game

No	Software	Test Key point	Test Environment	Result
1	Daytona USA	<ol style="list-style-type: none"> 1. Installation 2. Play Game 	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
2	Quake III Arena	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
3	Age of Empires II	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
4	NBA2001	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS

No	Software	Test Key point	Test Environment	Result
5	H LF-LIFE	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHZ DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
6	Counter-Strike (CS)	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHZ DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
7	Team Fortress 1.5	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHZ DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
8	War zone 2100	<ol style="list-style-type: none"> 1. Installation 2. Play game 	CPU : Intel P4 Socket478 1.8A GHZ DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
BIOS : Version 1.0 Load Setup				

3. Fundamental Function Test :**3.01 Power Management Test**

No	Type	Test Item	Result	Memo
1	Power Management	Mini Saving	PASS	
		Max Saving	PASS	
		User Defined	PASS	
2	PM Timer	HDD Power Down	PASS	
		Suspend Mode	PASS	
3	PWR Switch	Instant-off	PASS	
		Delay 4 sec	PASS	
4	Power On by Ring		PASS	
5	Resume by Alarm		PASS	

3.02 Interface Function Test

No	Function on board	Result
1	PCI Slot 1(Sound Card)	PASS
2	PCI Slot 2(LAN Card)	PASS
3	PCI Slot 3(VGA Card)	PASS
4	DIMM 1(184 DDRAM)	PASS
5	DIMM 2(184 DDRAM)	PASS
6	Wake On LAN (WOL)(LAN Card By PCI)	PASS
7	USB1 (USB Keyboard)	PASS
8	USB2 (USB Mouse)	PASS
9	Com 1(Serial Mouse)、 Com 2(Modem)	PASS
10	JIR Connect	PASS
11	AUDIO Connect	PASS
12	IDE 1 (Hard Disk)	PASS
13	IDE 2 (CD-ROM)	PASS
14	VGA Connect	PASS
15	JATKB Connect	PASS
16	Disk On Chip 2000	PASS
17	Disk on Module	PASS
18	J82559E Connect	PASS

3.03 LED or Control Panel Test

No	Panel Connector	Result	Memo
1	Green LED	PASS	
2	Power LED	PASS	
3	Speaker	PASS	
4	Reset	PASS	
5	IDE LED	PASS	
6	LAN LED	PASS	

3.04 System BIOS Function Test

No	Function on System BIOS	Result	Memo
1	CPU L1 Cache	PASS	
2	CPU L2 Cache	PASS	
3	Quick Power on Self Test	PASS	
4	On Chip Primary PCI IDE	PASS	
5	On Chip Secondary PCI IDE	PASS	
6	First Boot Device	PASS	
7	USB Controller	PASS	
8	USB Keyboard Support	PASS	
9	Init Display Fist	PASS	
10	ACPI Function	PASS	
11	CPU Warning Temperature	PASS	
12	CPU Frequency Control	PASS	
13	UART2 Mode Select	PASS	
14	Pwron After PWR-Fail	PASS	
15	On board FDC Controller	PASS	
16	On board Serial Port 1	PASS	
17	On board Serial Port 2	PASS	
18	On board Parallel Port	PASS	
19	Current CPU FAN Speed	PASS	
20	Current System FAN Speed	PASS	
21	Set Supervisor Password	PASS	
22	Set User Password	PASS	

3.05 On Board Graphics Driver Test

No	Resolution	Test Key point	Operating System	Test Environment	Result
1	800 x 600 32 bit 75Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
2	800 x 600 16 bit 75Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
3	1024 x 768 32 bit 75Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
4	1024 x 768 16 bit 75Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
5	1152 x 864 32 bit 60Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

No	Resolution	Test Key point	Operating System	Test Environment	Result
7	1152 x 864 16 bit 60Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
8	1280 x 720 32 bit 60Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
9	1280 x 960 16 bit 60Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
10	1280 x 1024 32 bit 60Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
11	1280 x 1024 16 bit 60Hz	1. 3DMARK2001 2. Winbench99	Windows98 SE	CPU : Intel P4 Socket478 1.7GHz DIMM1 : Winbond 256MB DDRAM DIMM2 : Winbond 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

3.06 Modem Card Compatibility Test

No	Modem Chipset	Operating System	Test Environment	Type	Result
1	GVC PCI Modem SF-1133V/R16	Windows98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PCI	PASS
2	ADI PCI Modem SVD-56KIM/SOO	Windows98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PCI	PASS
3	Motorola PCI Modem RS56/SP	Windows98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PCI	PASS
4	Conexant PCI Modem RH56D/SP	Windows98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PCI	PASS
5	Com Bo PCI Modem ComBo-2000 (Modem Sound)	Windows98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PCI	PASS

No	Modem Chipset	Operating System	Test Environment	Type	Result
6	USB 56K Modem FM-56USB-ST	Windows98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PCI	PASS
BIOS : Version 1.0 Load Setup					

4. PERFORMANCE TEST :**4.01 DOS / Windows Operating System**

System Configuration:

- DIMM1: Type_Winbond 184pin DDRAM Model W942508AH-75 Size: 256_MB
- DIMM2: Type_Winbond 184pin DDRAM_Model W942508AH-75 Size: 256 MB
- Display adapter- On board VGA
- DVD: A Open 16XDVD-ROM/AMH 20010712 R03
- HDD: Seagate ST330630A 30.6GB
- BIOS Version 1.0_Load Setup Default.
- O.S.: MS-DOS 7.10

4.01-1 Landmark Speed com V2.0

ITEM	Intel P4 Socket478	Intel P4 Socket478	Intel P4 Socket478
	2.4GHz	1.8GHz	1.7GHz
CPU (MHz)	75212.54	19764.89	10424.32
FPU (MHz)	8393.84	5959.23	4672.54
Video (chr/ms)	17873	17873	17873

4.01-2 Norton Utility V8.0 --- System Information

ITEM	Intel P4 Socket478	Intel P4 Socket478	Intel P4 Socket478
	2.4GHz	1.8GHz	1.7GHz
CPU Speed	1103.5	910.6	795.2
Disk Speed	22.1	22.1	22.1
Overall performance	187.7	176.5	164.2

4.01-3 Power Meter V1.81

ITEM	Intel P4 Socket478	Intel P4 Socket478	Intel P4 Socket478
	2.4GHz	1.8GHz	1.7GHz
Aggregate System	67654.1 PMUS	28728.4 PMUS	17685..8 PMUS
Aggregate Video	9177.4 PMUS	7889.3 PMUS	6254.5 PMUS
Aggregate Disk	4.5 PMUS	4.5 PMUS	4.5 PMUS
CPU/Memory	1240431PMUS	640050 PMUS	537060PMUS
Clock Speed	7472.9 MHz	4887.5 MHz	3946.8 MHz
MIPS TEST	711 MIPS	474 MIPS	397 MIPS
Dhrystone	1249.1K Dhrystones/sec	832.8 K Dhrystones/sec	7456.2K Dhrystones/sec
Whetstone	166552.2K Whetstones	111034.8 K Whetstones	101538.4K Whetstones

4.01-4 Check It V3.0

<i>ITEM</i>		Intel P4 Socket478 2.4GHz	Intel P4 Socket478 1.8GHz	Intel P4 Socket478 1.7GHz
Main System	CPU Speed	517064 Dhrystones	517064 Dhrystones	Dhrystones
	Math Speed	300913.4K Whetstones	222033.6 K Whetstones	188368.2K Whetstones
Video	Bios Video Speed	55167 Chr/sec	44499 Chr/sec	43365Chr/sec
	Direct Video Speed	573577 Chr/sec	573577 Chr/sec	573577 Chr/sec
Hard Disk	Transfer	3731.1 K/Second	3551.2 K/Second	3425.3 K/Second
	Average Times	6.9 ms	6.9 ms	6.9 ms

4.02 Windows 2000 Operating System

System Configuration:

- DIMM1: Type Winbond 184pin DDRAM Model W942508AH-75 Size: 256_MB
- DIMM2: Type Winbond 184pin DDRAM Model W942508AH-75 Size: 256 MB
- Display adapter- On board VGA
- DVD: A Open 16XDVD-ROM/AMH 20010712 R03
- HDD: Seagate ST330630A 30.6GB
- BIOS Version 1.0_Load Setup Default.
- OS : Windows 2000

4.02-1 Content Creation Winstone2001 V1.0

(Resolution: 800X600, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>					<i>P4 Intel 2.4GHZ</i>				
Score Variance	1	2	3	4	5	1	2	3	4	5
Content Creation Winstone2001	63.7	65.2	65.2	65.5	62.7	73.4	73.5	73.5	73.2	73.1

4.02-2 Business Winstone2001 V1.0

(Resolution: 800X600, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>					<i>P4 Intel 2.4GHZ</i>				
Score Variance	1	2	3	4	5	1	2	3	4	5
Business Winstone2001	51.2	51.3	51.5	51.2	51.3	60.8	61.1	61.1	61.3	61.2

4.02-3 Content Creation Winstone2000 V1.0

(Resolution: 800X600, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
Content Creation Winstone2000	64.1	75.4

4.02-4 3D Win Bench2000 V1.0

(Resolution: 1024X768, 16bit colors 85Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
3D WinMark2000	47.4	57.8

4.02-5 3D Win Bench99 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
3D WinMark99	45.1	56.1

4.02-6 Winstone99V1.3

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8AGHZ</i>	<i>P4 Intel 2.4GHZ</i>
Winstone99	43.7	47.8

4.02-7 3D Mark2000 V1.1

(Resolution: 800X600, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
On Board VGA	4523	5240

4.02-8 3D Mark2001 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
On Board VGA	1302	1315

4.02-9 Win Bench 99 V1.0

(Resolution: 1024x768, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
CPUMark99	113	147
FPU Win Mark	6290	8390
Business Disk Win Mark 99	6320	6710
High-End Disk Win Mark 99	21700	22900
Business Graphics WinMark99	179	184
High-EndGraphicsWinMark99	667	879

4.03 Windows XP Operating System

System Configuration:

- DIMM1: Type Winbond 184pin DDRAM Model W942508AH-75 Size: 256_MB
- DIMM2: Type Winbond 184pin DDRAM Model W942508AH-75 Size: 256 MB
- Display adapter- On board Intel 845G VGA
- DVD: A Open 16XDVD-ROM/AMH 20010712 R03
- HDD: Seagate ST330630A 30.6GB
- BIOS Version 1.0_Load Setup Default.
- OS : Windows XP

4.03-1 Content Creation Winstone2001 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>					<i>P4 Intel 2.4GHZ</i>				
Score Variance	1	2	3	4	5	1	2	3	4	5
Content Creation Winstone2001	63.9	64.1	65.2	64.6	64.4	75.4	75.9	74.4	76.1	74.6

4.03-2 Business Winstone2001 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>					<i>P4 Intel 2.4GHZ</i>				
Score Variance	1	2	3	4	5	1	2	3	4	5
Business Winstone2001	52.8	52.7	52.5	52.7	52.6	63.4	63.5	63.4	63.3	63.2

4.03-3 Content Creation Winstone2000 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
Content Creation Winstone2000	61.2	66.7

4.03-4 3D WinBench2000 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
3D WinMark2000	42.8	54.7

4.03-5 Win stone 99V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
Winstone99	42.5	47.9

4.03-6 3D Mark2001 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
On Board VGA	1332	1367

4.03-7 Win Bench 99 V1.0

(Resolution: 1024x768, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8AGHZ</i>	<i>P4 Intel 2.4GHZ</i>
CPUMark99	112	145
FPU Win Mark	6300	8380
Business Disk Win Mark 99	6540	6720
High-End Disk Win Mark 99	21300	22900
Business Graphics WinMark99	177	187
High-EndGraphicsWinMark99	710	876

4.04 Windows 98SE Operating System

System Configuration:

- DIMM1: Type Winbond 184pin DDRAM Model W942508AH-75 Size: 256_MB
- DIMM2: Type Winbond 184pin DDRAM Model W942508AH-75 Size: 256 MB
- Display adapter- On board VGA
- DVD: A Open 16XDVD-ROM/AMH 20010712 R03
- HDD: Seagate ST330630A 30.6GB
- BIOS Version 1.0_Load Setup Default.
- OS : Windows 98SE

4.04-1 Content Creation Winstone2001 V1.0

(Resolution: 800X600, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>					<i>P4 Intel 2.4GHZ</i>				
Score Variance	1	2	3	4	5	1	2	3	4	5
Content Creation Winstone2001	54.1	54.5	54.6	54.4	54.6	60.2	59.7	59.7	59.8	60.1

4.04-2 Business Winstone2001 V1.0

(Resolution: 1024X768, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>					<i>P4 Intel 2.4GHZ</i>				
Score Variance	1	2	3	4	5	1	2	3	4	5
Business Winstone2001	41.2	41.3	41.1	41.2	41.1	46.8	47.2	47.2	47.1	46.9

4.04-3 Content Creation Winstone2000 V1.0

(Resolution: 800X600, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
Content Creation Winstone2000	41.5	49.6

4.04-4 3D Win Bench2000 V1.0

(Resolution: 1024X768, 32bit colors 75Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8GHZ</i>	<i>P4 Intel 2.4GHZ</i>
3D WinMark2000	53.8	58.5

4.04-5 3D Win Bench99 V1.0

(Resolution: 800X600, 16bit colors 85Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8GHZ</i>	<i>P4 Intel 2.4GHZ</i>
3D WinMark99	1150	1624

4.04-6 Winstone99V1.3

(Resolution: 800X600, 16bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
Winstone99	35.8	41.8

4.04-7 3D Mark2000 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
3D WinMark2000	4241	5247

4.04-8 3D Mark2001 V1.0

(Resolution: 1024X768, 32bit colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
ON BOARD VGA	1215	1334

4.04-9 Win Bench 99 V1.0

(Resolution: 1024x768, 16bit colors 85Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
CPUMark99	114	147
FPU Win Mark	6870	8380
Business Disk Win Mark 99	4220	6630
High-End Disk Win Mark 99	10200	21960
Business Graphics WinMark99	179	187
High-EndGraphicsWinMark99	738	871

4.05 Windows NT 4.0(Workstation) Operating System

System Configuration:

- DIMM1: Type_Winbond 184pin DDRAM Model W942508AH-75 Size: 256_MB
- DIMM2: Type Winbond 184pin DDRAM_Model W942508AH-75 Size: 256 MB
- Display adapter- On board VGA
- DVD: A Open 16XDVD-ROM/AMH 20010712 R03
- HDD: Seagate ST330630A 30.6GB
- BIOS Version 1.0 Load Setup Default
- OS : Windows NT4.0

4.05-1 Content Creation Winstone2000 V1.0

(Resolution: 800X600, 16bit colors60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Intel 1.8A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
Content Creation Winstone2000	39.8	43.5

4.05-2 Win Bench 99 V1.1

(Resolution: 1024x768, 65536 colors 60Hz refresh rate with small font)

<i>CPU Type</i>	<i>P4 Inte1.80A GHZ</i>	<i>P4 Intel 2.4GHZ</i>
CPUMark99	114	147
FPU Win Mark	6300	8380
Business Disk Win Mark 99	3800	6510
High-End Disk Win Mark 99	5320	21840
Business Graphics WinMark99	176	185
High-EndGraphicsWinMark99	621	864

5. Hardware Compatibility Testing :**5.01 Graphic card (PCI)**

No	Graphic Card	Test Key point	Operating System	Test Environment	Result
1	Cardex S3 Virge/Dx (PCI)	1. Install O.S 2. WinBench 99	Windows 98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
2	Trident 9440 (PCI)	1. Install O.S 2. WinBench 99	Windows 98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
3	Cyber Pro 2000 (PCI)	1. Install O.S 2. WinBench 99	Windows 98 SE	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
BIOS : Version 1.0 Load Setup					

5.02 LAN Card (PCI)

No	LAN Card	Test Key point	Operating System	Test Environment	Result
1	3 COM 3C905B-TX (PCI)	1. Client/server test 2. Internet Test	1. Windows98SE 2. Windows 2000	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
2	D-Link DFE-530 TX (PCI)	1. Client/server test	1. Windows98SE 2. Windows2000	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
3	Realtek RTL 8139C (PCI)	1. Client/server test	1. Windows98SE 2. Windows 2000	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
4	Intel L101 (PCI)	1. Client/server test	1. Windows98SE 2. Windows 2000	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS

No	LAN Card	Test Key point	Operating System	Test Environment	Result
5	Win bond NE55W (PCI)	1. Client/server test	1. Windows 98 2. Windows Nt4.0	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
6	Win bond W98C840F (PCI)	1. Client/server test	1. Windows98 2. Windows Nt4.0	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
7	Reatlk RTL8029AS (PCI)	1. Client/server test	1. Windows98 2. Windows Nt4.0	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
8	Reatlk RTL8139B (PCI)	1. Client/server test	1. Windows98 2. Windows Nt4.0	CPU : Intel P4 Socket478 1.8A GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	PASS
BIOS : Version 1.0 Load Setup					

5.03 Host controller (SCSI)

No	Host Controller	Test Key point	Operating System	Test Environment	Result
1	Adaptec AHA-2930U2 (PCI)	Install O.S. test	Windows98 SE (Chinese)	CPU : Intel P4 Socket478 1.8A GHz	PASS
2	Sym bios Logic DP05772 (PCI)			DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Maxtor 2B020H1 WAH2IPB0 20.0GB	
3	ACC Micro F01ASR51207 (PCI)			CD-ROM : IDE/ATAPI CD-ROM 52XS 172G 20010712 R03	
BIOS : Version 1.0 Load Setup					

5.04 Keyboard

No	Key Board	Brand/Type	Result
1	104-key keyboard-Philips KWD-601	Philips	PASS
2	104-key keyboard-BTC-8110M	BTC	PASS
3	104-key keyboard-RT6855TW	NMB	PASS
4	USB 104-key keyboard	Forward	PASS
5	USB 104-key keyboard	Chicory	PASS
6	101-key keyboard CHAMPKING	Champ king	PASS
7	SCORPIUS 98A-DCS	DCS	PASS

5.05 Mouse

No	Mouse	Brand/Type	Result
1	PS/2 mouse -M-S34	Philips	PASS
2	Serial mouse	Microsoft	PASS
3	PS/2 mouse	Microsoft	PASS
4	USB mouse-DCS	DCS	PASS
5	PS/2 mouse-LYNX 3D MOUSE	DCS	PASS

5.06 PCI Sound Card (Disable onboard sound codec)

No	PCI Sound card	Test Key point	Operating System	Test Environment	Result
1	Yamaha YMF724E-V (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
2	Yamaha YMF754-R (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows ME 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
3	ESS ES1989S (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows 2000	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
4	JATON Trident Wave 4D (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows 2000	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

No	PCI Sound card	Test Key point	Operating System	Test Environment	Result
5	ALS ALS4000 (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
6	ESS SOLO1 (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
7	ENSOIQ ES1370 (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
8	ESS AXP201 (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

No	PCI Sound card	Test Key point	Operating System	Test Environment	Result
9	ESS S929-2ch (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
10	YAMAHA S927-4ch (PCI)	Play media function: MIDI,WAV,CD-AUDIO ,MPEG,etc...	1 Windows 98 SE 2 Windows NT4.0	CPU : Intel P4 Socket478 1.8GHz DIMM1 : HYUNDAI 256MB DDRAM DIMM2 : HYUNDAI 256MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
BIOS : Version 1.0 Load Setup					

5.07 HDD (EIDE)

No	IDE HDD	Test Key point	Operating System	Test Environment	Result
1	Seagate ST34520A 30.0GB	1 Hard disk delete 2 Install O.S	Windows98 OEM	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST34520A 30.0GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
2	Seagate ST330630A 3.12 30.6GB	1 Hard disk delete 2 Install O.S	Windows2000	CPU : Intel P4 Socket478 1.8GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST330630A 3.12 30.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
3	Seagate ST315320A 15.3GB	1 Hard disk delete 2 Install O.S	Windows98 SE	CPU : Intel P4 Socket478 1.8AGHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST315320A 15.3GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
4	IBM DJNA-352030 20.3GB	1 Hard disk delete 2 Install O.S	Windows NT4.0	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DJNA352030 20.3GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
5	Quantum KX13600AT 15.3GB	1 Hard disk delete 2 Install O.S	Windows XP	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Quantum KX13600AT 15.3GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

No	IDE HDD	Test Key point	Operating System	Test Environment	Result
6	WD AC313000 13GB	1 Hard disk delete 2 Install O.S	Windows ME	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : WD AC313000 13GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
7	Maxtor 98196H8 80GB	1 Hard disk delete 2 Install O.S	Windows 2000	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Maxtor 98196H8 80.0GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
8	IBM DTLA-307030 30GB	1 Hard disk delete 2 Install O.S	Windows 2000	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
9	Seagate ST315323A 15.3GB	1 Hard disk delete 2 Install O.S	Windows98 OEM	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST315323A 15.3GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
10	WD AC26400 10.3GB	1 Hard disk delete 2 Install O.S	Windows NT4.0	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : WD AC26400 10.3GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS

No	IDE HDD	Test Key point	Operating System	Test Environment	Result
11	Seagate ST320414A 20GB	1 Hard disk delete 2 Install O.S	Windows2000	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Seagate ST320414A 20GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
12	Maxtor 5T020H2 10.6	1 Hard disk delete 2 Install O.S	WindowsNT4.0	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : Maxtor5T020H2 10.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
13	IBM DJNA-313000 13.6GB	1 Hard disk delete 2 Install O.S	Windows98 OEM	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DJNA-313000 13.6GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
14	WD AC28400 8.4GB	1 Hard disk delete 2 Install O.S	Windows98 OEM	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : WD AC28400 8.4GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
15	Maxtor 2B020H1 20 GB	1 Hard disk delete 2 Install O.S	Windows2000 Pro	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : WD AC28400 8.4GB DVD : Aopen 16XDVD-ROM/AMH 20010712 R03	PASS
BIOS : Version 1.0 Load Setup					

5.08 CD-ROM (IDE)

No	CD-ROM Drive	Test Key point	Operating System	Test Environment	Result
1	Acer 50X CD-2050E	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : CD-2050E 50X	PASS
2	SONY CDU4811 PY09 48X	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : CDU4811 PY09 48X	PASS
3	CREATIVE CD5233E 52X	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : CD5233E 52X	PASS
4	TEAC CD-540E 40X	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : CD-540E 40X	PASS
5	TEAC CD 540E 1.0A 52X	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : TEAC CD 540E 1.0A 52X	PASS

No	CD-ROM Drive	Test Key point	Operating System	Test Environment	Result
6	PHILIPS PCA 323CD	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : PCA 323CD	PASS
7	PHILIPS 32X/AKU U10I	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : PHILIPS 32X/AKU U10I	PASS
8	ASUS CD-S520/A	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : ASUS CD-S520/A 52X	PASS
9	杰盟	1 Install O.S 2 Media function test audio CD,VCD,etc	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB CD-ROM : CR-852E 52X	PASS
BIOS : Version 1.0 Load Setup					

5.09 DVD-ROM

No	DVD-ROM Drive	Test Key point	Operating System	Test Environment	Result
1	Panasonic SR-8583-B	1 Install O.S 2 Play DVD movie 3 Play VCD movie 4 Play audio CD	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB DVD : Panasonic SR-8583-B	PASS
2	Pioneer A open DVD1648	1 Install O.S 2 Play DVD movie 3 Play VCD movie 4 Play audio CD	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB DVD : Pioneer A open DVD 1648	PASS
3	Pioneer DVD-020	1 Install O.S 2 Play DVD movie 3 Play VCD movie 4 Play audio CD	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB DVD : Pioneer DVD-020	PASS
4	HITACHI GD-2500	1 Install O.S 2 Play DVD movie 3 Play VCD movie 4 Play audio CD	Windows98 SE	CPU : Intel P4 Socket478 2.4GHz DIMM1 : Samsung 512MB DDRAM DIMM2 : Samsung 512MB DDRAM Display adapter-On board VGA HDD : IBM DTLA-307030 30.0GB DVD : Hitachi GD-2500	PASS
BIOS : Version 1.0 Load Setup					