

# **FIC FA31 PCI/AGP SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT**

<b>Product Version:</b>	<b><i>V 1.1B</i></b>
<b>BIOS Version:</b>	<b>VBB43</b>
<b>Report Date:</b>	<b>2/09/2001</b>
<b>Revision:</b>	<b>1.06</b>



## Revision History

Document Release	Date	Change Item	ECN
Revision 1.01	7/07/2000	BIOS update version to VBB42 Add support Cyrix III(Samuel) 533/550/600MHz CPU	M99B03-E-004
Revision 1.02	7/18/2000	Add support Apacer PC-100 64MB(Infineon) SDRAM P/N:71.63323.115	
Revision 1.03	8/14/2000	BIOS update version to VBB43	
		Add support PROMISE ATA/100 PCI IDE card Add support IBM DTLA series ATA/100 IDE HDD	
Revision 1.04	11/14/2000	Add support Intel Celeron (FC-PGA) 600/700/766 MHz CPU	
Revision 1.05	11/27/2000	Add support Windows ME (Millennium Edition) Add support Intel Celeron (FC-PGA) 633MHz CPU	
Revision 1.06	2/09/2001	Add support Intel Celeron 800MHz CPU	

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Communication

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Graphics

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Tools

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Internet

CD Title Game



## 1. Introduction

FIC's motherboards undergo a comprehensive suite of stringent software and hardware compatibility tests to ensure that they can not only run a complete range of operating systems and software packages, but that they can also be installed with a full selection of add-on cards and peripheral devices, such as AGP, VGA, SCSI, and network adapters as well as HDDs, FDDs, CD-ROM Drives and Fax/Modems. A board is deemed to have passed the compatibility testing suite when it has met the following criteria:

- All application software available for IBM compatible products works properly.
- All common internal and external hardware available to the IBM AT-Bus and PCI compatible systems functions properly.
- All hardware and software can be installed according to the instructions provided to the user.
- All legal configurations (IRQ , I/O addresses, DMA levels ) function properly.
- All applications have been tested with and without drivers provided on the support disk.
- All operating systems have been installed and tested with each processor, with and without the most critical mode selected by setup.



## 2. Mainboard Features

**Model Name** : FA31 PCB Rev 1.1B  
**Product Name** : VIA Apollo pro 133A Based Mainboard  
**System BIOS** : Award BIOS Version VBB43  
**PCI IDE** : Internal PCI Mastre dual IDE  
**I/O** : VIA VT686A

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## 3. Mainboard CPU Supports:

### Intel:

Intel Processors	Bus	Package	Status
Celeron 300MHz (with 128K cache)	66	PPGA	Pass
Celeron 333MHz	66	PPGA	Pass
Celeron 366MHz	66	PPGA	Pass
Celeron 400MHz	66	PPGA	Pass
Celeron 433MHz	66	PPGA	Pass
Celeron 466MHz	66	PPGA	Pass
Celeron 500MHz	66	PPGA	Pass
Celeron 533MHz	66	PPGA/FC-PGA	Pass
Celeron 566MHz	66	FC-PGA	Pass
Celeron 600MHz	66	FC-PGA	Pass
Celeron 633MHz	66	FC-PGA	Pass
Celeron 667MHz	66	FC-PGA	Pass
Celeron 700MHz	66	FC-PGA	Pass
Celeron 766MHz	66	FC-PGA	Pass
Celeron 800MHz	100	FC-PGA	Pass
Pentium III 500MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 533MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 550MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 600MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 600MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 650MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 667MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 700MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 733MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 750MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 800MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 850MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 866MHz (Coppermine)	133	FC-PGA	Pass

### Cyrix :

Cyrix Processors	Bus	Package	Status
Cyrix III 533MHz	133	FPGA	Pass
Cyrix III 550MHz	100	FPGA	Pass
Cyrix III 600MHz	133	FPGA	Pass

## 4 System Specification for Hardware and Software Utilities

The mainboard hardware portion was configured as follows :

Item	Description
System Core Logic	VIA Apollo pro 133A (694X_E+686A_C)
System Cache	128K/256K Pipeline Burst SRAM Built-in CPU
System Memory	Maximum : 1.5GB SDRAM/ VCM-SDRAM
	168 pins single RAS and Double RAS DIMM RAM Module
System Slots	1 AGP and 3 PCI and 1 ISA(Optional) slots
Audio	OnChip VIA VT686A AC'97 Audio on board
IO Corelogic	VIA VT686A Support Normal,EPP,ECP mode and IR interface

### 4.1 Main Functionality :

Num.	M/B function	Result
1	ACPI Ready (under Win 98 SE/Win 2000)	PASS
2	APM 1.2	PASS
3	Wake On LAN / Wake On Ring	PASS
4	RTC Alarm Function	PASS
5	H/W Monitoring (+/-12V,+/-5V,Vccp,+5VR)	PASS
6	Logo Genie	PASS
7	BIOS Easy Kit	PASS
8	Overclock Partner	PASS
9	BIOS Flash Protect (Guardian feature)	PASS
10	Ultra ATA-33/66 Enhanced IDE Interface	PASS
11	Virtual Channel Memory (VCM) SDRAM	PASS
12	CPU with DRAM Asynchronous interface	PASS
13	USB Function	PASS
14	Power Failure feature	PASS
15	Year 2000 Compliance	PASS

### 4.2 Main Software Utilities :

Num.	M/B function	Version	Result
1	VIA IDE Bus Master for Win 98	1.47	PASS
2	VIA IDE Bus Master for Win NT	2.1.47	PASS
3	VIA AGP VxD Utilities for Win 95/98	4.00	PASS
4	VIA chipset function' Registry for Win 95/98	1.09	PASS
5	VIA IRQ Routing Table	1.30	PASS
6	Onboard VIA VT686A Audio driver for Win 9x	1.09	PASS
7	Onboard VIA VT686A Audio driver for Win NT	1.09	PASS
8	Award BIOS Flash ROM Utilities	7.64A	PASS
9	Award DMICFG Utilities for DOS	2.3Du	PASS

## 5. Jumper Function Verification

Description	Jumper Name	Default Option	Status
Speaker Connector	SPK	Open	Pass
Power LED	PW_LED	Open	Pass
Sleep Switch	SP_SW	Open	Pass
IDE LED Connector	IDE_LED	Open	Pass
Reset Switch	RST	Open	Pass
Remote Power Switch	RPW_SW	Open	Pass
Message LED	MSG_LED	Open	Pass
Sleep LED	SP_LED	Open	Pass
CPU FAN Connector	CPU_FAN	Open	Pass
Chassis FAN Connector	CHS_FAN	Open	Pass
CPU Clock Rate	SW1-1~4	On,Off,Off,On	Pass
Clear CMOS	SW1-5	Off	Pass
Clear Password Switch	SW1-6	Off	Pass
System Bus Clock	FS0/FS1/FS2	2-3/1-2/1-2	Pass
Magic Tunner	ODV	2-3	Pass
LAN Wake Up	WOL	Open	Pass
IR interface	IR	Open	Pass



## 6. Stability Test

### 6.1 Worst Case Test :

#### 1. Temperature Strife Margin Test : ( 1 day)

System Configuration			
<b>CPU</b>	: Pentium III 750	<b>Mouse</b>	: Microsoft PS/2 mouse
<b>Cache Memory</b>	: 256 K	<b>PowerSupply</b>	: Enlight SI-X145M2 145W
<b>On Board Memory</b>	: SDRAM 128MB (64MB x2)	<b>O.S. Environment:</b>	MS-DOS 6.22,Win 98,UNIX
<b>HDD</b>	: Seagate ST-320420A 20.4GB	<b>Chamber</b>	: KATO SE-47CRT
<b>VGA</b>	: Voodoo3 3000 AGP		
<b>FDD</b>	: NEC FD1231T 1.44MB		

DC voltage: 3.3V and 5V fixed

Temperature range: 25° C ~ 35 ° C

Frequency test on 100MHz frequency

Diagnostic Program: ZD WinStone 99 program will be ran at each different temperature ranges.

NO.	Test Engineer	Test Result	Remark
1.	Peter Chuang	PASS	

#### 2. Full Loading Test : ( 1 day)

System Configuration			
<b>CPU</b>	: Pentium III 700	<b>PCI 1</b>	: Tekrem DC-390F SCSI card
<b>Cache Memory</b>	: 256 K	<b>PCI 2</b>	: Intel 82559 10/100 LAN card
<b>On Board Memory</b>	: SDRAM 384MB (128MB x 3)	<b>PCI 3</b>	: Pctel V1456VQH-P1 56K modem card
<b>HDD 1</b>	: Quantum Fireball CX 4.3GB	<b>Mouse</b>	: Microsoft PS/2 mouse
<b>HDD2</b>	: Maxtor 90871U2 8.7GB	<b>PowerSupply</b>	: HIPRO HP-200NLXAG 200W
<b>HDD3</b>	: WD 38400 8.4GB	<b>O.S. Environment:</b>	Win 2000
<b>CD-ROM</b>	: ASUS CD-S400/A 40X	<b>Chamber</b>	: KATO SE-47CRT
<b>VGA</b>	: Cardex TNT2 AGP		
<b>FDD</b>	: NEC FD1231T 1.44MB		

DC voltage: 3.3V and 5V fixed.

Temperature range: Ambient Temperature (about 25°C)

Frequency tested are on 100MHz with a ±10% frequency variation.

Diagnostic Program: ZD WinStone 99/CC WinStone 2000 burn in.

NO.	Test Engineer	Test Result	Remark
1.	Peter Chuang	PASS	

#### 3. Power Cycling test (Power On/Off Test): (1days)

System Configuration			
<b>CPU</b>	: Pentium III 667	<b>Mouse</b>	: Microsoft PS/2 mouse
<b>Cache Memory</b>	: 256 K	<b>PowerSupply</b>	: HIPRO HP-200NLXAG 200W
<b>On Board Memory</b>	: SDRAM 192MB	<b>Chamber</b>	: KATO SE-47CRT
<b>VGA</b>	: ATI Rage pro Turbo		
<b>FDD</b>	: NEC FD1231T 1.44MB		

DC voltage: change power voltage 3.0V/5.0 V ± 0.5% (Vcc)

Power on and off test using both 110V/220V input .

Temperature range: 25°C

NO.	Test Engineer	Test Result	Remark
1.	Peter Chuang	PASS	Cool boot total: 1000 times

## 6.2 Field (Stress) Test: Dynamic Burn-in Tests

Software Name	Duration	Result
Winstone 99 Under WIN98 SE	24hr.	<i>Pass</i>
Test Configurations for Win 98	Intel Pentium III 733MHz IBM DPTA-372730 Ultra DMA66 27.3GB HDD Buffalo 128MB SDRAM Memory.(Hitachi) Diamond Viper V770 32MB SDRAM AGP VGA	
CC Winstone 2000 Under WIN2000	24hr.	<i>Pass</i>
Test Configurations for Win 2000	Intel Pentium III 750MHz IBM DPTA-372730 Ultra DMA66 27.3GB HDD Buffalo 128MB SDRAM Memory.(NEC) Diamond Viper V770 32MB SDRAM AGP VGA	
Winstone 99 Under Windows NT 4.0	24hr.	<i>Pass</i>
Test Configurations for Windows NT 4.0	Intel Pentium III 700MHz IBM DPTA-372730 Ultra DMA66 27.3GB HDD SIEMENS 128MB SDRAM Memory. ATI XPERT 2000 32B SDRAM AGP VGA	

## 7. Base Operating Systems HCT Tests For PC99

Operating System	Company	HCT Name	Result
Windows 2000 Professional	Microsoft	Microsoft WHQL HCT 9.5	<i>Pass</i>
Test Configurations	Intel Pentium III 800MHz 128MB Memory. ELSA ERAZOR III LT 32MB SDRAM AGP VGA		

## 8. Hardware Compatibility Test Suite

### 8.1 Memory

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A  
☐ Win NT Ver: 4.0 + SP6  
 CPU Intel Pentium III 800MHz (Bus clock 100MHz) ☐ Intel  
 Intel Pentium III 800MHz (Bus clock 133MHz)  
 HDD Maxtor 91360U4 13.6GB IDE ☐ PIO4 ☐ UDMA/66  
 Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 VGA ELSA ERAZOR X 32MB SDRAM ☐ PCI\_Slot:        ☐ AGP 4X  
 CD-ROM SONY CDU4811 48X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 Sound VIA VT686A ☐ ISA\_Slot:        ☐ On board  
 Mouse Microsoft IntelliMouse PS/2 Mouse ☐ COM ☐ PS/2

The following SDRAM module test Winstone 99 V1.2/ BAPCO under Windows 98 SE/NT with BIOS set up default value and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

#### 8.1.1 SDRAM DIMM Module (PC66)

Vender	IC Part No.	ECC	Size	Side	Module No.
Fujitsu	81117622A-100FN	No	16MB	S	
	81117822E-100FN	No	32MB	D	
	81164842A-100FN	Yes	128MB	D	
HYUNDIA	HY57V168010A-10	No	16MB	S	HYM7V64200 TFG-10
	HY57V168010A-10	No	16MB	S	MEMDIMO12AAWW
	HY57V168010A-10	Yes	32MB	D	HYM7V72A400 TFG-10
	HY57V658020TC-10	Yes	64MB	S	HYM7V72A801
	HY57V658020TC-10	No	128MB	D	U8
Micron	MT48LC2M8A-10	No	16MB	S	MTBLSDT264AG
	MT48LC2M8A1-10	No	16MB	S	MT8LSDT264AG-662C1
	MT48LC2M8A1-10	No	32MB	S	MT16LSDT464AG-66CL2
	MT48LC2M8A1-10	Yes	32MB	D	MT16LSDT472A6-662C1
Mitsubishi	M5M4V16S30CTP-12	No	16MB	S	MH2S64CZTJ-15
	M5M4V16S30CTP-12	No	32MB	D	MH4S64CZTJ-16
	M5M4V16S30DTP	Yes	32MB	D	M04B032M2EE72208-C3100
SEC	KM48S2020AT-G12	No	16MB	S	MDS163S-28
	KM48S2020AT-G12	No	16MB	S	KMM366S203AT-G2
	KM48S2020BT-G10	No	16MB	S	KMM366S203BTN-G0
	KM48S2020BT-G10	Yes	32MB	D	KMM374S403BTN-G0
	KM416S4030AT-G10	No	64MB	D	KMM366S824AT-G0
	KM48S8030AT-G10	No	64MB	S	KMM366S823AT-G0
SIEMENS	HYB39S16800T-10	No	16MB	S	NYS64V2000GU-10
Toshiba	TC59S1608AFT-12A	No	16MB	S	THMY640231AEG-12A
	TC59S1608AFT-12A	No	32MB	D	THMY644041AEG-12A

### 8.1.2 SDRAM DIMM Module (PC100)

Vender	IC Part No.	ECC	Size	Side	Module No.
NEC	D4564841G5-A80-9JF	Yes	128MB	D	BUFFALO VSJ-ED128M2
KingSton	TC59SM716FT-80	No	64MB	S	KGM100X64C2/64
SIMONS	D45128163G5-A10B-9JF	No	64MB	S	
SIEMENS	HYB39S64160AT-8	No	32MB	S	HYS64V4200GU-8
	HYB39S64800AT-8	No	64MB	S	HYS64V8200GU-8
	HYB39S64800AT-8	Yes	128MB	D	HYS72V16220GU-8
	HYB39S64800BT-8	No	64MB	S	HYS64V8200GU-8
	HYB39S64800BT-8	Yes	128MB	D	HYS72V16220GU-8
	HYB39S64800CT-8	No	64MB	S	HYS64V8300GU-8-C
	HYB39S64800CT-8	Yes	128MB	D	HYS72V16220GU-8-C
SEC	KM48S2020CT-GH	Yes	32MB	D	BUFFALO VSJ-D32M
	KM48S8030BT-GH	Yes	64MB	S	BUFFALO VSJ-ES64M2
	KM48S8030BT-GH	No	128MB	D	BUFFALO VSJ-D128M2
	KM48S16030T-GL	Yes	256MB	D	
KingMAX	KSV884T4A1A-08A	No	64MB	S	MPC643S-882
	KSV884T4A1A-08A	No	128MB	D	MPCA83S-882
Winbond	W981216AH-75	No	64MB	S	VSJ-S64M2
Apacer	HYB39S64800BT-7.5	No	64MB	S	71.63323.115

### 8.1.3 SDRAM DIMM Module (PC133)

Vender	IC Part No.	ECC	Size	Side	Module No.
SIEMENS	HYB39S64800BT-7.5	No	64MB	S	HYS64V8300GU-7.5
	HYB39S64800BT-7.5	No	128MB	D	HYS64V16220GU-7.5
MICRON	MT48LC8M8A2-75B	No	64MB	S	MT8LSDT864AG-133B4
	MT48LC8M8A2-75B	Yes	64MB	S	MT9LSDT872AG-133B4
	MT48LC8M8A2-75B	No	128MB	D	MT16LSDT1664AG-133B4
	MT48LC8M8A2-75B	Yes	128MB	D	MT18LSDT1672AG-133B4
Hyundai	HY57V658020B TC-75	No	64MB	S	HYM7V63801BTFG-75
	HY57V658020B TC-75	No	128MB	D	HYM7V631601BTFG-75
	HY57V658020B TC-75	Yes	128MB	D	HYM7V73A1601BTFG-75
NEC	D4564841G5-A75-9JF	No	64MB	S	MC-458CB647LF-A75
Winbond	W981208AH-75	No	128MB	S	VS133-128M
KingMAX	KSV884T4A1A-07	No	64MB	S	MPG643S-883
	KSV884T4A1A-07	No	128MB	D	MPGA83S-883
Hitachi	5264805FTT75	No	64MB	S	VS133-64M
	5264805FTT75	No	128MB	D	VS133-128M
Mitsubishi	M2V64S30BTP	No	64MB	S	MH8S64BALD-6
Apacer	HYB39S64800BT-7.5	No	64MB	S	71.63350.114
	AM2V648C2T75	No	64MB	S	71.63350.034
	HYB39S64800BT-7.5	No	128MB	D	71.73350.114
	GM72V66841XT75	No	128MB	D	71.73350.064
	HYB39S64800AT-7.5	No	128MB	D	71.73350.114
	AM2V648C2T75	No	128MB	D	71.73350.034

Buffalo	GM72V66841ET7K	No	128MB	D	VS133-128M
	GM72V66841ET7K	No	64MB	S	VS133-64MB
V-TEC	GM72V66841ET75	No	64MB	S	
KingSton	TC59SM708FT-75	No	128MB	S	KGM133X64C3/128
	HYB39S64800BT-7.5	No	64MB	S	KVR-PC133/64 (8X64)
	HYB39S64800BT-7.5	No	128MB	D	KVR-PC133/128
	0312804CT3A-75A	No	256MB	D	KVR-PC133/256 (32X64)
SIMONS	D45128841G5-A80-9JF	No	128MB	S	

## 8.2 Add-on Cards

### 8.2.1 Display Adapter Products

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.222A .

CPU Intel Pentium III 800MHz ☐ Intel

Memory SIMONS 128MB(D45128841G5-A80-9JF)Total: 256 MB ☐ PC100 ☐ PC133

HDD Seagate ST-330630A 30.6GB ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM Pioneer DVD-115 15X IDE DVD

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound VIA VT686A

☐ ISA\_Slot:     ☐ Onboard

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following PCI/AGP VGA cards test 3D WinBench 2000 /3Dmark 2000/Final Reality 1.01 under Windows 98 with their respective VGA drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

#### 8.2.1.1 2X AGP Display Adapter Products

Vendor	Model Name	Product Description	Driver version
ATI	Rage 128GL	Rage Fury	4.11.6222
	Rage 128GL	All-In-Wonder 128	4.11.6222
	Rage 128GL	XPert 128	4.11.6222
	Rage 128VR	XPert 2000	4.11.6222
	Rage 128 Pro	Rage Fury MAXX	4.12.7936
	Rage 128 Pro	Rage Fury Pro	4.11.6249
ASUS	Riva 128ZX	AGP-V3000ZXTV	4.10.01.0250
	S3 Savage 3D	AGP-V3100	4.11.01.4005
	Voodoo Banshee	AGP-V3200	4.11.01.0378
	Riva TNT	AGP-V3400TNT	4.11.01.0216
	S3 Savage 4	AGP-V3500	1.00.0603
Matrox	MGA-G200	Millennium G200	4.11.01.2410
	MGA-G200A	Millennium G200 LE	4.11.01.2410
	MGA-G400	Millennium G400 SH	4.11.01.1410
	MGA-G400	Millennium G400 DH	4.11.01.1410
	MGA-G400	Millennium G400 MAX	4.11.01.1410
Diamond	3DLabs Permedia II	Fire GL1000 pro	4.10.01.2359

	Riva TNT	Viper V550	4.12.01.0368
	Intel i740	Stealth II G460	4.10.01.1400
	Voodoo Banshee	Monster Fusion	4.10.01.0213
PowerColor	S3 Savage 3D	Savage 3D	4.11.01.4005
JIN JIU	SiS 6326	6326 AGP	4.11.01.1280
Creative	Riva TNT2 Ultra	3D Blaster Riva TNT2 Ultra	4.12.01.2207
Gigabyte	Riva TNT2 -A	GA-660 Plus	4.11.01.0208
ELSA	3Dlabs Permedia II	Gloria Synergy (UP802PII)	4.10.01.0203
	Riva TNT	ERAZOR II	4.12.01.0112
	Voodoo Banshee	Victory II	4.11.01.0300
	Riva Geforce2 GTS	GLADIAC	4.12.01.0202
Leadtek	Riva TNT2 Vanta	WinFast 3D S320V	4.11.01.0240
	Riva TNT2 Ultra	Winfast 3D 320II Ultra	4.11.01.0240
	SiS 300	Winfast VR300	4.12.01.1030
3dfx	Voodoo 3 2000	Voodoo 3 2000	4.12.01.1222
	Voodoo 3 3000	Voodoo 3 3000	4.12.01.1222
	Voodoo 3 3500	Voodoo 3 3500 TV	4.12.01.1222

#### 8.2.1.2 4X AGP Display Adapter Products

Vendor	Model Name	Product Description	Driver version
Diamond	Riva TNT2	Viper V770	4.12.01.0368
	Riva TNT2 Ultra	Viper V770 Ultra	4.12.01.0368
	S3 Savage 2000	Viper II (mode Z200)	4.12.01.9002
ASUS	Riva TNT2 Pro	AGP-V3800 Pro	4.12.01.0375
	Riva GeForce 256	AGP-V6600	4.12.01.0375
	GeForce256	AGP-V6800	4.12.01.0375
Leadtek	Riva TNT2 M64	WinFast 3D S325	4.11.01.0208
	Riva GeForce 256	Winfast Geforce 256	4.12.01.0379
	GeForce256 GTS	Winfast GeForce 2 GTS	4.12.01.0384
YUAN	Riva TNT2 M64	3D Xtreme2	4.12.01.0368
Hercules	Riva GeForce 256	3D Prophet DDR-DVI	4.12.01.0377
Creative	Savage 4	3D Blaster Savage 4	4.11.01.2104
	Riva TNT2 M64	Riva TNT2 Value	4.12.01.2207
	Riva Geforce 256	3D Blaster GeForce256	4.12.01.2207
	Riva Geforce 256	3D Blaster GeForce Pro	4.12.01.2207
ELSA	Riva TNT2	ERAZOR III	4.12.01.0112
	Riva TNT2	Synergy II	4.12.01.0116
	Savage 4	Winner II	4.11.01.0310
	Riva TNT2 M64	ERAZOR III LT	4.12.01.0112
	Riva TNT2 Vanta	ERAZOR III LT-16	4.12.01.0116
	Riva TNT2 Pro	ERAZOR III Pro	4.12.01.0112
	Riva GeForce 256	ERAZOR X	4.12.01.0112
	Riva GeForce 256 DDR	ERAZOR X <sup>2</sup>	4.12.01.0112

### 8.2.1.3 PCI Display Adapter Products

Vendor	VGA Chip	Product Description
ATI	ATI Rage II	ATI Rage II 3D
ELSA	S3 Virge/VX	Winner 3000L 3D
Creative	S3 Savage 4	3D Blaster Savage 4
Diamond	S3 964	Stealth 64 Video
Cardex	SiS 6326	Cardexpert 6326
ASUS	Riva TNT2	PCI-V3800
Matrox	MGA-1064SG	Mystique 4MB SGRAM

### 8.2.2 SCSI Adapter Products

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A .  
☐ Win NT Ver: 4.0 + SP6  
 CPU Intel Pentium III 866MHz ☐ Intel  
 Memory Buffalo 128MB (5264805FTT75) Total: 256 MB ☐ PC100 ☐ PC133  
 VGA Creative Geforce 256 AGP VGA ☐ PCI\_Slot:        ☐ AGP  
 HDD IBM DD RS39130 9.1GB SCSI HDD ☐ Ultra II SCSI ☐ Ultra Wide  
 Seagate ST-39240LW 9GB SCSI HDD ☐ Ultra SCSI ☐ Ultra Wide  
 CD-ROM TEAC CD-R56S SCSI ☐ Ultra SCSI ☐ Ultra Wide  
 Sound VIA VT686A ☐ ISA\_Slot:     ☐ On board  
 Mouse Logitech MouseMan Mouse ☐ COM ☐ PS/2

The following PCI SCSI cards run Winstone 99 under Windows 98/NT with their respective SCSI drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

Vendor	Model Name	Product Description	Bus I/F
Adaptec	AHA-2940UW	Adaptec AHA-2940UW PCI SCSI card	PCI
	AHA-2940U2W	Adaptec AHA-2940U2W PCI SCSI card	PCI
	ASC-29160	Adaptec Ultra 160 PCI SCSI card 29160	PCI
	ASC-39160	Adaptec Ultra 160 PCI SCSI card 39160	PCI
BusLogic	KT-958	Buslogic KT-958 Narrow SCSI	PCI



FlashPoint LT	Buslogic BA81C15 PCI SCSI	PCI
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### 8.2.3 FAX / Modem Products

#### Test Configuration:

**OS Ver** ☐ Win 98 **SE Ver:** 4.10.2222A .  
**CPU** Intel Pentium III 750MHz ☐ Intel  
**Memory** SIEMENS 64MB(HYB39S64800AT-8) **Total:** 128 MB ☐ PC66 ☐ PC100  
**VGA** Matrox Millennium G400 MAX ☐ PCI\_Slot: \_\_\_\_\_. ☐ AGP  
**HDD** WD AC313000 13GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Creative CD5220E 52X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686A ☐ ISA\_Slot: \_\_\_\_\_. ☐ On board  
**Mouse** Microsoft IntelliMouse PS/2 Mouse ☐ COM ☐ PS/2

The following External modem test includes connecting to the internet and download files under under Windows 98 with their respective modem drivers installed .

Vendor	Product Description	Bus I/F
ADI	CommuPack 56K SVD	External
USR	Sportster 56K Faxmodem	External
GVC	56K/K56 FLEX ASVD	External
Motorola	VoiceSURFR 56K	External
Diamond	Supra MAX 56K ITU & flex	Internal/PCI
Askey	1456VQH75	Internal/PCI
HSP	V1456VQH-P1 56Kbps	Internal/PCI
CIS	Soft 56K data/Fax/RTAP	Internal/PCI

### 8.2.4 ATA/100 PCI IDE Products

#### Test Configuration:

**OS Ver** ☐ Win 98 **SE Ver:** 4.10.2222A .  
☐ Win 2000 **Ver:** 5.00.2195  
**CPU** Intel Pentium III 866MHz ☐ Intel  
**Memory** Buffalo 128MB (GM72V66841ET7K) **Total:** 256 MB ☐ PC100 ☐ PC133  
**VGA** ELSA ERAZOR III Pro 32MB DDRAM ☐ PCI\_Slot: \_\_\_\_\_. ☐ AGP  
**HDD** IBM DTLA-307060 61.4GB IDE ☐ PIO4 ☐ UDMA/100  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DVD-115 16X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686A ☐ ISA\_Slot: \_\_\_\_\_. ☐ On board  
**Mouse** Microsoft IntelliMouse PS/2 Mouse ☐ COM ☐ PS/2



The following ATA/100 PCI card test Core test 92/Winstone 99/Winbench 99 under Windows 98 SE/2000 with their respective card drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font..

Vendor	Product Description	Bus I/F
PROMISE	Ultra ATA/100 Controller Card for PCI	Internal/PCI

## 8.3 Storage

### 8.3.1 SCSI Peripheral Products

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A .

☐ Win NT Ver: 4.0 + SP6

CPU Intel Pentium III 800MHz ☐ Intel

Memory SIMONS 128MB(D45128841G5-A80-9JF)Total: 256 MB ☐ PC100 ☐ PC133

VGA Creative Geforce 256 AGP VGA ☐ PCI\_Slot:       . ☐ AGP

SCSI AHA -2940U2W Ultra 2 SCSI ☐ ISA ☐ PCI\_Solt: 2.

Mouse Logitech First Mouse+ Mouse ☐ COM ☐ PS/2

The following SCSI devices test and WinStone 99 under Windows 98/NT with their respective SCSI drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

ITEM	Vendor	Model Name	Product Description
Hard Disk	Quantum	Viking II	Ultra2 Wide SCSI HDD 4.5GB
		Atlas II	Ultra SCSI HDD 4.5GB
		Atlas III	Ultra Wide SCSI HDD 9.1GB
		Atlas V	Ultra Wide SCSI HDD 18GB
		Atlas 10K	Ultra2 SCSI HDD 18.2GB
	Seagate	ST-34555N	Ultra SCSI HDD 4.5GB
		ST-32272W	Ultra Wide SCSI HDD 2.2GB
		ST-39173W	Barracuda 9LP Ultra Wide 9.1GB
		ST318404LW	Cheetah Ultra160 Wide 18GB
		ST-34502LW	Cheetah 9LP Ultra2 Wide 4.5GB
	IBM	DCAS34330	Ultra SCSI HDD 4.5GB
		DCAS34330	Ultra Wide SCSI HDD 4.5GB
		DMVS IEC-950	Ultra2 Wide SCSI HDD 9.1GB
		DMVS IEC-950	Ultra2 Wide SCSI HDD 36GB
CD-ROM CD-RW	Plextor	PX-40Tsi	Ultra SCSI CD-ROM 40X
	Panasonic	CR-508	SCSI-II CD-ROM 24X
	NEC	CDR-1910	Ultra SCSI CD-ROM 32X
	SONY	CDU-625	SCSI-II CD-ROM 24X
	TEAC	CD-523S	Ultra SCSI CD-ROM 32X
		CD-R56S	SCSI-II CD-ROM 24R/6W/4RW
	Toshiba	XM-6210B	Ultra SCSI CD-ROM 32X
ZIP	iomega	ZIP 250	SCSI ZIP 250 External

### 8.3.2 IDE Fixed Disk Drive Products

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A ☐ Win NT Ver: 4.0 + SP6  
 CPU Intel Pentium III 866MHz ☐ Intel  
 Memory KingSton 128MB(HYB39S64800BT-7.5)Total: 256 MB ☐ PC100 ☐ PC133  
 CD-ROM Mitsumi CRMC-FX4820T 48X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 VGA Diamond Viiper 770 Ulltra 32MB SDRAM ☐ PCI\_Slot:      ☐ AGP  
 Sound VIA VT686A ☐ ISA\_Slot:      ☐ On board  
 Mouse Logitech First Mouse+ Mouse ☐ COM ☐ PS/2

The following IDE devices test and WinStone 99 under Windows 98/NT with VIA IDE Bus Master drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

#### 8.3.2.1 IDE Ultra DMA/33

Vendor	Model Name	Mode	Capacity
Maxtor	Diamond 88400D8	Ultra DMA 33	8.4GB
	Diamond 86480D6	Ultra DMA 33	6.4GB
	Diamond 84320D4	Ultra DMA 33	4.3GB
	Diamond 91000D8	Ultra DMA 33	10.0GB
Fujitsu	MPA3052AT	Ultra DMA 33	5.2GB
	MPA3043AT	Ultra DMA 33	4.3GB
	MPB3064AT	Ultra DMA 33	6.4GB
	MPB3032AT	Ultra DMA 33	3.2GB
	MPC3043AT	Ultra DMA 33	4.3GB
	MPC3064AT	Ultra DMA 33	6.4GB
	MPC3102AT	Ultra DMA 33	10.2GB
Quantum	Fireball ST	Ultra DMA 33	6.4GB
	Fireball SE	Ultra DMA 33	4.3GB
	Fireball EL	Ultra DMA 33	5.1GB
	Fireball EX	Ultra DMA 33	6.4GB
	Fireball EX	Ultra DMA 33	12.7GB
Seagate	Medialist pro ST-34342A	Ultra DMA 33	4.3GB
	Medialist pro ST-39140A	Ultra DMA 33	9.1GB
	Medialist pro ST-36530A	Ultra DMA 33	6.5GB
WD	Caviar AC36400	Ultra DMA 33	6.4GB
	Caviar AC38400	Ultra DMA 33	8.4GB
IBM	DHEA-36480	Ultra DMA 33	6.4GB
	DTTA-371010	Ultra DMA 33	10.1GB

### 8.3.2.2 IDE Ultra DMA/66

Vendor	Model Name	Mode	Capacity
WD	AC28400	Ultra DMA 66	8.4GB
	AC310200	Ultra DMA 66	10.2GB
	AC313000	Ultra DMA 66	13GB
Seagate	ST-36421A	Ultra DMA 66	6.4GB
	ST-313032A	Ultra DMA 66	13GB
	ST-317242A	Ultra DMA 66	17.2GB
	ST-320420A	Ultra DMA 66	20.4GB
	ST-328040A	Ultra DMA 66	28GB
	ST-330630A	Ultra DMA 66	30.6GB
Fujitsu	MPE3064AT	Ultra DMA 66	6.4GB
	MPE3102AT	Ultra DMA 66	10.2GB
	MPE3102AH	Ultra DMA 66	10.2GB
	MPE3204AT	Ultra DMA 66	20.4GB
	MPE3204AH	Ultra DMA 66	20.4GB
IBM	DJNA-370910	Ultra DMA 66	9.1GB
	DJNA-351350	Ultra DMA 66	13.5GB
	DJNA-352030	Ultra DMA 66	20.3GB
	DPTA-372730	Ultra DMA 66	27.3GB
	DPTA-353750	Ultra DMA 66	37.5GB
Quantum	Fireball CR	Ultra DMA 66	4.3GB
	Fireball CR	Ultra DMA 66	8.4GB
	Fireball CX	Ultra DMA 66	10.2GB
	Fireball CX	Ultra DMA 66	13GB
	Fireball KA	Ultra DMA 66	9.1GB
	Fireball LA	Ultra DMA 66	4.3GB
	Fireball LA	Ultra DMA 66	8.4GB
	Fireball LB	Ultra DMA 66	10.2GB
	Fireball Plus LM	Ultra DMA 66	20.5GB
	Fireball LM	Ultra DMA 66	30GB
Maxtor	91021U2	Ultra DMA 66	10.2GB
	91024U4	Ultra DMA 66	10.2GB
	91360U4	Ultra DMA 66	13.6GB
	91531U3	Ultra DMA 66	15.3GB
	92040U6	Ultra DMA 66	20GB
	92049U4	Ultra DMA 66	20GB
	92720U8	Ultra DMA 66	27GB
	93073U6	Ultra DMA 66	30.7GB
	53073U6	Ultra DMA 66	30.7GB
	94098U8	Ultra DMA 66	40GB
	54098U8	Ultra DMA 66	40GB
Samsung	SV2046D	Ultra DMA 66	20.4GB

### 8.3.2.3 IDE Ultra DMA/100 (Test under Promise ATA/100 PCI card)

Vendor	Model Name	Mode	Capacity
IBM	DTLA-307015	Ultra DMA 100	15.3GB
	DTLA-305020	Ultra DMA 100	20.5GB
	DTLA-307020	Ultra DMA 100	20.5GB
	DTLA-307030	Ultra DMA 100	30.7GB
	DTLA-307045	Ultra DMA 100	46.1GB
	DTLA-307060	Ultra DMA 100	61.4GB
	DTLA-307075	Ultra DMA 100	76.8GB

### 8.3.3 Floppy Disk Drive Products

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A
☐ Win NT Ver: 4.0 + SP6

CPU Intel Pentium III 700MHz

☐ Intel

Memory NEC 128MB (D4564841G5-A80-9JF)

Total: 128 MB ☐ PC66 ☐ PC100

VGA Diamond Viper V770 32MB SDRAM

☐ PCI\_Slot:      ☐ AGP

HDD Quantum Fireball CX 10.2GB IDE

☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM BTC BCD 48SB 48X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound VIA VT686A

☐ ISA\_Slot:      ☐ On board

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following Floppy devices were tested by format disk, boot and read/write file under under Windows 98/NT with VIA IDE Bus Master drivers installed .

Vendor	Model Name	Product Description
Panasonic	JU-257A606P	1.44MB Floppy Disk Drive
TEAC	FD-235HF	1.44 MB Floppy Disk Drive
SONY	MPF920-E	1.44 MB Floppy Disk Drive
ALPS	DF354N901C	1.44 MB Floppy Disk Drive

### 8.3.4 ATAPI CD-ROM /DVD-ROM Device Product

#### Test Configuration:

**OS Ver** ☐ Win 98 **SE Ver:** 4.10.2222A .  
**CPU** Intel Pentium III 700MHz ☐ Intel  
**Memory** NEC 128MB (D4564841G5-A80-9JF) **Total:** 128 MB ☐ PC66 ☐ PC100  
**HDD** Maxtor 91531U3 15.3GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Creative GeForce256 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**Sound** VIA VT686A ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
**Mouse** Logitech TrackmanMarble Mouse ☐ COM ☐ PS/2

The following IDE devices test CD Winbench 99 and play VCD/DVD over night under indows 98 with VIA IDE Bus Master drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

#### 8.3.4.1 ATAPI CD-ROM:

Vendor	Model Name	Product Description
Panasonic	CR-587-D	ATAPI CD-ROM 32X Mode4
Mitsumi	CRMC-FX320S	ATAPI CD-ROM 32X Mode4
LITE-ON	LTN-485S	ATAPI CD-ROM 48X UDMA2
Acer	650P	ATAPI CD-ROM 50X UDMA2
BTC	BCD 48SB	ATAPI CD-ROM 48X UDMA2
Pioneer	DR-744	ATAPI CD-ROM 36X Mode4
Creative	CD4834E	ATAPI CD-ROM 48X Mode4
	CD5220E	ATAPI CD-ROM 52X Mode4
ASUS	CD-S400/A	ATAPI CD-ROM 40X UDMA2
	CD-S500/A	ATAPI CD-ROM 50X UDMA2
SONY	CDU-711	ATAPI CD-ROM 32X UDMA2
	CDU-4811	ATAPI CD-ROM 48X UDMA2

#### 8.3.4.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
Toshiba	SD-M1202	ATAPI DVD-ROM 4.8X
SONY	DDU-220E	ATAPI DVD-ROM 5.0X
Hitachi	GD-2500	ATAPI DVD-ROM 6X
Pioneer	DVD-114	ATAPI DVD-ROM 10X
	DVD-115	ATAPI DVD-ROM 16X
Afreedy	DD-4008E	ATAPI DVD-ROM 8.0X
	DD-4010E	ATAPI DVD-ROM 10X



Creative	DVD8400E	ATAPI DVD-ROM 8.0X
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### 8.3.5 ATAPI Disk Drive (IDE Interface)

#### Test Configuration:

OS Ver ☐ MS-DOS Ver: 6.22 .  
☐ Win 98 SE Ver: 4.10.2222A .

CPU Intel Pentium III 650MHz ☐ Intel

Memory SEC 64MB (KM48S8030BT-GH) Total: 128 MB ☐ PC66 ☐ PC100

VGA ATI XPERT 2000 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP

HDD Seagate ST-317242A 17.2GB IDE ☐ PIO4 ☐ UDMA/66

CD-ROM Acer 650P 50X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound VIA VT686A Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Mouse Microsoft IntelliMouse Mouse ☐ ISA\_Slot: \_\_\_\_ ☐ On board

☐ COM ☐ PS/2

The following Floppy devices were tested by format disk, boot and read/write file (large file) under DOS 6.22/Windows 98 with VIA IDE Bus Master drivers installed .

Vendor	Product Description
Panasonic	LKM-F434-105 LS-120
Zip	Z250ATAPI ZIP device 250MB
	Z100iIDE ZIP device 100MB

## 8.4 Peripherals

### 8.4.1 Parallel/Serial Port Products (Including IR)

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A .

CPU Intel Pentium III 750MHz ☐ Intel

Memory Winbond 128MB (W981216AH-75) Total: 256 MB ☐ PC66 ☐ PC100

HDD Maxtor 92040U6 20.4GB IDE ☐ PIO4 ☐ UDMA/66

CD-ROM Hitachi GD-2500 6X IDE DVD Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

**VGA** Matrox Millennium G400 MAX ☐ PCI\_Slot:\_\_\_\_. ☐ AGP  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_\_. ☐ On board  
**Mouse** Logitech TrackMan Marble Mouse ☐ COM ☐ PS/2

The following Parallel/Serial devices be tested under Windows 95/98 with VIA IDE Bus Master drivers installed.

Vendor	Product Description	Bus I/F
HP	HP LaserJet 6P support IR Interface	LPT/IR
Mustek	Mustek 1200CP Scanner	LPT
Parallel	DirectParallel universal cable	LPT
Kodak	DC210 InfraRed/Serial port Digital camera	COM/IR
ACTisys	ACT-IR210L	IR
	ACT-IR220L	COM(IR)
IRwave	IRwave320F	IR
	IRwave320S	COM(IR)

## 8.4.2 Mouse Products

### Test Configuration:

**OS Ver** ☐ Win 95 Ver: OSR2.5 ☐ Win 98 SE Ver: 4.10.2222A  
**CPU** Intel Pentium III 750MHz ☐ Intel  
**Memory** KingSton 64MB (TC59SM716FT-80) **Total:** 128 MB ☐ PC66 ☐ PC100  
**HDD** Seagate ST-320420A 20.4GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** BTC BCD 48SB 48X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** ASUS AGP-3400TNT 16MB SGRAM ☐ PCI\_Slot:\_\_\_\_. ☐ AGP  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_\_. ☐ On board

The following Mouse devices test Office 2000 and Game under Windows 95/98 with Mouse drivers installed.

Vendor	Model Name	Product Description	Bus I/F
Microsoft	IntelliMouse	Microsoft IntelliMouse Serial - PS/2 Mouse	Serial/ PS2
	IntelliMouse	IntelliMouse USB/PS2 Mouse (w IntelliEye)	USB/PS2
Logitech	MouseMan	Logitech MouseMan Serial - PS/2 Mouse	Serial/ PS2
	First Mouse+	Logitech First Mouse+ Serial - PS/2 Mouse	Serial/ PS2
	TrackMan Marble	Logitech TrackMan Marble Serial - PS/2 Mouse	Serial/ PS2
Genius	NetMouse	Genius NetMouse PS/2 Mouse	PS2

### 8.4.3 USB Device Products

#### Test Configuration:

**OS Ver** ☐ Win 98 **SE Ver:** 4.10.2222A   
**CPU** Intel Pentium III 750MHz ☐ Intel   
**Memory** SIEMENS 128MB (HYB39S64800CT-8) **Total:** 256 MB ☐ PC66 ☐ PC133   
**HDD** Maxtor 92040U6 20.4GB IDE ☐ PIO4 ☐ UDMA/66   
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS   
**CD-ROM** Hitachi GD-2500 6X IDE DVD **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS   
**VGA** Matrox Millennium G400 MAX ☐ PCI\_Slot: \_\_\_\_ ☐ AGP   
**Sound** VIA VT686A ☐ ISA\_Slot: \_\_\_\_ ☐ On board   
**Mouse** Logitech First Mouse+ Mouse ☐ COM ☐ PS/2

The following USB devices be tested under Windows 98 with Win 98 default driver installed.

Type	Vendor	Description
Mouse	Logitech	M-UA34
		USB Wheel Mouse
		USB MouseMan Wheel
	Microsoft	IntelliMouse USB/PS2 Mouse (w IntelliEye)
	Justy	UM-400
	XNTC	98NS1-U2
	Cypress	7-895 Mouse
HUB	Belkin	Express Bus F5U001
Camera	Kodak	DVC323
	IBM	XVP610
	AXIS	PCAM-QU
Faxmodem	USRobotics	56K Voice Faxmodem
Keyboard	BTC	8113W
	Chicony	KU-8933
	Jetime	ACK-298H
	Microsoft	Natural Keyboard Pro
Printer	EPSON	Stylus Color 740
Ethernet	CATC	USB to Lan 10BASE-T
Scanner	HP	ScanJet 4200C
Speaker	Philips	MAGNAVOX DSS350
Monitor	CTX	PR711F
CD-RW	SONY	Spessa CD-ReWritable Recorder
GamePad	Creative	Cobra USB GamePad
	Logitech	WingMan Extreme USB GamePad
Joystick	Genius	Flight2000 F-22X
	Logitech	WingMan Formula Force joystick
	Thrustmaster	TOP Gun



#### 8.4.4 Joystick & Game Pad

##### Test Configuration:

**OS Ver** ☐ Win 98 **SE Ver:** 4.10.2222A .  
**CPU** Intel Pentium III 750MHz ☐ Intel  
**Memory** SEC 64MB (KM48S8030BT-GH) **Total:** 192 MB ☐ PC66 ☐ PC100  
**HDD** Seagate ST-320420A 20.4GB IDE ☐ PIO4 ☐ UDMA/33  
**CD-ROM** Lite-On LTN-485S 48X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Creative Geforce 32MB SDRAM **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686A **PCI\_Slot:**        ☐ AGP  
**Mouse** Microsoft IntelliMouse Mouse **ISA\_Slot:**        ☐ On board  
☐ COM ☐ PS/2

The following Joystick & Game Pad devices test Game under Windows 98 SE with themselves default driver installed.

Type	Vendor	Product Description
GamePad	Logitech	ThunderPad Digital
Joystick	Microsoft	SideWinder 3D Pro joystick
		SideWinder force feedback pro joystick
	Logitech	Wing Man Extreme digital joystick
		WingMan Force joystick
		CyberMan2 Digital Game Controller

#### 8.5 Power Supply Products

Vendor	Product Description	Power	Type
DELTA	DPS-200PB-103A	200W	ATX
	DPS-200PB-103D	200W	ATX
	DPS-200PB-103F	200W	ATX
	DPS-88AB	90W	SFX
HIPRO	HP-250NLXAK Rev:01	250W	NLX
	HP-200 NLXAG	200W	NLX
	HP-200NLXAA	250W	NLX
	HP-250NLXAA	250W	NLX
	HP-300SN Rev:02	300W	ATX

	HP-A1463F5 Rev:03	145W	SFX
Seventeam	ST-250GL	250W	ATX
	ST-301HR	300W	ATX
	ST-150MK	150W	SFX
	ST-200PIII	200W	SFX
Enlight	ATX-723B	230W	ATX
	ATX-725B	250W	ATX
	SFX-1215A	150W	SFX
	SI-X145M2 REV:A0-01	145W	SFX
	SI-X145M3 REV:B0	145W	SFX
Liteon	PS-5141-4	145W	SFX
Enhance	SFX-1215B	150W	SFX

## 8.6 MPEG-2 DVD Display Products

### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A

CPU Intel Pentium III 700MHz ☐ Intel

Memory SEC 64MB (KM48S8030BT-GH) Total: 192 MB ☐ PC66 ☐ PC100

HDD Quantum Fireball CX 13GB IDE ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM SONY CDU711 32X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS

VGA Diamond Viper V550 32MB SDRAM ☐ PCI\_Slot:      ☐ AGP

Sound VIA VT686A ☐ ISA\_Slot:      ☐ On board

Mouse Microsoft IntelliMouse Mouse ☐ COM ☐ PS/2

The following DVD player over night under Windows 98 with their respective DVD drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

Vendor	VGA Chip	Product Description
Realmagic	Sigma Designs EM8300	DVDmagic Pro DVD card
Formosa	Sigma Designs EM8300	DVD8300 DVD card

## 9. Software Compatibility Test Suite

### 9.1 Base Operating System

#### 9.1.1 Microsoft Windows 95/98/98 SE:

### Test Configuration:

CPU Intel Pentium III 866MHz ☐ Intel

Memory Winbond 128MB (W981208AH-75) Total: 384 MB ☐ PC66 ☐ PC133

HDD Seagate ST-320420A 20.4GB IDE ☐ PIO4 ☐ UDMA/66



**VGA** Creative TNT2 Ultra 32MB SDRAM **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686A ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**CD-ROM** SONY CDU-4811 48X IDE ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
**Mouse** Microsoft IntelliMouse Mouse **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
☐ COM ☐ PS/2

Test Item	Result	Remark
FDISK (FAT32)	PASS	
Install Win OS	PASS	
Format FDD	PASS	
Diskcopy	PASS	
Large file Copy	PASS	
Cool boot 2 times under every combination	PASS	
Reboot 2 times under every combination	PASS	
FIC CD-PRO all Application Install & Test	PASS	
CoreTest 92 (Transfer Rate test)	PASS	
Device Management check (No Caution)	PASS	
VGA Resolution/Color change	PASS	
Install Office 2000	PASS	
Auto Shutdown (system power off)	PASS	
Defrag test	PASS	
LS-120/ZIP install & working	PASS	
Year 2000 test	PASS	
VCD play (name: Mercury Rising )	PASS	
GAME play (name: Need For Speed III )	PASS	
PM function by WIN98 (H/W )	PASS	
WinStone 99 (Business WS99)	PASS	
CC WinStone 2000	PASS	
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	
3D Winbench 99 (3D Quality/3D Winmark)	PASS	

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
MS Windows 95 OSR2.5	950C	English	Microsoft	Pass
MS Windows 98	1998	English	Microsoft	Pass
MS Windows 98 SE	4.10.2222A	English	Microsoft	Pass
	4.10.2222A	Chinese(trad)	Microsoft	Pass
	4.10.2184.1	Chinese(simp)	Microsoft	Pass
MS Windows 98 OPK	4.10.1998	German	Microsoft	Pass
	4.10.1998	Japanese	Microsoft	Pass
	4.10.1998	Chinese(trad)	Microsoft	Pass

	4.10.1998	Chinese(simp)	Microsoft	Pass
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### 9.1.2 Microsoft Windows 2000:

#### Test Configuration:

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** SIMONS 128MB(D45128163G5-A10B-9JF) **Total: 256 MB** ☐ PC100 ☒ PC133  
**HDD** Maxtor 54098U8 40GB IDE ☐ PIO4 ☐ UDMA/33 ☒ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Leadtek Winfast S320II Ultra ☐ PCI\_Slot:\_\_\_\_. ☒ AGP  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_\_. ☒ On board  
**CD-ROM** Acer 650P 50X IDE **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Mouse** Microsoft IntelliMouse Mouse ☐ COM ☒ PS/2

Test Item	Result	Remark
Install Win 2000 with NTFS (boot from CD )	PASS	
Format FDD	PASS	
Cool boot 2 times under every combination	PASS	
Reboot 2 times under every combination	PASS	
Install Office 2000	PASS	
VGA Resolution/Color change	PASS	
Auto Shutdown (system power off)	PASS	
Hibernate (Suspend To Disk)	PASS	
Defrag test	PASS	
VCD/DVD play (name: Mercury Rising )	PASS	
PM function by Win2000 (H/W & Time out & Stand by)	PASS	
WinStone 99 (Business /High End WS99)	PASS	
CC WinStone 2000	PASS	
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
MS Windows 2000 Professional	5.00.2195	English	Microsoft	Pass

### 9.1.3 Microsoft Windows NT 4.0 + Service Pack 6:

#### Test Configuration:

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** Hyundai 128MB (HY57V658020B TC-75) **Total: 128 MB** ☐ PC66 ☒ PC133  
**HDD** Quantum Fireball LA 8.4GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS



VGA      Leadtek Winfast S320II Ultra      ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
Sound    VIA VT686A      ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
CD-ROM   Mitsumi CRMC-FX4820T 48X      Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
Mouse    Logitech Mouse+ Mouse      ☐ COM ☐ PS/2

Test Item	Result	Remark
Install Win NT with NTFS (boot from CD )	PASS	
Install Service Pack	PASS	
Format FDD	PASS	
Cool boot 2 times under every combination	PASS	
Reboot 2 times under every combination	PASS	
FirstAID Install & Test (FirstAID Ver: <u>2.0</u> )	PASS	
VGA Resolution/Color change	PASS	
VCD/DVD play (name: Mercury Rising )	PASS	
PM function by Win NT	PASS	
WinStone 99 (Business/High End WS99)	PASS	
CC WinStone 2000	PASS	
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
Windows NT Workstation	4.0	English	Microsoft	Pass
	4.0	Japanese	Microsoft	Pass
	4.0	Chinese	Microsoft	Pass
Windows NT Workstation Service Pack	5.0	English	Microsoft	Pass
	6.0	English	Microsoft	Pass

#### 9.1.4 IBM OS/2 4.0:

##### Test Configuration:

CPU      Intel Pentium II 750MHz      ☐ Intel  
Memory   SIEMENS 64MB (HYB39S64800BT-8)      Total: 128 MB ☐ PC66 ☐ PC100  
HDD      Fujitsu MPB3032AT 3.2GB IDE      ☐ PIO4 ☐ UDMA/33  
Channel: ☐ PM ☐ PS ☐ SM ☐ SS

**VGA** Creative TNT2 Value 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**Sound** VIA VT686A ☐ ISA\_Slot: 1 ☐ On board  
**CD-ROM** Creative CD4834E 48X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Mouse** Logitech Mouse+ Mouse ☐ COM ☐ PS/2

Test Item	Result	Remark
Install OS/2 (HPFS)	PASS	
Format FDD	PASS	
XCOPY	PASS	
Diskcopy	PASS	
DOS Windows	PASS	
OS/2 Windows	PASS	
PM function (H/W & BIOS)	PASS	

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board ☐ Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
IBM OS/2 Warp	4.0	English	IBM	Pass

### 9.1.5 LINUX :

#### Test Configuration:

**CPU** Intel Pentium III 600MHz ☐ Intel  
**Memory** KingMAX 128MB (KSV884T4A1A-08A) Total: 256 MB ☐ PC66 ☐ PC100  
**HDD** Maxtor 92049U4 20.4GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Diamond Viper V550 16MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**CD-ROM** Pioneer DR-744 36X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Mouse** Logitech Mouse+ Mouse ☐ COM ☐ PS/2

The board is tested to ensure that it runs a complete a range of Operating Systems.

Operating System	Version	Language	Status
Red Hat	6.1	English	Pass
Open Linux	2.4	English	Pass

### 9.1.6 Microsoft Windows ME:

#### Test Configuration:

**CPU** Intel Pentium III 733MHz ☐ Intel  
**Memory** Hyundai 128MB (GM72V66841ET7K) Total: 256 MB ☐ PC100 ☐ PC133  
**HDD** Quantum Fireball KA 9.1GB IDE ☐ PIO4 ☐ UDMA/33 ☐ UDMA/66



**VGA** ATI Rage 128 Pro 32MB SDRAM **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686A **PCI\_Slot:** \_\_\_\_ ☐ AGP  
**CD-ROM** TEAC CD-540E 40X IDE **ISA\_Slot:** \_\_\_\_ ☐ On board  
**Mouse** Microsoft IntelliMouse Mouse **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
☐ COM ☐ PS/2

Test Item	Result	Remark
FDISK (FAT32)	PASS	
Install OS	PASS	
Format FDD	PASS	
Device Management check (No Caution)	PASS	
VGA Resolution/Color change	PASS	
Large file Copy (one file Over 500MB)	PASS	
Install Office 2000	PASS	
Media Player 7.0 (play MIDI/MP3/CD Audio)	PASS	
LS-120/ZIP install & working	PASS	
VCD/DVD play (name: Mercury Rising )	PASS	
Power Management	PASS	
Hibernate (Suspend To Disk)	PASS	
System Restore	PASS	
WinStone 99 (Business WS99)	PASS	

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
MS Windows ME	4.90.3000	English	Microsoft	Pass

## 9.2 Software Applications

Item	Descriptions	Version	O.S.	Language	Status
Suites	MS Office 97 for Windows	7.0	Windows 95	English	Pass
	MS Office 2000		Windows 95/98	Chinese	Pass
		9.0.2720	Windows 95/98	English	Pass
Communication	BITWare	3.30.10	Windows 95/98	English	Pass
	WinFAX Pro for Win 95	4.0	Windows 95/98	English	Pass
	LapLink	7.0A	Windows 95	English	Pass
	Norton Anywhere	1.0	Windows	English	Pass
Database	FoxPro Microsoft	6.0	Windows	English	Pass
Graphics	Corel Draw	9.0	Windows 95	English	Pass
	MS PowerPoint	4.0	Windows	English	Pass
	Photo Shop Pro	3.05	Windows 95	English	Pass



Presentation Program	MS PowerPoint	7.0	Windows 95	English	Pass
	MS Visual Basic	4.0	Windows 95	English	Pass
	MS Visual C++	6.0	Windows 95/98	English	Pass
	Borland Delphi	4.0	Windows 95	English	Pass
Diagnostic Utility	Bapco 4.0 for Win NT	4.0	Windows NT	English	Pass
	ZD 3D Winbench 99	1.2	Windows 95/98	English	Pass
	ZD Winstone 99	1.2	Windows 95/98	English	Pass
	QAPlus	5.52	DOS	English	Pass
	AMIDdiag	6.0	DOS	English	Pass
	Landmark(Speedcom)	2.0	DOS	English	Pass
	Check IT Pro	5.01	Windows 95/98	English	Pass
	CheckIt 98		Windows 95/98	English	Pass
Tools	Norton Utility 2000		Windows 98	English	Pass
	Norton Ghost 2000	6.0	DOS, Win 9X	English	Pass
	PartitionMagic 4.0	4.0	DOS, Win 9X	English	Pass
Scan	PC-cillin 98 Plus	4.1	Windows 95/98	English	Pass
	Norton Antivirus	5.0	Windows 95/98	English	Pass
Internet	Netscape	4.6	Windows 95	English	Pass
	Internet Explore	4.0	Windows 95/98	English	Pass
		5.0	Windows 95/98	English	Pass
CD Title Game	3D Ultra Pin Ball	1.0	Windows 95	English	Pass
	Duke Nukem 3D	1.0	DOS	English	Pass
	Mech Warrior2	1.0	Windows 95	English	Pass
	AH-64D longbow	1.0	DOS	English	Pass
	NFL Football Trivia Challenge	1.0	DOS	English	Pass
	Wing Commander III	4.0	DOS	English	Pass
	Poker Cowboy Casino MPEG Version	1.0	Window 95	English	Pass
	MDK (Exclusive North American Version)	1.0	Window 95	English	Pass
	Master of Orion II Battle at Antares	1.0	Window 95	English	Pass
	The Lion King	1.0	Window 95	English	Pass
	DIABLO BLIZZARD (CD)		Win95 / NT4.0	English	Pass
	WARCRAFT II TIDES OF DARKNESS		DOS/WIN95	English	Pass
	DOOM II	1.0	Window 95	English	Pass
	War Wind		Window 95	English	Pass
	Magic 2 Carpet		Window 95	English	Pass
	YAMARAJA		Window 95	English	Pass
	TOMB RAIDER II		Window 95	English	Pass
	Lands of Lore II		Window 95	English	Pass
	The Magic School Bus			English	Pass
	Flight Simulator 98		Window 95	English	Pass
	Dagger fall		Window 95	English	Pass
	Quake II		Window 95	English	Pass
	Test Drive 4		Window 95	English	Pass
	AGE of EMPIRES		Window 95	English	Pass
	Mech Warrior 2 Mercenaries			English	Pass



	Blood & Magic		DOS/WIN95	English	Pass
	Wing Commander III		DOS/WIN95	English	Pass
	Wing Commander IV		Window 95	English	Pass
	Descent II			English	Pass
	TOMB Raider III		Window 95/98	English	Pass
	AGE of EMPIRES(Expansion)		Window 95/98	English	Pass
	Moto Racer 2		Window 95/98	English	Pass
	Need for Speed III		Window 95/98	English	Pass
	Klingon Honor Gurd		Window 95/98	English	Pass
	F-15		Window 95/98	English	Pass
	SIM City 3000		Window 95/98	English	Pass
	Baldur's Gate		Window 95/98	English	Pass
	STAR WARS ROGUE SQUADRON 3D		Window 95/98	English	Pass
	X-WING COLLECTOR SERIES		Window 95/98	English	Pass
	TUOK SEED OF EV 2		Window 95/98	English	Pass
	Lands of Lore III		Window 95/98	English	Pass
	Popvlov		Window 95/98	English	Pass
	Need For Speed -High Stakes		Window 95/98	English	Pass
	Civilization		Window 95/98	English	Pass
	DESCENT III		Window 95/98	English	Pass
	Starcraft		Window 95/98	English	Pass
	Starcraft – Expansion Set(Brood War)		Window 95/98	English	Pass
	TIBERIAN SUN		Window 95/98	English	Pass
	Flight Unlimited III		Window 95/98	English	Pass
	Black Moon Chronicles		Window 95/98	English	Pass
	Unreal – Return to NA Pali		Window 95/98	English	Pass
	Discworld NOIR		Window 95/98	English	Pass
	Return to Krondor		Window 95/98	English	Pass
	DRAKAN – Order of the Flame		Window 95/98	English	Pass
	Outcast		Window 95/98	English	Pass
	Age of Empires II		Window 95/98	English	Pass
	Might and Magic VII – For Blood and Honor		Window 95/98	English	Pass
	TOMB RAIDER 4		Window 95/98	English	Pass
	QUAKE III – ARENA		Window 98	English	Pass
	Final Fantasy VIII		Window 98	English	Pass
	DELTA FORCE II		Window 98	English	Pass
	FIFA 2000		Window 98	English	Pass
	TRIGGER		Window 98	English	Pass
	Need For Speed V – Porsche 2000		Window 98	English	Pass