

# **FIC KA11 PCI/AGP SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT**

<b>Product Version:</b>	<b>V 2.3</b>
<b>BIOS Version:</b>	<b>QM414</b>
<b>Report Date:</b>	<b>10/17/2000</b>
<b>Revision:</b>	<b>1.05</b>



## Revision History

Document Release	Date	Change Item	ECN
Revision 1.01	1/05/2000	BIOS version update to QM413	N/A
Revision 1.02	3/24/2000	Add support AGP list: Maxtor Millennium G400 SH AGP VGA Creative 3D Blaster TNT2 M64 AGP VGA Leadtek WinFast VR300 AGP VGA ELSA ERAZOR III LT ELSA TNT2 Pro ELSA ERAZOR X2 YUAN 3D Xtreme 2 AGP VGA	N/A
		Add support FIC CK71 CPU Converter Board for Intel Coppermine FC-PGA 500~750MHz CPU	M99203-E-022
Revision 1.03	4/14/2000	Update FIC CK71 CPU Converter Board unable to support FSB 133MHz CPU.	M99203-E-025
		Add support Microsoft Windows 2000 Professional support Microsoft Windows NT with Service Pack 6	
Revision 1.04	5/26/2000	Add support Intel Coppermine 800/866MHz CPU Update BIOS version to QM414	M99203-E-026
		Add support Intel Celeron 667MHz CPU	
Revision 1.05	10/17/2000	Add support Windows ME (Millennium Edition)	

## **TABLE OF CONTENTS**

1. Introduction
2. Mainboard Features
3. Mainboard CPU Support
4. System Specification for Hardware and Software Utilities
  - 4.1 Main Functionality Test
  - 4.2 Main Software Utilities Test
5. Jumper Function Verification
6. Stability Test
  - 6.1 Worst Case Test
  - 6.2 Field (Stress) Test : Dynamic Burn-in Tests
7. Base Operating System HCT Tests
8. Hardware Compatibility Test Suite
  - 8.1 **Memory**
    - 8.1.1 SDRAM DIMM Module(PC66)
    - 8.1.2 SDRAM DIMM Module(PC100)
    - 8.1.3 SDRAM DIMM Module(PC133)
    - 8.1.4 VC-SDRAM DIMM Module(VC100/133)
  - 8.2 **Add-on Cards**
    - 8.2.1 Display Adapter Products
      - 8.2.1.1 Intel Pentium III (Katmai)
        - 2X AGP Display Adapter Products
        - 4X AGP Display Adapter Products
        - PCI Display Adapter Products
      - 8.2.1.2 Intel Pentium III (Coppermine 100)
        - 2X AGP Display Adapter Products
        - 4X AGP Display Adapter Products
      - 8.2.1.3 Intel Pentium III (Coppermine 133)
        - 2X AGP Display Adapter Products
        - 4X AGP Display Adapter Products
    - 8.2.2 SCSI Adapter Products
    - 8.2.3 FAX / Modem Products
    - 8.2.4 CPU Converter Board
  - 8.3 **Storage**
    - 8.3.1 SCSI Peripheral Products
    - 8.3.2 IDE Fixed Disk Drive Products
    - 8.3.3 Floppy Disk Drive Products
    - 8.3.4 ATAPI CD-ROM / DVD-ROM Device Products
      - 8.3.4.1 ATAPI CD-ROM
      - 8.3.4.2 ATAPI DVD-ROM
    - 8.3.5 ATAPI Disk Drive (IDE Interface)
  - 8.4 **Peripherals**
    - 8.4.1 Parallel/Serial Port Products(Including IR)
    - 8.4.2 Mouse Products
    - 8.4.3 USB Device Products
    - 8.4.4 Joystick
  - 8.5 **Power Supply Products**



**8.6 DVD Device Products**

**9. Software Compatibility Test Suite**

**9.1 Base Operating Systems**

- 9.1.1 Microsoft MS-DOS/Win 3.1
- 9.1.2 Microsoft Windows 95/98/98 SE
- 9.1.3 Microsoft Windows 2000
- 9.1.4 Microsoft Windows NT 4.0 + Service Pack 6
- 9.1.5 IBM OS/2 4.0
- 9.1.6 LINUX
- 9.1.7 Microsoft Windows ME

**9.2 Tested Software List**

Suites  
Communication  
Database  
Graphics  
Presentation  
Program  
Diagnostic Utility  
Tools  
Scan  
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** : KA11 PCB Rev 2.3  
**Product Name** : VIA Apollo pro 133A Based Mainboard  
**System BIOS** : Award BIOS Version QM414  
**PCI IDE** : Internal PCI Mastre dual IDE  
**I/O** : Winbond 83977EF-AW

---

## 3. Mainboard CPU Supports:

Intel Processors	Bus	Package	Status
Pentium II 233MHz	66	SECC	Pass
Pentium II 266MHz	66	SECC	Pass
Pentium II 300MHz	66	SECC	Pass
Celeron 266MHz	66	SEPP	Pass
Celeron 300MHz (without cache)	66	SEPP	Pass
Celeron 300MHz (with 128K cache)	66	SEPP	Pass
Celeron 333MHz	66	SEPP	Pass
Celeron 366MHz	66	SEPP	Pass
Celeron 400MHz	66	SEPP	Pass
Celeron 433MHz	66	SEPP	Pass
Pentium II 333MHz (Deschute)	66	SECC	Pass
Pentium II 350MHz (Deschute)	100	SECC/SECC2	Pass
Pentium II 400MHz (Deschute)	100	SECC/SECC2	Pass
Pentium II 450MHz (Deschute)	100	SECC/SECC2	Pass
Pentium III 450MHz (Katmai)	100	SECC2	Pass
Pentium III 500MHz (Katmai)	100	SECC2	Pass
Pentium III 533MHz (Katmai)	133	SECC2	Pass
Pentium III 550MHz (Katmai)	100	SECC2	Pass
Pentium III 600MHz (Katmai)	133	SECC2	Pass
Pentium III 667MHz (Coppermine)	133	SECC2	Pass
Pentium III 700MHz (Coppermine)	100	SECC2	Pass
Pentium III 733MHz (Coppermine)	133	SECC2	Pass
Pentium III 750MHz (Coppermine)	100	SECC2	Pass
Pentium III 800MHz (Coppermine)	100	SECC2	Pass
Pentium III 800MHz (Coppermine)	133	SECC2	Pass
Pentium III 866MHz (Coppermine)	133	SECC2	Pass

### Extra CPU Supports: with Converter Board (FIC CK71)

Intel Processors	Bus	Package	Status
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	Pass
Celeron 566MHz	66	FC-PGA	Pass
Celeron 600MHz	66	FC-PGA	Pass
Celeron 667MHz	66	FC-PGA	Pass
Pentium III 500MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 550MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 600MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 650MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 700MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 750MHz (Coppermine)	100	FC-PGA	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_C+596B_C)
System Cache	128K/256K/512K Pipeline Burst SRAM Built-in CPU card
System Memory	Maximum : 2GB SDRAM/ VCM-SDRAM 168 pins single RAS and Double RAS DIMM RAM Module
PCI Bus Clock	Synchronous mode (depended on CPU Clock divide by 2)
System Slots	1 AGP and 5 PCI and 2 ISA slots
Audio	Creative CT5880 PCI 4 channel Audio on board
IO Corelogic	Winbond 83977EF-AW Support Normal,EPP,ECP mode and IR interface
PCI IDE	VIA VT82C596B internal Bus Master PCI IDE.

### 4.1 Main Functionality Support:

Num.	M/B function	Result
1	ACPI Ready (under Win 98/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	Audio Alert	PASS
11	Ultra ATA-33/66 Enhanced IDE Interface	PASS
12	Virtual Channel Memory (VCM) SDRAM	PASS
13	CPU with DRAM Asynchronous interface	PASS
14	USB Function	PASS
15	Power Failure feature	PASS
16	Keyboard/PS2 mouse Power On	PASS
17	Year 2000 Compliance	PASS

#### 4.2 Main Software Utilities Support:

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	FirstAID	1.2	PASS
7	Onboard Creative CT5880 Audio driver for Win 9x	4.06.1167	PASS
8	Award BIOS Flash ROM Utilities	7.13B	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
Suspended 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
CPU FAN Connector	CPU_FAN	Open	Pass
Chassis FAN1 Connector	CHS_FAN1	Open	Pass
Chassis FAN2 Connector	CHS_FAN2	Open	Pass
CPU Clock Rate	SW1-1~4	On,Off,On,Off	Pass
Clear CMOS	SW1-5	Off	Pass
Clear Password Switch	SW1-6	Off	Pass
CHASSIS	Chassis	Open	Pass
Keyboard Power-On Select	KB_WAKE	2-3	Pass
LAN Wake Up	WOL	Open	Pass
IR interface	IR	Open	Pass



## 6. Stability Test

### 6.1 Worst Case Test :

System Configuration			
CPU	: Pentium III 600	Mouse	: Microsoft PS/2 mouse
Cache Memory	: 512 K	PowerSupply	: HIPRO HP-200NLXAG 200W
Memory	: Mibsubishi 648MB X 2	O.S. Environment:	MS-DOS 6.22,Win 98,UNIX
HDD	: Maxtor 88400D8 8.4GB	Chamber	: KATO SE-47CRT
VGA	: Matrox G400 DH		
FDD	: Mitsumi D353F3 1.44MB		

#### 1. Temperature Strife Margin Test : ( 1.5 days)

DC voltage: 3.3V and 5V fixed

Temperature range: -10 ~ 60C ° (Out side)

Frequency test on 133MHz frequency

Diagnostic Program: AMIDdiag 6.0 program will be ran at each different temperature ranges.

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

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

Full loading test condition:

a. All memory banks loaded.

b. All available slots occupied.

c. Both IDE channels are used.

DC voltage: 3.3V and 5V fixed.

Temperature range: Ambient Temperature (about 25°C)

Frequency tested are on 133MHz with a  $\pm 10\%$  frequency variation.

Diagnostic Program: WinStone 99 V1.2 test under Win 98 SE.

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

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

DC voltage: change power voltage 3.0V/5.0 V  $\pm 0.5\%$  (Vcc)

Power on and off test using both 110V input .

Temperature range: -20°C to 35°C

Power On/Off ten times in each condition

Diagnostic Program: Win 98 SE

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

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

Software Name	Duration	Result
BAPCO for Windows NT	24 hr.	Pass



Test Configurations for NT	Intel Pentium III 600MHz Diamond Viper V550 16MB SDRAM AGP VGA 128MB SDRAM Memory Adaptec AHA 2940U2W Quantum Atlas III Ultra Wide SCSI 9.1GB SCSI HDD	
Novell Server version 4.11	48 hr.	<i>Pass</i>
Test Configurations for Novell	Intel Pentium III 533MHz Adaptec AHA 3940 Quantum Fireball SE 8.4GB SCSI HDD (SE8400S) 3COM 3C905B-TX PnP PCI 100Mbps Netware card (Connect to 4-6 workstation) SEC 64MB SDRAM Memory ELSA ERAZOR II 16MB SDRAM AGP VGA Test Program : Netware 4.11	
SCO UNIX Open Desktop 5.04	24 hr.	<i>Pass</i>
Test Configurations for SCO	Intel Pentium III 450MHz Adaptec AHA-2940UW SONY CDU-625 24X SCSI CD-ROM Seagate ST-34555N 4.5GB Ultra SCSI Disk 128MB Memory ATI Rage pro 8MB SGRAM AGP VGA Test Program : Create a batch file	
Winstone 99 Under WIN98	24 hr.	<i>Pass</i>
Test Configurations for Win 98	Intel Pentium III 600MHz IBM DJNA-370910 Ultra DMA66 9.1GB HDD ELSA ERAZOR III 32MB SGRAM AGP VGA Fujitsu 64MB SDRAM Memory	
Winstone 99 Under WIN98 SE	24hr.	<i>Pass</i>
Test Configurations for Win 98	Intel Pentium III 600MHz Quantum Fireball KA Ultra DMA66 13.6GB HDD Buffalo 128MB SDRAM Memory.(SEC) Diamond Viper V770 32MB SGRAM AGP VGA	
BAPCO for Windows NT 4.0	24hr.	<i>Pass</i>
Test Configurations for SYSmark 32 under Windows NT 4.0	Intel Pentium III 600MHz IBM DTTA-371010 Ultra DMA33 10.2GB IDE HDD Apacer 128MB SDRAM Memory. ELSA Winner II 32B SDRAM AGP VGA	

## 7. Base Operating Systems HCT Tests For PC99

Operating System	Company	HCT Name	Result
Windows 2000 build 2195	Microsoft	Microsoft WHQL HCT 9.3	<i>Pass</i>
Test Configurations	Intel Pentium III 600MHz 128MB Memory. ATI Rage 128GL 32MB SDRAM AGP VGA		
Windows 98 SE with ACPI	Microsoft	Microsoft WHQL HCT 9.3	<i>Pass</i>
Test Configurations	Intel Pentium III 600MHz 128MB Memory. ATI Rage 128GL 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 Celeron 533MHz (Bus clock 66MHz) ☐ Intel  
Intel Pentium III 600MHz (Bus clock 133MHz)  
Intel Pentium III 700MHz (Bus clock 100MHz)

HDD Quantum Fireball CX 10.2GB IDE ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

VGA Creative GeForce pro 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP 4X

CD-ROM Vuego 624A-304 24X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☐ On board

Mouse Microsoft IntelliMouse PS/2 Mouse ☐ COM ☐ PS/2

The following SDRAM module test cool boot, Install Win 98 and run Winstone 99 V1.2 under Windows 98 SE 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	D4516821AG5-A10-7JF	Yes	32MB	D	M04B032M2EE72208-C3100
	D4564841G5-A80-9JF	Yes	128MB	D	BUFFALO VSJ-ED128M2
Fujitsu	81F16822D-102LFN	Yes	32MB	D	M04B032M2EE72208-C2100
	81F64842B-103FN	Yes	64MB	S	M04B064MIHE72224-C3100
Mitsubishi	M5M4V64S30ATP-8	Yes	64MB	S	M04B064M1HE72224-C3100
Hitachi	HM5233B85TTB60	No	64MB	D	M18E64S48HIG6
Toshiba	TC59S6408FTL-80H	Yes	64MB	S	MO4B064M1HE72224-C2100
SIEMENS	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
	HYB39S256800T-8	Yes	512MB	D	HYS72V64220GU-8-A
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	
Apacer	GM72V661641CT7J	No	32MB	S	7B.G2426.A01 (LGS)
	GM72V66841CT7J	No	128MB	D	7B.G3346.A4J (LGS)
	GM72V66441CT7J	Yes	256MB	D	7B.G4258.A01 (LGS)
	M5M4V64S20ATP	Yes	256MB	D	7B.G4258.701 (Mitsubishi)
Winbond	W981216AH-75	No	64MB	S	VSJ-S64M2

### 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
Hitachi	5264805FTT75	No	64MB	S	VS133-64M
	5264805FTT75	No	128MB	D	VS133-128M

#### 8.1.4 VC-SDRAM DIMM Module (VC100/133)

Vender	IC Part No.	Bus	Size	Side	Module No.
NEC	D4565821G5-A10-9JF	100	64MB	S	MC-45V8AB641F-A10
	D4565821G5-A75-9JF	133	64MB	S	MC-45V8AB641KF-A75
	D4565821G5-A75-9JF	133	128MB	D	MC-45V16AD641KF-A75
SIEMENS	HYB39V64160T-10	100	32MB	S	HYV64V4200GU-10
	HYB39V64160T-7.5	133	32MB	S	HYV64V4300GU-7.5

## 8.2 Add-on Cards

### 8.2.1 Display Adapter Products

#### 8.2.1.1 Intel Pentium III (Katmai)

##### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.222A

CPU Intel Pentium III 550MHz (Bus clock 100MHz) ☐ Intel

Memory NEC 128MB (D4564841G5-A80-9JF) Total: 384 MB ☐ PC66 ☐ PC100

HDD Quantum Fireball CR 8.4GB ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM Lite-On LTN-403L 40X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound Creative CT5880 PCI

☐ ISA Slot:     ☐ Onboard

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following PCI/AGP VGA cards test Final Reality V1.01/ 3D WinBench 99 V1.2 /3Dmark99 MAX under Windows 98 SE(ACPI)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.

#### 2X AGP Display Adapter Products

Vendor	Model Name	Product Description	Driver version
ATI	Rage pro	XPRT@Play 98	4.11.2611
	Rage pro Turbo	XPRT 98	4.11.2611
	Rage 128GL	Rage Fury	4.11.6216
	Rage 128GL	XPRT 128	4.11.6216
	Rage 128VR	XPRT 2000	4.11.6216
	Rage 128GL	All-In-Wonder 128	4.11.6220
ASUS	Riva 128	AGP-V3000	4.10.01.0250
	Riva 128ZX	AGP-V3000ZXTV	4.10.01.0250
	S3 Savage 3D	AGP-V3100	4.11.01.4005
	3Dfx Voodoo Banshee	AGP-V3200	4.11.01.0378
	S3 Savage 4	AGP-V3500	1.00.0603
	Riva TNT2	AGP-V3800	4.11.01.0225
Matrox	MGA-G200	Millennium G200	4.11.01.2410
	MGA-G400	Millennium G400 SH	4.11.01.1500
	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 128	Viper V330	4.10.01.0279
	Riva TNT	Viper V550	4.11.01.0255
	Intel i740	Stealth II G460	4.11.01.1400
	3Dfx Voodoo Banshee	Monster Fusion	4.10.01.0213
ELSA	3Dlabs Permedia II	Gloria Synergy	4.11.01.0203
	Riva TNT	ERAZOR II	4.11.01.0301
	3Dfx Voodoo Banshee	Victory II	4.11.01.0300
PowerColor	S3 Savage 3D	Savage 3D	4.11.01.4005
Hercules	S3 Savage 3D	Terminator BEAST	4.11.01.4005
Compro	SiS 6326	Daytona 3D SiS 6326	4.10.01.0905
Gigabyte	S3 Savage 4	GA-650	4.11.01.8006
Top Solution	3Dfx Voodoo Banshee	3Dfx Voodoo Banshee	4.10.01.0232
ENNYAH	3Dfx Voodoo Banshee	Voodoo Banshee	4.11.01.0203
YUAN	Riva TNT2 M64	3D Xtreme 2	4.12.01.0353
Cardex	Riva TNT2 Ultra	Explosive	4.12.01.0356
Creative	Riva TNT	Graphics Blaster Riva TNT	4.11.01.2111
	Riva TNT2 Ultra	3D Blaster Riva TNT2 Ultra	4.11.01.2111
Leadtek	Riva TNT	Winfast 3D S320	4.11.01.0208
	SiS 300	Winfast VR300	4.11.01.1010
	Riva Vanta	WinFast 3D S320V	4.11.01.0208
3dfx	Voodoo 3 2000	3dfx Voodoo 3 2000	4.12.01.1213
	Voodoo 3 3000	3dfx Voodoo 3 3000	4.12.01.1213
	Voodoo 3 3500	3dfx Voodoo 3 3500 TV	4.12.01.1213

#### 4X AGP Display Adapter Products

Vendor	Model Name	Product Description	
Diamond	Riva TNT2	Viper V770	4.11.01.0402
	Riva TNT2 Ultra	Viper V770 Ultra	4.11.01.0402
ASUS	Riva GeForce 256	AGP-V6600	4.12.01.0348
Leadtek	Riva GeForce 256	Winfast GeForce256	4.12.01.0353a
Creative	Riva TNT2 M64	Riva TNT2 Value	4.11.01.2110
	Riva GeForce 256	3D Blaster GeForce256	4.12.01.2202
	Riva GeForce 256	3D Blaster GeForce Pro	4.12.01.2203
ELSA	Riva TNT2	Synergy II	4.11.01.0300
	Riva TNT2	ERAZOR III	4.12.01.0104.0020
	Riva TNT2 M64	ERAZOR III LT	4.12.01.0104
	Riva GeForce 256	ERAZOR X	4.12.01.0104.0023
	Riva TNT2 Pro	ERAZOR III Pro	4.12.01.0101
	Riva GeForce 256 DDR	ERAZOR X <sup>2</sup>	4.12.01.0104

#### PCI Display Adapter Products

Vendor	VGA Chip	Product Description
ATI	ATI Mach64	ATI Mach64
	ATI Mach64 VT	ATI Mach64 VT
	ATI Rage II	ATI Rage II 3D
Diamond	S3 968	Stealth 4MB VRAM
ELSA	S3 Virge/VX	Winner 3000L 3D

	S3 Virge	Victory 3D-4
STB	3dfx Voodoo3-2000	3dfx Voodoo3 2000 PCI
Number #9	LSI 128	Image 128
Matrox	MGA-1064SG	Mystique 4MB SGRAM
Cardex	S3 Virge/DX	S3 Virge/DX

### 8.2.1.2 Intel Pentium III (Coppermine 100)

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.222A

CPU Intel Pentium III 700MHz (Bus clock 100MHz) ☐ Intel

Memory SEC 128MB (KM48S8030BT-GH) Total: 384 MB ☐ PC66 ☐ PC100

HDD Maxtor 92720U8 27.2GB ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM Pioneer DR-744 36X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound Creative CT5880 PCI

☐ ISA\_Slot:     ☐ Onboard

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following AGP VGA cards test WinBench 99 V1.1/ 3D WinBench 99 V1.2 /3Dmark99 MAX 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.

#### 2X AGP Display Adapter Products

Vendor	Model Name	Product Description	Driver version
ATI	Rage pro Turbo	XPRT 98	4.11.2611
	Rage 128GL	Rage Fury	4.11.6216
	Rage 128GL	XPRT 128	4.11.6216
	Rage 128VR	XPRT 2000	4.11.6216
	Rage 128GL	All-In-Wonder 128	4.11.6220
ASUS	Riva 128ZX	AGP-V3000ZXTV	4.10.01.0250
	S3 Savage 3D	AGP-V3100	4.11.01.4005
	3Dfx Voodoo Banshee	AGP-V3200	4.11.01.0378
	Riva TNT2	AGP-V3800	4.11.01.0225
Matrox	MGA-G200	Millennium G200	4.11.01.2410
	MGA-G200	Millennium G200 SH	4.11.01.1500
	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 128	Viper V330	4.10.01.0279
	Intel i740	Stealth II G460	4.11.01.1400
	3Dfx Voodoo Banshee	Monster Fusion	4.10.01.0213
ELSA	3DLabs Permedia II	Gloria Synergy	4.11.01.0203
	Riva TNT	ERAZOR II	4.11.01.0301
	3Dfx Voodoo Banshee	Victory II	4.11.01.0300
PowerColor	S3 Savage 3D	Savage 3D	4.11.01.4005
Hercules	S3 Savage 3D	Terminator BEAST	4.11.01.4005
Top Solution	3Dfx Voodoo Banshee	3Dfx Voodoo Banshee	4.10.01.0232





ENNYAH	3Dfx Voodoo Banshee	Voodoo Banshee	4.11.01.0203
YUAN	Riva TNT2 M64	3D Xtreme 2	4.12.01.0353
Cardex	Riva TNT2 Ultra	Explosive	4.12.01.0356
Creative	Riva TNT	Graphics Blaster Riva TNT	4.11.01.2111
	Riva TNT2 Ultra	3D Blaster Riva TNT2 Ultra	4.11.01.2111
Leadtek	Riva TNT	Winfast 3D S320	4.11.01.0208
	SiS 300	Winfast VR300	4.11.01.1010
	Riva Vanta	WinFast 3D S320V	4.11.01.0208
3dfx	Voodoo 3 2000	3dfx Voodoo 3 2000	4.12.01.1213
	Voodoo 3 3000	3dfx Voodoo 3 3000	4.12.01.1213
	Voodoo 3 3500	3dfx Voodoo 3 3500 TV	4.12.01.1213

#### 4X AGP Display Adapter Products

Vendor	Model Name	Product Description	
Diamond	Riva TNT2	Viper V770	4.11.01.0402
ASUS	Riva GeForce 256	AGP-V6600	4.12.01.0348
Leadtek	Riva GeForce 256	Winfast GeForce256	4.12.01.0353a
Creative	Riva TNT2 M64	Riva TNT2 Value	4.11.01.2110
	Riva GeForce 256	3D Blaster GeForce256	4.12.01.2202
	Riva GeForce 256	3D Blaster GeForce Pro	4.12.01.2203
ELSA	Riva TNT2	Synergy II	4.11.01.0300
	Riva TNT2	ERAZOR III	4.12.01.0104.0020
	Riva TNT2 M64	ERAZOR III LT	4.12.01.0104
	Riva GeForce 256	ERAZOR X	4.12.01.0104.0023
	Riva TNT2 Pro	ERAZOR III Pro	4.12.01.0101
	Riva GeForce 256 DDR	ERAZOR X <sup>2</sup>	4.12.01.0104

#### 8.2.1.3 Intel Pentium III (Coppermine 133)

##### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.222A .

CPU Intel Pentium III 733MHz (Bus clock 133MHz) ☐ Intel

Memory SIEMENS 128MB (HYB39S64800BT-7.5) Total: 384 MB ☐ PC66 ☐ PC133

HDD Fujitsu MPD3064AT 6.4GB ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM ASUS CD-S400/A 40X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound Creative CT5880 PCI

☐ ISA\_Slot:     ☐ Onboard

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following AGP VGA cards test WinBench 99 V1.1/ 3D WinBench 99 V1.2 /3Dmark99 MAX 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.

## 2X AGP Display Adapter Products

Vendor	Model Name	Product Description	Driver version
ATI	Rage 128GL	Rage Fury	4.11.6216
	Rage 128GL	XPRT 128	4.11.6216
	Rage 128VR	XPRT 2000	4.11.6216
	Rage 128GL	All-In-Wonder 128	4.11.6220
ASUS	Riva 128ZX	AGP-V3000ZXTV	4.10.01.0250
	S3 Savage 3D	AGP-V3100	4.11.01.4005
	3Dfx Voodoo Banshee	AGP-V3200	4.11.01.0378
	Riva TNT2	AGP-V3800	4.11.01.0225
Matrox	MGA-G200	Millennium G200	4.11.01.2410
	MGA-G200	Millennium G200 SH	4.11.01.1500
	MGA-G400	Millennium G400 DH	4.11.01.1410
	MGA-G400	Millennium G400 MAX	4.11.01.1410
Diamond	Riva 128	Viper V330	4.10.01.0279
	Intel i740	Stealth II G460	4.11.01.1400
	3Dfx Voodoo Banshee	Monster Fusion	4.10.01.0213
ELSA	3Dlabs Permedia II	Gloria Synergy	4.11.01.0203
	Riva TNT	ERAZOR II	4.11.01.0301
	3Dfx Voodoo Banshee	Victory II	4.11.01.0300
PowerColor	S3 Savage 3D	Savage 3D	4.11.01.4005
Hercules	S3 Savage 3D	Terminator BEAST	4.11.01.4005
Top Solution	3Dfx Voodoo Banshee	3Dfx Voodoo Banshee	4.10.01.0232
ENNYAH	3Dfx Voodoo Banshee	Voodoo Banshee	4.11.01.0203
YUAN	Riva TNT2 M64	3D Xtreme 2	4.12.01.0353
Cardex	Riva TNT2 Ultra	Explosive	4.12.01.0356
Creative	Riva TNT	Graphics Blaster Riva TNT	4.11.01.2111
	Riva TNT2 Ultra	3D Blaster Riva TNT2 Ultra	4.11.01.2111
Leadtek	Riva TNT	Winfast 3D S320	4.11.01.0208
	SiS 300	Winfast VR300	4.11.01.1010
	Riva Vanta	WinFast 3D S320V	4.11.01.0208

## 4X AGP Display Adapter Products

Vendor	Model Name	Product Description	
Diamond	Riva TNT2	Viper V770	4.11.01.0402
ASUS	Riva GeForce 256	AGP-V6600	4.12.01.0348
Leadtek	Riva GeForce 256	Winfast GeForce256	4.12.01.0353a
Creative	Riva TNT2 M64	Riva TNT2 Value	4.11.01.2110
	Riva GeForce 256	3D Blaster GeForce256	4.12.01.2202
	Riva GeForce 256	3D Blaster GeForce Pro	4.12.01.2203
ELSA	Riva TNT2	Synergy II	4.11.01.0300
	Riva TNT2 M64	ERAZOR III LT	4.12.01.0104
	Riva GeForce 256	ERAZOR X	4.12.01.0104.0023

## 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 500MHz ☐ Intel  
 Memory SEC 64MB (KM48S8030BT-GH) Total: 128 MB ☐ PC66 ☐ PC100  
 VGA ELSA ERAZOR II AGP VGA ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
 HDD IBM DCAS34330 4.5GB SCSI HDD ☐ Ultra SCSI ☐ Ultra Wide  
 Quantum Atlas III 9.1GB SCSI HDD ☐ Ultra SCSI ☐ Ultra Wide  
 CD-ROM Plector PX-32Tsi 32X SCSI ☐ Ultra SCSI ☐ Ultra Wide  
 Sound Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
 Mouse Logitech MouseMan Mouse ☐ COM ☐ PS/2

The following PCI SCSI cards test HCT Stress 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
	AHA-3940	Adaptec AHA-3940 PCI to PCI Bridge card	PCI
	AHA-2920	Adaptec AHA-2920 PCI SCSI	PCI
	AHA-2940	Adaptec AHA-2940 PCI SCSI	PCI
BusLogic	BT-946	Buslogic BT-946 SCSI	PCI
	FlashPoint LT	Buslogic BA81C15 PCI SCSI	PCI
	BT-948CD	Buslogic BT-948CD PCI FWD SCSI	PCI
	KT-958	Buslogic KT-958 Narrow SCSI	PCI
Tekram	DC-390	Tekram DC-390 PCI SCSI	PCI
	DC-390U2W	Tekram DC-390U2W PCI SCSI	PCI
Symbios	SYM875-1SP	Symbios Logic 53C875J	PCI

## 8.2.3 FAX / Modem Products

### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A .

**CPU** Intel Celeron 533MHz ☒ Intel  
**Memory** Toshiba 64MB (TC59S6408FTL-80H) **Total: 128 MB** ☐ PC66 ☒ PC100  
**VGA** ELSA ERAZOR III 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_\_. ☒ AGP  
**HDD** WD AC36400 6.4GB IDE ☐ PIO4 ☒ UDMA/33  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** ASUS CD-S500/A 50X IDE **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** Creative CT5880 PCI ☐ 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
Motorola	VoiceSURFR 56K	External
HSP	V1456VQH-P1 56Kbps PCI	Internal/PCI
GVC	SF-1156HV/R21 KB3471	Internal/ISA
GVC	F-1156IV/R2 KB3497	Internal/PCI
Turbo	Motorola SM56 Voice PCI	Internal/PCI
HSP	V1456VQH-P1 56Kbps	Internal/PCI
Archtek	A12PW19085A 56Kbps	Internal/PCI

## 8.2.4 CPU Converter Board

### Test Configuration:

**OS Ver** ☒ Win 98 **SE Ver:** 4.10.2222A .  
**Memory** NEC 128MB (D456841G5-A80-9JF) **Total: 128 MB** ☐ PC66 ☒ PC100  
**VGA** ATI XPERT 2000 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_\_. ☒ AGP  
**HDD** Maxtor 92040U6 20GB IDE ☐ PIO4 ☒ UDMA/33  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** TEAC CD-532EA 32X IDE **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** VIA VT686A ☐ ISA\_Slot: \_\_\_\_\_. ☒ On board  
**Mouse** Microsoft IntelliMouse PS/2 Mouse ☐ COM ☒ PS/2

The following CPU Converter Board test ZD WinStone 99 V1.2/3D WinBench 99 V1.2 under Windows 98 with set Auto detect bus clock under Converter Board.

Vendor	Product Description	Celeron	Coppermine
ASUS	ASUS S370	PASS	N/A
Gigabyte	GA-6R7	PASS	N/A
MicroStar	MS-6905	PASS	N/A



Iwill	Slocket	PASS	N/A
EPOX	S370 CPU converter	PASS	N/A
PROCOM	S370 CPU converter	PASS	N/A
Iwill	Slocket II	PASS	FAIL
FIC	CK71 (version 1.1)	PASS	PASS

## 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 533MHz ☐ Intel

Memory Micron 128MB (MT48LC8M8A2-75B) Total: 128 MB ☐ PC66 ☐ PC133

VGA Diamond Viper V770 32MB SDRAM ☐ 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 HCT Stress 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
SCSI Hard Disk	Quantum	Fireball SE	Ultra SCSI HDD 2.1GB
		Fireball SE	Ultra SCSI HDD 8.4GB
		Viking II	Ultra2 Wide SCSI HDD 4.5GB
		Atlas II	Ultra SCSI HDD 4.5GB
		Atlas III	Ultra Wide SCSI HDD 9.1GB
	Seagate	ST-34555N	Ultra SCSI HDD 4.5GB
		ST-32272W	Ultra Wide SCSI HDD 2.2GB
		ST-39173W	Barracuda 9LP Ultra Wide 9.1GB
		ST-34502LW	Cheetah 9LP Ultra2 Wide 4.5GB
	IBM	DCAS34330	4.5GB Ultra SCSI HDD
		DCAS34330	4.5GB Ultra Wide SCSI HDD
	WD	WDE2170	4.3GB Ultra Wide SCSI HDD
CD-ROM	Plextor	PX-32Tsi	Ultra SCSI CD-ROM 32X
	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
	Toshiba	XM-6210B	Ultra SCSI CD-ROM 32X
	Pioneer	DR-533	Narrow SCSI II CD-ROM 24X

### 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 533MHz ☐ Intel  
 Memory Mitsubishi 64MB (M2V64S30BTP) Total: 128 MB ☐ PC66 ☐ PC133  
 CD-ROM Sony DDU220E 5X IDE DVD-ROM Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 VGA ELSA ERAZOR III 32MB SDRAM ☐ PCI\_Slot:        ☐ AGP  
 Sound Creative CT5880 PCI ☐ ISA\_Slot:        ☐ On board  
 Mouse Logitech First Mouse+ Mouse ☐ COM ☐ PS/2

The following IDE devices test WinStone 99/WinBench 99 under Windows 98/NT with High-Point 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
Fujitsu	MPD3064AT	Ultra DMA 66	6.4GB
	MPD3084AT	Ultra DMA 66	8.4GB
	MPD3108AT	Ultra DMA 66	10.8GB
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 KA	Ultra DMA 66	13.6GB
IBM	DJNA-370910	Ultra DMA 66	9.1GB
	DJNA-352030	Ultra DMA 66	20.3GB
	DPTA-372730	Ultra DMA 66	27.3GB
	DPTA-353750	Ultra DMA 66	37.5GB
Maxtor	90845U3	Ultra DMA 66	8.4GB
	91024U4	Ultra DMA 66	10.2GB
	91360U4	Ultra DMA 66	13.6GB
	92040U6	Ultra DMA 66	20GB
	92720U8	Ultra DMA 66	27GB
Samsung	SV1364D	Ultra DMA 66	13.6GB
	SV2046D	Ultra DMA 66	20.4GB

### 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 Celeron 433MHz

☐ Intel



**Memory** Winbond 64MB (W981216AH-75) **Total: 128 MB** ☐ PC66 ☐ PC100  
**VGA** Diamond Stealth II G460 8MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**HDD** Seagate ST-313032A 13GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** BTC BCD-40BXH 40X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** Creative CT5880 PCI ☐ 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 High-Point 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 95 Ver: OSR2.5 .  
☐ Win 98 SE Ver: 4.10.2222A .  
**CPU** Intel Pentium III 550MHz ☐ Intel  
**Memory** NEC 128MB (D4564841G5-A80-9JF) **Total: 128 MB** ☐ PC66 ☐ PC100  
**HDD** Fujitsu MPD3108AT 10.8GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** ASUS AGP-V3800 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**Sound** Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
**Mouse** Logitech TrackmanMarble Mouse ☐ COM ☐ PS/2

The following IDE devices play VCD/DVD over night under Windows 95/98 with High-Point 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
NEC	CDR-1900A	ATAPI CD-ROM 32X Mode4
Wearnes	CDS-32X	ATAPI CD-ROM 32X Mode4



Acer	650P	ATAPI CD-ROM 50X UDMA2
LITE-ON	LTN-301	ATAPI CD-ROM 32X UDMA2
	LTN-403L	ATAPI CD-ROM 40X UDMA2
Hitachi	CDR-8430	ATAPI CD-ROM 32X Mode4
Philips	PCA323CD	ATAPI CD-ROM 32X UDMA2
Creative	CD2421E	ATAPI CD-ROM 24X Mode4
A-Open	CD-940E/AKU	ATAPI CD-ROM 40X UDMA2
ASUS	CD-S400/A	ATAPI CD-ROM 40X UDMA2
	CD-S500/A	ATAPI CD-ROM 50X UDMA2
Vuego	624A-304	ATAPI CD-ROM 24X Mode4
TEAC	CD-532EA	ATAPI CD-ROM 32X Mode3
SONY	CDU-611	ATAPI CD-ROM 24X Mode4
	CDU-711	ATAPI CD-ROM 32X UDMA2
Pioneer	DR-502S	ATAPI CD-ROM 24X Mode4
	DR-744	ATAPI CD-ROM 36X Mode4
BTC	BCD 48SB	ATAPI CD-ROM 48X UDMA2

#### 8.3.4.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
Panasonic	SR-8583-BXX	ATAPI DVD-ROM 5.0X
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-102	ATAPI DVD-ROM 2.6X
	DVD-A03S	ATAPI DVD-ROM 6X

#### 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 550MHz ☐ Intel  
 Memory Hyundai 128MB (HY57V658020B-10P) Total: 128 MB ☐ PC66 ☐ PC100  
 VGA ATI Rage Fury 328MB SDRAM ☐ PCI Slot:        ☐ AGP  
 HDD Seagate ST-36530A 6.5GB IDE ☐ PIO4 ☐ UDMA/33  
 Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 CD-ROM TEAC CD-532EA 32X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 Sound Creative CT5880 PCI ☐ ISA Slot:        ☐ On board  
 Mouse Microsoft IntelliMouse Mouse ☐ 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 High-Point IDE Bus Master drivers installed .



Vendor	Product Description
Panasonic	LKM-F434-105 LS-120
Zip	Z100ATAPI ZIP device 100MB
	Z100iDE ZIP device 100MB

## 8.4 Peripherals

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

#### Test Configuration:

OS Ver ☐ Win 95 Ver: OSR2.5  
☐ Win 98 SE Ver: 4.10.2222A

CPU Intel Pentium III 500MHz ☐ Intel

Memory Fujitsu 32MB (81F16822D-102LFN) Total: 64 MB ☐ PC66 ☐ PC100

HDD Quantum Fireball EL 5.1GB IDE ☐ PIO4 ☐ UDMA/33  
Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM NEC CDR-1900A 32X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS

VGA Matrox Millennium G200 8MB SGRAM ☐ PCI\_Slot:      ☐ AGP

Sound Creative CT5880 PCI ☐ ISA\_Slot:      ☐ On board

Mouse Logitech TrackMan Marble Mouse ☐ COM ☐ PS/2

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

Vendor	Model Name	Product Description	Bus I/F
HP	LaserJet III	HP LaserJet III	LPT
	LaserJet 6P	HP LaserJet 6P support IR Interface	LPT
Mustek	1200CP	Mustek 1200CP Scanner	LPT
Parallel	Universal Cable	DirectParallel universal cable	LPT
Road Runner	Express T305	External Parallel Port Tape Backup	LPT
	Express FD144	External Parallel Port Floppy Drive	LPT
	Express CD-4X	External Parallel Port CD-ROM Driver	LPT
	Express XD	External Parallel Port Hard Driver	LPT
Actisys	ACT-IR210L	InfraRed Computer Link	IR
	ACT-IR220L	InfraRed Computer Link	COM(IR)
IRwave	IRwave320S	InfraRed Computer Link	COM(IR)
	IRwave320F	InfraRed Computer Link	IR
Kodak	DC210	InfraRed/Serial port Digital camera	COM

## 8.4.2 Mouse Products

### Test Configuration:

OS Ver ☐ Win 95 Ver: OSR2.5  
☐ Win 98 SE Ver: 4.10.2222A  
 CPU Intel Pentium II 450MHz ☐ Intel  
 Memory SIEMENS 64MB (HYB39S64800BT-8) Total: 128 MB ☐ PC66 ☐ PC100  
 HDD Seagate ST-39140A 9.1GB IDE ☐ PIO4 ☐ UDMA/33  
 Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 CD-ROM Pioneer DR-502S 24X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 VGA ATI XPERT 2000 32MB SDRAM ☐ PCI\_Slot:      ☐ AGP  
 Sound Creative CT5880 PCI ☐ ISA\_Slot:      ☐ On board

The following Mouse devices test Office 97 and Game under Windows 95/98 with Mouse drivers installed.

Vendor	Model Name	Product Description	Bus I/F
Microsoft	Microsoft Mouse	Microsoft IntelliMouse Serial - PS/2 Mouse	Serial/ PS2
Logitech	MouseMan	Logitech MouseMan Serial - PS/2 Mouse	Serial/ PS2
	First Mouse+	Logitech First Mouse+ Serial - PS/2 Mouse	Serial/ PS2
	Wheel Mouse	Logitech Wheel Mouse PS/2 Mouse	PS2
	MouseMan Wheel	Logitech MouseMan Wheel PS/2 Mouse	PS2
	TrackMan Marble	Logitech TrackMan Marble Serial - PS/2 Mouse	Serial/ PS2

## 8.4.3 USB Device Products

### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A  
 CPU Intel Pentium III 550MHz ☐ Intel  
 Memory SIEMENS 128MB (HYB39S64800AT-8) Total: 128 MB ☐ PC66 ☐ PC100  
 HDD Seagate ST-34342A 4.3GB IDE ☐ PIO4 ☐ UDMA/33  
 Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 CD-ROM Hitachi CDR-8430 32X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS



**VGA** Voodoo3 3000 16MB SDGRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**Sound** Creative CT5880 PCI ☐ 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
		M-UB48
		USB Wheel Mouse
		USB MouseMan Wheel
	Twinhead	S-Mouse
	Macally	USB Mini Mouse
	Justy	UM-400
	Cypress	7-895 Mouse
HUB	Belkin	Express Bus F5U001
Camera	Kodak	DVC323
	AXIS	PCAM-QU
Faxmodem	USRobotics	56K Voice Faxmodem
Keyboard	BTC	8113W
	Chicony	KU-8933
Printer	EPSON	Stylus Color 740
Ethernet	CATC	USB to Lan 10BASE-T
Scanner	HP	ScanJet 4200C
Monitor	Viewsonic	Professional Series PS775
Joystick	Genius	Flight2000 F-22X
	Thrustmaster	TOP Gun

#### 8.4.4 Joystick

##### Test Configuration:

**OS Ver** ☐ Win 98 SE Ver: 4.10.2222A .  
**CPU** Intel Pentium II 400MHz ☐ Intel  
**Memory** SIEMENS 32MB (HYB39S64160AT-8) **Total: 64 MB** ☐ PC66 ☐ PC100  
**HDD** Maxtor 86480D6 6.4GB IDE ☐ PIO4 ☐ UDMA/33  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Vuego 624A-304 24X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Creative Riva TNT2 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP

**Sound** Creative CT5880 PCI

☐ISA\_Slot:\_\_\_\_ ☐ On board

**Mouse** Microsoft IntelliMouse Mouse

☐COM ☐ PS/2

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

Vendor	Product Description
Microsoft	SideWinder 3D Pro joystick
	SideWinder force feedback pro joystick
Logitech	Wing Man Extreme digital joystick
	WingMan Force joystick
	WingMan Formula Force joystick

## 8.5 Power Supply Products

Vendor	Product Description	Power	Type
DELTA	DPS-200PB-89G	200W	ATX
	DPS-200PB-103D	200W	ATX
	DPS-200PB-103F	200W	ATX
HIPRO	HP-200PPGN	200W	ATX
	HP-300SN Rev:02	300W	ATX
ZECK	ZKS-250WX	250W	ATX
	ZKS-300WX	300W	ATX
Seventeam	ST-250GL	250W	ATX
	ST-301HR	300W	ATX
Enlight	ATX-723B	230W	ATX
	ATX-725B	250W	ATX
Sea Sonic	SS-200GTX	200W	ATX

## 8.6 MPEG-2 DVD Display Products

### Test Configuration:

**OS Ver** ☐ Win 98 SE Ver: 4.10.2222A

**CPU** Intel Pentium III 500MHz

☐ Intel

**Memory** SEC 64MB (KN48S8030BT-GH)

**Total:** 128 MB ☐PC66 ☐ PC100

**HDD** IBM DJNA-352030 20.3GB

☐PIO4 ☐ UDMA/33

**Channel:** ☐ PM ☐PS ☐SM ☐SS

**VGA** Diamond Viper V770 32MB SDRAM

☐PCI\_Slot:\_\_\_\_ ☐ AGP

**Sound** Creative CT5880 PCI

☐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 MS-DOS/Win 3.1:

##### Test Configuration:

**CPU** Intel Celeron 533MHz ☐ Intel  
**Memory** Toshiba 64MB (TC59S6408FTL-80H) **Total: 128 MB** ☐ PC66 ☐ PC100  
**HDD** Quantum Fireball KA 13.6GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** ATI XPERT128 16MB SDRAM ☐ PCI\_Slot:\_\_\_\_ ☐ AGP  
**Sound** Creative CT5880 PCI ☐ ISA\_Slot:\_\_\_\_ ☐ On board  
**CD-ROM** TEAC CD-524EA 24X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Mouse** Logitech TrackMan Marble Mouse ☐ COM ☐ PS/2

Test Item	Result	Remark
FDISK (FAT16)	PASS	
Install DOS	PASS	
Format FDD	PASS	
Format HDD	PASS	
Boot from FDD	PASS	
Boot from HDD	PASS	
HIMEM	PASS	
EMM386	PASS	
XCOPY	PASS	
Diskcopy	PASS	
Power.exe	PASS	
USB Keyboard working (Only)	PASS	
Install Windows 3.1	PASS	
Qaplus 5.52 for DOS	PASS	
Check It 5.01 for DOS	PASS	
Norton Utility 8.0 for DOS/Win 3.1 (Sysinfo)	PASS	
AMIDdiag 5.42a	PASS	
Speedcom	PASS	
Speedy for Win 3.1	PASS	
ICU 1.43 test	PASS	
NSTL Y2K tools test	PASS	
PM function (H/W & BIOS)	PASS	



<b>LS-120/ZIP install &amp; working</b>	PASS	
<b>GAME play (name: Mech Warrior 2 Mercenaries)</b>	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 DOS	6.22	English	Microsoft	Pass
Windows for Workgroups	3.11	English	Microsoft	Pass

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

#### Test Configuration:

**CPU** Intel Pentium III 700MHz ☐ Intel  
**Memory** SIEMENS 128MB (HYB39S64800BT-7.5) **Total: 256 MB** ☐ PC66 ☐ PC133  
**HDD** IBM DPTA-372730 27.3GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Diamond Viper V770 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**Sound** Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
**CD-ROM** Pioneer DR-744 36X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Mouse** Microsoft IntelliMouse Mouse ☐ COM ☐ PS/2

Test Item	Result	Remark
<b>FDISK (FAT32)</b>	PASS	
<b>Install Win 98</b>	PASS	
<b>Format FDD</b>	PASS	
<b>Diskcopy</b>	PASS	
<b>Large file Copy</b>	PASS	
<b>USB device test</b>	PASS	
<b>Trend Anti-Virus Install &amp; Test</b>	PASS	
<b>LDCM Install &amp; Test (LDCM Ver: 3.30 )</b>	PASS	
<b>Device Management check (No Caution)</b>	PASS	
<b>Sound/VGA/LAN IRQ change (PnP function)</b>	PASS	
<b>VGA Resolution/Color change</b>	PASS	
<b>Install Office 97</b>	PASS	
<b>Auto Shutdown (system power off)</b>	PASS	
<b>Defrag test</b>	PASS	
<b>LS-120/ZIP install &amp; working</b>	PASS	
<b>Norton Utility 3.0</b>	PASS	
<b>CheckIt 98</b>	PASS	
<b>Qaplus 7.1 for Win 98</b>	PASS	
<b>Year 2000 test</b>	PASS	
<b>DVD Video CD play (name: BATMAN &amp; ROBIN)</b>	PASS	
<b>Video CD play (name: TOP GUN )</b>	PASS	

ACPI test (HCT 8.0)	PASS	
Drive Converter (FAT32)	PASS	
PM function by WIN98 (H/W )	PASS	
GAME play (name: TOMB RAIDER II )	PASS	
WinStone 98/99	PASS	
WinBench 98/99	PASS	
3D Winbench 98/99	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
	950C	Chinese	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	Portugal	Microsoft	Pass
	4.10.1998	Chinese(trad)	Microsoft	Pass
	4.10.1998	Chinese(simp)	Microsoft	Pass

### 9.1.3 Microsoft Windows 2000:

#### Test Configuration:

**CPU** Intel Pentium III 750MHz ☐ Intel  
**Memory** SIEMENS 128MB (HYB39S64800AT-8) **Total: 256 MB** ☐ PC100 ☐ PC133  
**HDD** Maxtor 92049U4 20.4GB IDE ☐ PIO4 ☐ UDMA/33 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Creative Geforce Pro ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**Sound** Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
**CD-ROM** ASUS CD-S400/A 40X 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	
VGA Resolution/Color change (800x600x32bit / 1024x768x16bit)	PASS	
Auto Shutdown (system power off)	PASS	
Defrag test	PASS	



DVD Video CD play (name: <b>BATMAN &amp; ROBIN</b> )	PASS	
PM function by Win2000 (H/W & Time out & Stand by)	PASS	
Sound/VGA/LAN IRQ change (PnP function)	PASS	
Install Office 2000	PASS	
GAME play (name: <b>TOMB RAIDER II</b> )	PASS	
WinStone 99	PASS	
CC WinStone 2000	PASS	
WinBench 99	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

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

##### Test Configuration:

**CPU** Intel Pentium III 550MHz ☒ Intel  
**Memory** SEC 64MB (KM48S8030BT-GH) **Total: 128 MB** ☐ PC66 ☒ PC100  
**HDD** Seagate ST-317242A 17.2GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Matrox Millennium G400 32MB SGRAM ☐ PCI\_Slot: \_\_\_\_ ☒ AGP  
**Sound** Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☒ On board  
**CD-ROM** ASUS CD-S500/A 50X IDE **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Mouse** Logitech Mouse+ Mouse ☐ COM ☒ PS/2

Test Item	Result	Remark
Install Win NT (NTFS/FAT)	PASS	
Format FDD	PASS	
Diskcopy	PASS	
IDE Bus Master install	PASS	
VGA Resolution/Color change	PASS	
Shutdown	PASS	
Shutdown & Restart	PASS	
LS-120/ZIP install & working	PASS	
Year 2000 test	PASS	
WinStone 98/99	PASS	

WinBench 98/99	PASS	
BAPCO for Win NT 4.0 (SYSmark32)	PASS	
HCT 8.0 Stress test	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
Windows NT Advance Server	3.51	English	Microsoft	Pass
Windows NT Workstation	3.51	English	Microsoft	Pass
Windows NT Workstation	4.0	English	Microsoft	Pass
	4.0	Japanese	Microsoft	Pass
	4.0	German	Microsoft	Pass
	4.0	French	Microsoft	Pass
	4.0	Chinese	Microsoft	Pass
Windows NT Workstation Service Pack	5.0	English	Microsoft	Pass
	6.0	English	Microsoft	Pass

### 9.1.5 IBM OS/2 4.0:

#### Test Configuration:

**CPU** Intel Pentium II 400MHz

☐ Intel

**Memory** Toshiba 64MB (TC59S6408FTL-80H)

**Total: 64 MB** ☐ PC66 ☐ PC100

**HDD** Fujitsu MPB3032AT 3.2GB IDE

☐ PIO4 ☐ UDMA/33

**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS

**VGA** ATI Rage pro Turbo 8MB SGRAM

☐ PCI\_Slot: \_\_\_\_ ☐ AGP

**Sound** Creative CT5880 PCI

☐ ISA\_Slot: 1 ☐ On board

**CD-ROM** Philips PCA323CD 32X 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	
VGA Resolution/Color change	PASS	
DOS Windows	PASS	
OS/2 Windows	PASS	
Stress test	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

### 9.1.6 LINUX :

#### Test Configuration:

**CPU** Intel Pentium III 500MHz ☐ Intel  
**Memory** Toshiba 64MB (TC59S6408FTL-80H) **Total: 128 MB** ☐ PC66 ☐ PC100  
**HDD** WD AC313000 13GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** Diamond Viper V550 16MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**CD-ROM** ASUS CD-S400/A 40X 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	2.3	English	Pass

### 9.1.7 Microsoft Windows ME:

#### Test Configuration:

**CPU** Intel Pentium III 866MHz ☐ Intel  
**Memory** Micron 128MB (MT48LC8M8A2-75B) **Total: 128 MB** ☐ PC66 ☐ PC133  
**VGA** ELSA ERAZOR X 32MB SDRAM ☐ PCI\_Slot: \_\_\_\_ ☐ AGP  
**HDD** Seagate ST-313032A 13GB IDE ☐ PIO4 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** BTC BCD-40BXH 40X IDE **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** Creative CT5880 PCI ☐ ISA\_Slot: \_\_\_\_ ☐ On board  
**Mouse** Logitech MouseMan Mouse ☐ 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: PooDEL Springs )	PASS	
Power Management	PASS	
Hibernate (Suspend To Disk)	PASS	
System Restore	PASS	
WinStone 99 (Business WS99)	PASS	
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	
3D Winbench 2000 (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 ME	4.90.3000	English	Microsoft	Pass

## 9.1 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
	Balduur'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

