

# **FIC PAG-2130 PCI/AGP SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT**

<b>Product Version:</b>	<b><i>V 1.3</i></b>
<b>BIOS Version:</b>	<b>SB412</b>
<b>Report Date:</b>	<b>10/05/2000</b>
<b>Revision:</b>	<b>1.02</b>



## Revision History

Document Release	Date	Change Item	ECN
Revision 1.01	5/24/2000	VIA MVP4 North Bridge version "H" approval Ready	M98A03-E-092
		BIOS update to SB412 for ICW W156H clock_GEN Add support AMD K6-2 550MHz CPU Add support Microsoft Windows 2000 Professional support Microsoft Windows NT with Service Pack 6	
Revision 1.02	10/05/2000	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)
  - 8.2 **Add-on Cards**
    - 8.2.1 SCSI Adapter Products
    - 8.2.2 Network Card Products
    - 8.2.3 FAX / Modem Products
  - 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
    - 8.3.5 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 & Game Pad
  - 8.5 **Power Supply 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 NT 4.0
    - 9.1.4 Microsoft Windows 2000
    - 9.1.5 IBM OS/2 4.0
    - 9.1.6 Microsoft Windows ME
  - 9.2 **Tested Software List**
    - Suites
    - Word Processor
    - Communication
    - CAD
    - Database
    - Graphics
    - Presentation



Program  
Diagnostic Program  
Tools  
Time Management  
Scan  
Internet  
CD Title Game  
CD Title Multimedia  
CD Title



## 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** : PAG-2130 PCB Rev 1.3  
**Product Name** : VIA Apollo MVP4 + Super South Based Mainboard  
**System BIOS** : Award BIOS Version SB412  
**PCI IDE** : Internal PCI Mastre dual IDE  
**I/O** : VIA VT686A

## 3. Mainboard CPU Supports:

Vender	Description	Voltage	Bus
AMD	K6-266	2.2V	66
	K6-300	2.2V	66
	K6-2 /266	2.2V	66
	K6-2 /300	2.2V	66/100
	K6-2 /333	2.2V	66/95
	K6-2 /350	2.2V	100
	K6-2 /366	2.2V	66
	K6-2 /380	2.2V	95
	K6-2 /400	2.2V	100
	K6-2 /450	2.2V	100
	K6-2 /475	2.4V	95
	K6-2 /500	2.2V	100
	K6-2 /550	2.3V	100
	K6-3 /400	2.2V	100
	K6-3 /450	2.2V	100
	K6-3 /500	2.2V	100

Vender	Description	Voltage	Bus
Cyrix	M II-266GP	2.9V	66
	M II-300GP	2.9V	75
	M II-333GP	2.9V	83
	M II-366GP	2.9V	100
	M II-366GP	2.9V	95

## 4 System Specification for Hardware and Software Utilities

The mainboard hardware portion was configured as follows :

Item	Description
System Core Logic	VIA Apollo MVP4 with Super South (501_H+686A_K)
System Cache	512K/1M/2M Pipeline Burst SRAM onboard
System Memory	Maximum : 768MB 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	4 PCI / 1 ISA slots
System Audio	VIA VT686 AC'97 Audio
IO Corelogic	Onchip VIA 82C686A Support Normal,EPP,ECP mode and IR interface
PCI IDE	VIA 82C686A internal Bus Master PCI IDE.

#### 4.1 Main Functionality Test:

Num.	M/B function	Result
1	ACPI Ready (under Win 98/Win 2000)	PASS
2	APM 1.2	PASS
3	Wake On LAN	PASS
4	Modem Ring On	PASS
5	RTC Alarm Function	PASS
6	H/W Monitoring (+12V,+5V,Vccp,)	PASS
7	Ultra ATA-33/66 Enhanced IDE Interface	PASS
8	USB Function	PASS
9	Year 2000 Compliance	PASS

#### 4.2 Main Software Utilities Test:

Num.	M/B function	Version	Result
1	High-Point IDE Bus Master for Win 95/98	1.2	PASS
2	VIA IDE Bus Master for Win NT	2.1.41	PASS
3	VIA AGP VxD Utilities for Win 95/98	3.55	PASS
4	VIA chipset function' Registry for Win 95/98	1.8	PASS
5	VIA IRQ Routing Table	1.30	PASS
6	FirstAID	1.2	PASS
7	VIA MVP4 AGP for Win 98 driver	4.11.01.2200	PASS
8	VIA MVP4 AGP for Win NT driver	4.00.1381.0061	PASS
9	Onchip VIA VT686 Sound driver for Win 95/98	4.10.3106	PASS
10	Onchip VIA VT686 Sound driver for Win NT	1.06	PASS
11	Award BIOS Flash ROM Utilities	7.13B	PASS
12	Award DMICFG Utilities for DOS	2.3Du	PASS

### 5. Jumper Function Verification

Description	Jumper Name	Default Option	Status
Speaker Connector	SPEAKER	Open	Pass
Power LED	PW_LED	Open	Pass
Suspended Switch	SP_SW	Open	Pass
IDE LED Connector	HDDLED	Open	Pass
Reset Switch	RST_SW	Open	Pass
Remote Power Switch	RPW_SW	Open	Pass
Message LED	MSG_LED	Open	Pass
CPU FAN Connector	CPU_FAN	Open	Pass
Chassis FAN Connector	CHASSIS FAN	Open	Pass
CPU Clock Frequency	J6	On,On,On,Off	Pass
CPU Clock Rate	SW1-1~3	On,On,On	Pass
CPU Voltage	SW1-4~8	Off,On,Off,Off,Off	Pass
Clear CMOS	CMOS	2-3	Pass
IR interface	IR	Open	Pass
BIOS Voltage	J7	2-3	Pass
LAN Wake Up	RWU	Open	Pass

## 6. Stability Test

### 6.1 Worst Case Test :

System Configuration	
CPU : AMD K6-2 500	Power Supply : Seasonic SS-200GTX 200W
Cache Memory : 1MB	Mouse : Microsoft PS/2 mouse
On Board Memory : SDRAM 192MB	O.S. Environment: MS-DOS 6.22,Win 98,UNIX
HDD : Fujitsu F1623TAU 1.7GB	Chamber : KATO SE-47CRT
FDD : Mitsumi D353F3 1.44MB	

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

DC voltage: 3.3V and 5V fixed

Temperature range: -20 ~ 50C ° (Out side)

Frequency test on 100MHz frequency

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

NO.	Test Engineer	Test Result	Remark
1.	Jason Chen	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 100MHz with a  $\pm 10\%$  frequency variation.

Diagnostic Program: Win NT HCT Stress test and SCO UNIX burn in.

NO.	Test Engineer	Test Result	Remark
1.	Jason Chen	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/230V input .

Temperature range: -20°C to 50°C

Power On/Off ten times in each condition

Diagnostic Program: Win 95/98

NO.	Test Engineer	Test Result	Remark
1.	Jason Chen	PASS	



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

Software Name	Duration	Result
BAPCO for Windows NT	24 hr.	<i>Pass</i>
Test Configurations for NT	AMD K6-2 450MHz Onboard VIA MVP4 AGP VGA 8MB UMA 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	AMD K6-2 400MHz 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 Onboard VIA MVP4 AGP VGA 8MB UMA Test Program : Netware 4.11	
SCO UNIX Open Desktop 5.04	24 hr.	<i>Pass</i>
Test Configurations for SCO	AMD K6-3 400MHz Adaptec AHA-2940UW SONY CDU-625 24X SCSI CD-ROM Seagate ST-34555N 4.5GB Ultra SCSI Disk 128MB Memory Onboard VIA MVP4 AGP VGA 8MB UMA Test Program : Create a batch file	
Winstone 99 Under WIN95	24 hr.	<i>Pass</i>
Test Configurations for Win 95	AMD K6-3 450MHz Maxtor Diamond 88400D8 Ultra DMA 8.4GB HDD Onboard VIA MVP4 AGP VGA 8MB UMA SEC 128MB SDRAM Memory	
Winstone 99 Under WIN98	24hr.	<i>Pass</i>
Test Configurations for Win 98	AMD K6-3 450MHz WD AC310200 Ultra ATA-66 10.2GB HDD Apacer 128MB SDRAM Memory. Onboard VIA MVP4 AGP VGA 8MB UMA	
BAPCO for Windows NT 4.0	24hr.	<i>Pass</i>
Test Configurations for SYSMARK 32 under Windows NT 4.0	AMD K6-2 450MHz IBM DTTA-371010 Ultra DMA 10.2GB IDE HDD SIEMENS 128MB SDRAM Memory. Onboard VIA MVP4 AGP VGA 8MB UMA	



## 7. Base Operating Systems HCT Tests For PC98

Operating System	Company	HCT Name	Result
Windows NT Version 4.0	Microsoft	Microsoft WHQL HCT 8.1	<i>Pass</i>
Test Configurations	AMD K6-3 450MHz 64MB Memory. Onboard VIA MVP4 AGP VGA 8MB UMA		
Windows NT Version 5.0 Beta2	Microsoft	Microsoft WHQL HCT 8.0	<i>Pass</i>
Test Configurations	AMD K6-3 450MHz 64MB Memory. Onboard VIA MVP4 AGP VGA 8MB UMA		
Windows 95	Microsoft	Microsoft WHQL HCT 8.1	<i>Fail</i>
Test Configurations	AMD K6-3 450MHz 64MB Memory. Onboard VIA MVP4 AGP VGA 8MB UMA		
Windows 98 with APM	Microsoft	Microsoft WHQL HCT 8.1	<i>Fail</i>
Test Configurations	AMD K6-3 450MHz 64MB Memory. Onboard VIA MVP4 AGP VGA 8MB UMA		
Windows 98 with ACPI	Microsoft	Microsoft WHQL HCT 8.1	<i>Fail</i>
Test Configurations	AMD K6-3 450MHz 64MB Memory. Onboard VIA MVP4 AGP VGA 8MB UMA		



## 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 AMD K6-3 500MHz

☐ AMD

HDD IBM DJNA-352030 20.3GB

☐ PIO4 ☐ UDMA/66Channel: ☐ PM ☐ PS ☐ SM ☐ SS

VGA VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot:\_\_\_\_. ☐ Onchip AGP

CD-ROM Pioneer DR-502S 24X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound VIA VT686

☐ ISA\_Slot:\_\_\_\_. ☐ Onchip AC97

Mouse Microsoft IntelliMouse PS/2 Mouse

☐ COM ☐ PS/2

The following SDRAM module test Winstone 99 / BAPCO under Windows 98/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	16MB	S	
	TC59S1608AFT-12A	No	32MB	D	THMY644041AEG-12A

#### 8.1.2 SDRAM DIMM Module (PC100)

Vender	IC Part No.	ECC	Size	Side	Module No.
LGS	GN72V661641CT7J	No	32MB	S	AAL8134
	GM72V661641CT7J	No	64MB	D	ABL8141
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
Toshiba	TC59S6408FTL-80H	Yes	64MB	S	MO4B064M1HE72224-C2100
Advantage	TC59S6408FTL-80H	Yes	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	
Apacer	AM2V168A1T8	No	32MB	D	7P.G1346.P00
	GM72V661641CT7J	No	32MB	S	7B.G2426.A01 (LGS)
	GM72V66841CT7J	No	64MB	D	7B.G3336.A4J (LGS)
	GM72V66841CT7J	No	128MB	D	7B.G3346.A4J (LGS)

## 8.2 Add-on Cards

### 8.2.1 SCSI Adapter Products

#### Test Configuration:

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

CPU AMD K6-3 450MHz

☐ AMD

Memory SEC 128MB (KM48S8030BT-GH)

Total: 128 MB ☐ PC66 ☐ PC100

VGA VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot:        . ☐ Onchip AGP

HDD IBM DCAS34330 4.5GB SCSI HDD

☐ Ultra SCSI ☐ Ultra Wide

Viking II 4.5GB SCSI HDD

☐ Ultra SCSI ☐ Ultra Wide

CD-ROM Plextor PX-32Tsi 32X SCSI

☐ Ultra SCSI ☐ Ultra Wide

Sound VIA VT686

☐ ISA\_Slot:        . ☐ Onchip AC97

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following ISA/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-1530P	Adaptec AHA-1530P ISA PnP SCSI	ISA PnP
	AHA-2940AU	Adaptec AHA-2940AU PCI SCSI card	PCI
	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
	AHA-1540CF	Adaptec AHA-1540CF ISA SCSI	ISA
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
Initio	INI-9100HA/W	Initio INI-9100HA/W PCI 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

## 8.2.2 Network Card Products

### Test Configuration:

OS Ver ☐ Novell Netware Ver: 4.11

☐ Win 98 SE Ver: 4.10.2222A

CPU AMD K6-3 400MHz

☐ AMD

Memory Toshiba 64MB (TC59S6408FTL-80H)

Total: 64 MB ☐ PC66 ☐ PC100

VGA VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot:        ☐ Onchip AGP

HDD IBM DTTA-371010 10.1GB IDE

☐ PIO4 ☐ UDMA/33

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM TEAC CD-523S 32X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Mouse Logitech MouseMan Mouse

☐ COM ☐ PS/2

The following ISA/PCI LAN cards test Nwtest under Novell Netware and tset NetBench 5.01 under Windows NT Server with their respective LAN drivers installed .

Vender	Model	Specification	Bus	Result
3COM	3C509B	ETHERNET PnP 10Mbps	ISA PnP	Pass
	3C905C	ETHERNET 100Mbps (WOL)	PCI	Pass
	3C905C	ETHERNET 100Mbps (WOL)	PCI	Pass
	3C339	PnP Token-Ring	PCI	Pass
	3C19250	External Network for USB	USB	Pass
ACCTON	ACC40P	ETHERNET PnP 10 Mbps	ISA PnP	Pass
	EN1203	ETHERNET 10 Mbps	PCI	Pass
	EN1207	ETHERNET 100 Mbps (WOL)	PCI	Pass
IBM	TR900	Token-Ring	PCI	Pass
	EN237	ETHERNET 10Mbps	PCI	Pass
	4H8089	Token-Ring	PCI	N/A
	TR701	Token-Ring (WOL)	PCI	Pass
INTEL	PRO10+	ETHERNET 10Mbps	PCI	Pass
	PCLA 8220B	ETHERNET 10Mbps	ISA PnP	Pass
	E100B 82557	ETHERNET 100 Mbps	PCI	Pass
	Pro/100+ 82558	ETHERNET 100 Mbps (WOL)	PCI	Pass
	Pro/100+ 82559	ETHERNET 100 Mbps (WOL)	PCI	Pass
OLICOM	OC-2185 (2183)	ETHERNET 10Mbps	PCI	Pass
	OC-4048	TOKEN RING	PCI	N/A
	OC-3136	TOKEN RING 4/16Mbps	PCI	Pass
	OC-3140	TOKEN RING 4/16Mbps (WOL)	PCI	Pass
	OC-2325	ETHERNET 100 Mbps	PCI	Pass
Thomas	TC4048	TOKEN RING	PCI	Pass
D-Link	DFE-540TX	ETHERNET 100 Mbps (WOL)	PCI	Pass
	DU-E10	External Network for USB	USB	Pass
SMC	SMC9332	ETHERNET 100Mbps	PCI	Pass
	SMC9432TX	ETHERNET 100Mbps (WOL)	PCI	Pass
	SMC1211	ETHERNET 100Mbps	PCI	Pass
Novell	NE2100	ETHERNET 10Mbps	ISA	N/A
RealTek	RTL8139B	ETHERNET 100Mbps (WOL)	PCI	Pass
NetMate	CATC	USB to Lan 10BASE-T	USB	Pass

### 8.2.3 FAX / Modem Products

#### Test Configuration:

OS Ver ☐ Win 98 SE Ver: 4.10.2222A .

CPU AMD K6-2 475MHz

☐ AMD

Memory Toshiba 64MB (TC59S6408FTL-80H)

Total: 64 MB ☐ PC66 ☐ PC100

VGA VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot:\_\_\_\_. ☐ Onchip AGP

HDD Fujitsu MPC 3064AT 6.4GB IDE

☐ PIO4 ☐ UDMA/33

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM Hitachi CDR-8430 32X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Sound VIA VT686

☐ ISA\_Slot:\_\_\_\_. ☐ Onchip AC97

Mouse Logitech MouseMan 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
Motorola	VoiceSURFR 56K	External
GVC	56K/K56 FLEX ASVD	External
RockModem	56K (FIC)	External
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
Conexaut	Soft 56K data/Fax/RTAP	Internal/PCI
CIS	PSL 56K data/Fax/RTAP	Internal/PCI
Diamond	Supra MAX 56K ITU & flex	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 AMD K6-3 400MHz

☐ AMD

Memory LGS 64MB (GN72V661641CT7J)

Total: 128 MB ☐ PC66 ☐ PC100

VGA VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot:        ☐ Onchip AGP

SCSI AHA -2940U2W Ultra Wide

☐ 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
CD-ROM	WD	WDE2170	4.3GB Ultra Wide SCSI HDD
	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 AMD K6-3 500MHz ☐ AMD

Memory SIEMENS 128MB (HYB39S64800CT-8) Total: 256 MB ☐ PC66 ☐ PC100

CD-ROM Panasonic CDR-587D 32X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS

VGA VIA MVP4 AGP VGA 8MB UMA ☐ PCI Slot:        ☐ Onchip AGP

Sound VIA VT686 ☐ ISA Slot:        ☐ Onchip AC97

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

The following IDE devices test HCT Stress and WinStone 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

### 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 AMD K6-2 400MHz

☐ AMD

Memory Toshiba 64MB (TC59S6408FTL-80H)

Total: 64 MB ☐ PC66 ☐ PC100



**VGA** VIA MVP4 AGP VGA 8MB UMA ☐ PCI\_Slot: \_\_\_\_ ☐ Onchip AGP  
**HDD** Quantum Bigfoot TX 4300A 4.3GB IDE ☐ PIO4 ☐ UDMA/33  
Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DR-502S 24X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686 ☐ ISA\_Slot: \_\_\_\_ ☐ Onchip AC97  
**Mouse** Logitech MouseMan Mouse ☐ COM ☐ PS/2

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

Vendor	Model Name	Product Description
Mitsumi	D359T3	1.44MB Floppy Disk Drive
Panasonic	JU-257	1.44 MB Floppy Disk Drive
TEAC	FD-235HG	1.44 MB Floppy Disk Drive

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

#### Test Configuration:

**OS Ver** ☐ Win 95 Ver: SR2 2.5  
☐ Win 98 SE Ver: 4.10.2222A  
**CPU** AMD K6-2 500MHz ☐ AMD  
**Memory** Mitsubishi 32MB (M5M4V16S30DTP) **Total: 64 MB** ☐ PC66 ☐ PC100  
**HDD** Fujitsu MPC3102AT 10.2GB IDE ☐ PIO4 ☐ UDMA/33  
Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** VIA MVP4 AGP VGA 8MB UMA ☐ PCI\_Slot: \_\_\_\_ ☐ Onchip AGP  
**Sound** VIA VT686 ☐ ISA\_Slot: \_\_\_\_ ☐ Onchip AC97  
**Mouse** Logitech First Mouse+ Mouse ☐ COM ☐ PS/2

The following IDE devices test HCT Stress and play VCD 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
Mitsumi	CRMC-FX320S	ATAPI CD-ROM 32X Mode4
NEC	CDR-1800A	ATAPI CD-ROM 24X Mode4
	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-302	ATAPI CD-ROM 32X 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-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
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 AMD K6-3 450MHz ☐ AMD  
 Memory SIEMENS 64MB (HYB39S64800AT-8) Total: 64 MB ☐ PC66 ☐ PC100  
 VGA VIA MVP4 AGP VGA 8MB UMA ☐ PCI\_Slot:        ☐ Onchip AGP  
 HDD WD Caviar AC38400 8.4GB IDE ☐ PIO4 ☐ UDMA/33  
 Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 CD-ROM TEAC CD-532EA 32X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS  
 Sound VIA VT686 ☐ ISA\_Slot:        ☐ Onchip AC97  
 Mouse Logitech First Mouse+ 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
Mitsubishi	MF357G-111MA LSA-120
Panasonic	LKM-F434-105 LS-120



Zip	Z100 Zip IDE DRIVE 29ms 100MB
-----	-------------------------------

## 8.4 Peripherals

### 8.4.1 Parallel/Serial Port Products

#### Test Configuration:

OS Ver ☐ Win 95 Ver: SR2 2.5 ☐ Win 98 SE Ver: 4.10.2222A ☐ AMD

CPU AMD K6-2 500MHz ☐ AMD

Memory NEC 128MB (D4564841G5-A80-9JF) Total: 256 MB ☐ PC66 ☐ PC100

HDD Maxtor 91024U4 10.2GB ☐ PIO4 ☐ UDMA/66

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

CD-ROM BTC BCD48SB 48X IDE Channel: ☐ PM ☐ PS ☐ SM ☐ SS

VGA VIA MVP4 AGP VGA 8MB UMA ☐ PCI\_Slot:      ☐ Onchip AGP

Sound VIA VT686 ☐ ISA\_Slot:      ☐ Onchip AC97

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

### 8.4.2 Mouse Products

#### Test Configuration:

OS Ver ☐ Win 95 Ver: SR2 2.5 ☐ Win 98 SE Ver: 4.10.2222A ☐ AMD

CPU AMD K6-2 475MHz ☐ AMD



**Memory** Apacer 64MB (AM2V168A1T8) **Total: 128 MB** ☐PC66 ☐PC100  
**HDD** Seagate ST-310240A 10.2GB IDE ☐PIO4 ☐UDMA/33  
**CD-ROM** NEC CDR-1900A 32X IDE **Channel:** ☐PM ☐PS ☐SM ☐SS  
**VGA** VIA MVP4 AGP VGA 8MB UMA **Channel:** ☐PM ☐PS ☐SM ☐SS  
**Sound** VIA VT686 **PCI\_Slot:** \_\_\_\_ ☐Onchip AGP  
**ISA\_Slot:** \_\_\_\_ ☐Onchip AC97

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** AMD K6-3 450MHz ☐ AMD  
**Memory** Mitsubishi 32MB (M5M4V16S30DTP) **Total: 64 MB** ☐PC66 ☐PC100  
**HDD** Seagate ST-36451A 6.4GB IDE ☐PIO4 ☐UDMA/33  
**CD-ROM** TEAC CD-532EA 32X IDE **Channel:** ☐PM ☐PS ☐SM ☐SS  
**VGA** VIA MVP4 AGP VGA 8MB UMA **Channel:** ☐PM ☐PS ☐SM ☐SS  
**Sound** VIA VT686 **PCI\_Slot:** \_\_\_\_ ☐Onchip AGP  
**Mouse** Microsoft IntelliMouse Mouse **ISA\_Slot:** \_\_\_\_ ☐Onchip AC97  
☐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
	DEXIN	MA2R
	XNTC	98NS1-U2
	Twinhead	S-Mouse
	Macally	USB Mini Mouse
	Cypress	7-895 Mouse
HUB	Belkin	Express Bus F5U001
Camera	Kodak	DVC323
	AXIS	PCAM-QU
Faxmodem	USRobotics	56K Voice Faxmodem
Keyboard	BTC	8113W
	Jetime	ACK-298H
	Microsoft	Natural Keyboard elite
	Chicony	KU-8933
Printer	EPSON	Stylus Color 740
Ethernet	CATC	USB to Lan 10BASE-T
	SMC	DU-E10 External Network for USB
	3COM	3C19250 External Network for USB
Scanner	HP	ScanJet 4200C
Monitor	Viewsonic	Professional Series PS775
Joystick	Genius	Flight2000 F-22X
	Thrustmaster	TOP Gun

#### 8.4.4 Joystick & Game Pad

##### Test Configuration:

OS Ver ☐ Win 98 Ver: 4.10.2222A

CPU AMD K6-2 400MHz

☐ AMD

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 VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot:\_\_\_\_, ☐ Onchip AGP

Sound VIA VT686

☐ ISA\_Slot:\_\_\_\_, ☐ Onchip AC97

Mouse Microsoft IntelliMouse Mouse

☐ COM ☐ PS/2

The following Joystick & Game Pad 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
	CyberMan 2 Game Pad

	WingMan Force joystick
	WingMan Formula Force joystick

## 8.5 Power Supply Products

The following Power Supply devices test power On/Off 10 times in the Chamber .

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

## 9. Software Compatibility Test Suite

### 9.1 Base Operating System

#### 9.1.1 Microsoft MS-DOS/Win 3.1:

##### Test Configuration:

**CPU** AMD K6-2 500MHz

**Memory** Apacer 64MB (GM72V66841CT7J)

**HDD** Quantum Fireball EX 6.4GB IDE

☐ AMD

**Total:** 128 MB ☐ PC66 ☐ PC100

☐ PIO4 ☐ UDMA/33

**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS



VGA VIA MVP4 AGP VGA 8MB UMA

Sound VIA VT686

CD-ROM TEAC CD-524EA 24X IDE

Mouse Logitech TrackMan Marble Mouse

☐ PCI\_Slot: \_\_\_\_ ☐ Onchip AGP☐ ISA\_Slot: \_\_\_\_ ☐ Onchip AC97Channel: ☐ PM ☐ PS ☐ SM ☐ SS☐ 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	
LS-120/ZIP install & working	PASS	
GAME play (name: Mech Warrior 2 Mercenaries)	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 SE:

#### Test Configuration:

CPU AMD K6-3 500MHz

☐ AMD

Memory Fujitsu 64MB (81F64842B-103FN)

Total: 128 MB ☐ PC66 ☐ PC100





**HDD** Maxtor Diamond 86480D6 6.4GB IDE ☐PIO4 ☐UDMA/33  
**Channel:** ☐PM ☐PS ☐SM ☐SS  
**VGA** VIA MVP4 AGP VGA 8MB UMA ☐PCI\_Slot:\_\_\_\_. ☐Onchip AGP  
**Sound** VIA VT686 ☐ISA\_Slot:\_\_\_\_. ☐Onchip AC97  
**CD-ROM** Pioneer DR-502S 24X IDE **Channel:** ☐PM ☐PS ☐SM ☐SS  
**Mouse** Microsoft IntelliMouse Mouse ☐COM ☐PS/2

Test Item	Result	Remark
FDISK (FAT32)	PASS	
Install Win 98	PASS	
Format FDD	PASS	
Diskcopy	PASS	
Large file Copy	PASS	
USB device test	PASS	
Trend Anti-Virus Install & Test	PASS	
LDCM Install & Test (LDCM Ver: 3.30 )	PASS	
Device Management check (No Caution)	PASS	
Sound/VGA/LAN IRQ change (PnP function)	PASS	
VGA Resolution/Color change	PASS	
Install Office 97	PASS	
Auto Shutdown (system power off)	PASS	
Defrag test	PASS	
LS-120/ZIP install & working	PASS	
Norton Utility 3.0	PASS	
CheckIt 98	PASS	
Qaplus 7.1 for Win 98	PASS	
Year 2000 test	PASS	
DVD Video CD play (name: BATMAN & ROBIN)	PASS	
Video CD play (name: TOP GUN )	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
	4.0a	Japanese	Microsoft	Pass
	950C	German	Microsoft	Pass
	950C	French	Microsoft	Pass
	950C	Chinese	Microsoft	Pass
MS Windows 98	1998	English	Microsoft	Pass

MS Windows 98 Second Edition	2222A	English	Microsoft	Pass
MS Windows 98 OEM	1998	German	Microsoft	Pass
	1998	Japanese	Microsoft	Pass
	1998	French	Microsoft	Pass
	1998	Chinese(trad)	Microsoft	Pass
	1998	Chinese(simp )	Microsoft	Pass

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

#### Test Configuration:

**CPU** AMD K6-2 500MHz

☒ AMD

**Memory** SEC 64MB (KM48S8030BT-GH)

**Total:** 196 MB ☐ PC66 ☐ PC100

**HDD** Seagate ST-310240A 10.2GB IDE

☐ PIO4 ☐ UDMA/33

**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS

**VGA** VIA MVP4 AGP VGA 8MB UMA

☐ PCI\_Slot: \_\_\_\_ ☐ Onchip AGP

**Sound** VIA VT686

☐ ISA\_Slot: \_\_\_\_ ☐ Onchip AC97

**CD-ROM** Mitsumi CRMC-FX320S 32X 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	PASS	
WinBench 98	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 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

#### 9.1.4 Microsoft Windows 2000:

##### Test Configuration:

**CPU** AMD K6-2 500MHz ☐ AMD  
**Memory** Hyundia 128MB (HY57V658020B-10P) **Total: 256 MB** ☐ PC66 ☐ PC100  
**HDD** Maxtor 90845U3 8.4GB IDE ☐ PIO4 ☐ UDMA/33 ☐ UDMA/66  
**Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**VGA** VIA MVP4 AGP VGA 8MB UMA ☐ PCI\_Slot: \_\_\_\_ ☐ Onboard AGP  
**Sound** VIA VT686 ☐ ISA\_Slot: \_\_\_\_ ☐ Onchip AC97  
**CD-ROM** ASUS CD-S500 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	
VGA Resolution/Color change (800x600x32bit / 1024x768x16bit)	PASS	
Auto Shutdown (system power off)	PASS	
Defrag test	PASS	
Year 2000 test	PASS	
DVD Video CD play (name: <u>BATMAN &amp; ROBIN</u> )	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: <u>TOMB RAIDER II</u> )	PASS	
WinStone 99	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	5.00.2195	English	Microsoft	Pass

### 9.1.5 IBM OS/2 4.0:

#### Test Configuration:

**CPU** AMD K6-2 350MHz ☐ AMD  
**Memory** Toshiba 64MB (TC59S6408FTL-80H) **Total: 64 MB** ☐ PC66 ☐ PC100  
**HDD** Fujitsu MPB3032AT 3.2GB IDE ☐ PIO4 ☐ UDMA/33  
**VGA** VIA MVP4 AGP VGA 8MB UMA **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
**Sound** VIA VT686 ☐ PCI\_Slot: \_\_\_\_ ☐ Onchip AGP  
**CD-ROM** LITN-ON LTN-302 32X IDE ☐ ISA\_Slot: \_\_\_\_ ☐ Onchip AC97  
**Mouse** Logitech Mouse+ Mouse **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
☐ 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	
Boot from A: feature ready	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 Microsoft Windows ME:

#### Test Configuration:

**CPU** AMD K6-2 550MHz ☐ AMD  
**Memory** Hyundia 128MB (HY57V658020B-10P) **Total: 256 MB** ☐ PC66 ☐ PC100  
**HDD** Maxtor 90845U3 8.4GB IDE ☐ PIO4 ☐ UDMA/33 ☐ UDMA/66  
**VGA** VIA MVP4 AGP VGA 8MB UMA **Channel:** ☐ PM ☐ PS ☐ SM ☐ SS  
☐ PCI\_Slot: \_\_\_\_ ☐ Onboard AGP



Sound VIA VT686

☐ ISA\_Slot:\_\_\_ ☐ Onchip AC97

CD-ROM ASUS CD-S500 50X IDE

Channel: ☐ PM ☐ PS ☐ SM ☐ SS

Mouse Microsoft IntelliMouse 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: Mercury Rising )	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	

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	Lotus SMART Suites 96	1.0	Windows 95	English	Pass
	MS Work for Windows	3.0	Windows	English	Pass
	MS Work for Windows95	4.0	Windows 95	English	Pass
	MS Office for Windows	4.3	Windows	English	Pass
	MS Office for Windows	4.3	Windows	Chinese	Pass
	MS Office 97 for Windows95	7.0	Windows 95	English	Pass
WordProcessor	AMI Pro for Windows	3.1	Windows	English	Pass
	Word Pro for Windows96		Windows	Chinese	Pass
	MS Word for Windows	6.0	Windows	English	Pass
	MS Word for Windows	6.0	Windows	Chinese	Pass
	Word Perfect for Windows	6.0	Windows	English	Pass
	WordPerfect	6.0	Windows	English	Pass



	MS Office 97	7.0	Windows	English	Pass
Communication	cc: Mail/Add-on		Windows	English	Pass
	BITWare	3.30	Windows 95	English	Pass
	Delrina CommSuite	1.0	Windows 95	English	Pass
	WinFAX Pro for Win 95	4.0	Windows 95	English	Pass
	LapLink	7.0A	Windows 95	English	Pass
	Norton Anywhere	1.0	Windows	English	Pass
CAD	3D Disign Plus	2.0	Windows	English	Pass
	AutoCAD	R13	Windows 95	English	Pass
	3D Studio	4.0	DOS	English	Pass
	Micro Station	5.0	Windows	English	Pass
Database	Approach 96	1.0	Windows 95	English	Pass
	Lotus Notes	4.0	Windows 95	English	Pass
	Borland Visual Dbase	5.5	Windows 95	English	Pass
	Visual Foxpro	3.0A	Windows 95	English	Pass
	Visual dBASE Compiler	5.5	Windows 95	English	Pass
	FoxBase Microsoft	2.1	Windows	English	Pass
	FoxPro Microsoft	6.0	Windows	English	Pass
Graphics	Corel Draw	6.0	Windows 95	English	Pass
	Fractul Design Painter	4.0	Windows 95	English	Pass
	Windows Draw	3.0	Windows	English	Pass
	MS PowerPoint	4.0	Windows	English	Pass
	Pagemaker	6.5	Windows 95	English	Pass
	Visio HOME	4.0	Windows 95	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++	4.0	Windows 95	English	Pass
	Borland C++	4.0	Windows	English	Pass
	Borland C++	5.0	Windows 95	English	Pass
	Turbo C++	3.1	Windows	English	Pass
	Borland Delphi	2.0	Windows 95	English	Pass
Diagnostic Program	Bapco95 for Win NT	4.0	Windows NT	English	Pass
	ZD 3D Winbench 98/99	1.0	Windows 95/98	English	Pass
	PC Magazine Winstone 98/99	1.0	Windows 95/98	English	Pass
	Speed for Win95	3.0	Windows	English	Pass
	QAPLus	5.52	DOS	English	Pass
	QAPLus	7.01	Windows 95/98	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
	Intel LANDesk Client Manager	3.0	Win95/Win NT	English	Pass
Tools	AfterDark for Win95	3.0	Windows 95	English	Pass
	Xing Soft MPEG Player	3.2	Windows 95	English	Pass
	Norton Commander	5.04	DOS	English	Pass
	Norton Desktop	3.0	Windows	English	Pass



TimeManagement	Norton Utility	3.0	Windows 95	English	Pass
	QEMM386	8.00	Windows 95	English	Pass
	MS Project	4.1	Windows 95	English	Pass
	Organizer	2.1T	Windows	Chinese	Pass
Scan	PC-cillin 97	3.0	Windows 95	English	Pass
	PC-cillin 98	4.021	Windows 95/98	English	Pass
	Norton Antivirus	5.0	Windows 95/98	English	Pass
Internet	Winsock	1.0	Windows 95	English	Pass
	Netscape	3.01	Windows 95	English	Pass
	Internet Explore	4.0	Windows 95	English	Pass
CD Title Game	3D Vltra Pin Ball	1.0	Windows 95	English	Pass
	Duke Nukem 3D	1.0	DOS	English	Pass
	Toy Story	1.0	Windows	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
	MYST	1.0	Windows 95	English	Pass
	Indy Car II Racing	1.0	DOS	English	Pass
	International Tennis Open	1.0	DOS	English	Pass
	Escape from Cyber City	1.0	DOS	English	Pass
	HAVOC	1.0	Window 95	English	Pass
	Flight Unlimited	1.0	DOS (CD)	Chinese	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
	Command & Conquer Red Alert			English	Pass
	Command & Conquer			English	Pass
	Broken & Word			English	Pass
	War Wind		WIN95	English	Pass
	Magic 2 Carpet			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
	Sky NET		Window 95	English	Pass
	THE NEED FOR SPEED SE			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