

# **FIC KBI-6130-V PCI/AGP SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT**

**Document Number:**     *MB-424*

**Product Version:**     *V 3.1*

**BIOS Version:**        **QE410**

Supervisor	Tester

**FIC Research & Development Department**  
**5F #52 Min-Chuan Road, Hsin-Tien City Taipei,Taiwan, R.O.C**  
**Tel : 886-2-918-6001   Fax : 886-2-915-6728**



## **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 Display Adapter Products
    - 8.2.2 SCSI Adapter Products
    - 8.2.3 Network Card Products
    - 8.2.4 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
      - 8.3.4.1 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 & Game Pad
  - 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
    - 9.1.3 Microsoft Windows NT 4.0
    - 9.1.4 IBM OS/2 3.0/4.0
  - 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** : KBI-6130-V PCB Rev 3.1  
**Product Name** : VIA Apollo pro plus Based Mainboard  
**System BIOS** : Award BIOS Version QE410  
**PCI IDE** : Internal PCI Master 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 II 450MHz (Katmai)	100	SECC2	Pass
Pentium II 500MHz (Katmai)	100	SECC2	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 plus
System Cache	128/512K Pipeline Burst SRAM Built-in CPU card
System Memory	Maximum : 768MB 168 pins single RAS and Double RAS DIMM RAM Module SDRAM
PCI Bus Clock	Synchronous mode (depended on CPU Clock divide by 2)
System Slots	3 PCI and 1 ISA slots
IO Corelogic	Winbond 83977EF-AW Support Normal,EPP,ECP mode and IR interface
PCI IDE	VIA 82C596A internal Bus Master PCI IDE.

### 4.1 Main Functionality Test:

Num.	M/B function	Result
------	--------------	--------



1	ACPI Ready (under Win 98/Win NT 5.0)	PASS
2	APM 1.2	PASS
3	Wake On LAN	PASS
4	Wake On Ring	PASS
5	RTC Alarm Function	PASS
6	H/W Monitoring (+/-12V,+/-5V,Vccp,+5VR)	PASS
7	USB Function	PASS
8	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	2.1.32	PASS
3	LanDesk Client Manager(LDCM) for Win 95/98/NT	3.3	PASS
4	ATI Rage pro Turbo Driver for Win 95/98	4.11.6050	PASS
5	ATI Rage pro Turbo Driver for Win NT 4.0	4.3.18	PASS
6	YAMAHA 740 Sound Driver for Win 95/98	4.05.1024	PASS
7	YAMAHA 740 Sound Driver for Win NT 4.0	4.00.6017	PASS
8	Award BIOS Flash ROM Utilities	7.03	PASS
9	Award DMICFG Utilities for DOS	2.1Cu	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	FAN1	Open	Pass
Chassis FAN Connector	FAN2	Open	Pass
CPU Clock Rate	SW1-1~4	On,On,Off,On	Pass
Clear CMOS	SW1-5	Off	Pass
Clear Password Switch	SW1-6	Off	Pass
Internal USB Connector	J1	Open	Pass
LAN Wake Up	WOL	Open	Pass
IR interface	IR	Open	Pass

### 6. Stability Test

#### 6.1 Worst Case Test :



System Configuration			
CPU	: Pentium II 400	CD ROM	: TEAC CD-532EA 32X CD-ROM
Cache Memory	: 512 K	Mouse	: Microsoft PS/2 mouse
On Board Memory	: SDRAM 128MB	O.S. Environment	: WIN 98, WinNT, SCO Unix
HDD	: Quantum Fireball SE 4.3GB	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: -30 ~ 90C ° (Out side)

Frequency test on 66MHz frequency

Diagnostic Program: AMIDdiag 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 66MHz,68MHz 75MHz or 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: -30°C to 90°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	Intel Pentium II 450MHz Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM 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 II 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 ATI Rage pro Turbo AGP VGA 8MB SDRAM Test Program : Netware 4.11	
SCO UNIX Open Desktop 5.04	24 hr.	<i>Pass</i>
Test Configurations for SCO	Intel Pentium II 400MHz Adaptec AHA-2940UW SONY CDU-625 24X SCSI CD-ROM Seagate ST-34555N 4.5GB Ultra SCSI Disk 128MB Memory Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM Test Program : Create a batch file	
Winstone 99 Under WIN95	24 hr.	<i>Pass</i>
Test Configurations for Win 95	Intel Pentium II 450MHz Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM ASUS AGP-V3200 16MB SGRAM AGP VGA Fujitsu 64MB SDRAM Memory Test program : Create Batch file	
Winstone 99 Under WIN98	24hr.	<i>Pass</i>
Test Configurations for Win 98	Intel Pentium II 450MHz Quantum Fireball EX Ultra DMA 6.4GB HDD Apacer 128MB SDRAM Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM	
BAPCO for Windows NT 4.0	24hr.	<i>Pass</i>
Test Configurations for SYSmark 32 under Windows NT 4.0	Intel Pentium II450MHz IBM DTTA-371010 Ultra DMA 10.2GB IDE HDD Apacer 128MB SDRAM Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM	





## 7. Base Operating Systems HCT Tests For PC98

Operating System	Company	HCT Name	Result
Windows NT Version 4.0	Microsoft	Microsoft WHQL HCT 8.0	<i>Pass</i>
Test Configurations	Intel Pentium II 450MHz 64MB Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM		
Windows NT Version 5.0 Beta2	Microsoft	Microsoft WHQL HCT 8.0	<i>Pass</i>
Test Configurations	Intel Pentium II 450MHz 64MB Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM		
Windows 95	Microsoft	Microsoft WHQL HCT 8.0	<i>Pass</i>
Test Configurations	Intel Pentium II 450MHz 64MB Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM		
Windows 98 with APM	Microsoft	Microsoft WHQL HCT 8.0	<i>Pass</i>
Test Configurations	Intel Pentium II 450MHz 64MB Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM		
Windows 98 with ACPI	Microsoft	Microsoft WHQL HCT 8.0	<i>Pass</i>
Test Configurations	Intel Pentium II 450MHz 64MB Memory. Onboard ATI Rage pro Turbo AGP VGA 8MB SDRAM		



## 8. Hardware Compatibility Test Suite

### 8.1 Memory

#### Test Configuration:

OS Ver ☒ Win 98 Ver: 4.10.1998

☒ Win NT Ver: 4.0

CPU Intel Pentium II 450MHz

HDD Quantum Fireball EX 6.4GB IDE

VGA ATI Rage pro Turbo AGP VGA

CD-ROM Pioneer DR-502S 24X IDE

Sound YAMAHA 740

Mouse Microsoft IntelliMouse PS/2 Mouse

☒ Intel

☒ PIO4 ☒ UDMA/33

Channel: ☒ PM ☒ PS ☒ SM ☒ SS

☒ PCI\_Slot: ☒ Onboard AGP

Channel: ☒ PM ☒ PS ☒ SM ☒ SS

☒ ISA\_Slot: ☒ Onboard

☒ 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
Hitachi	HM5233B85TTB60	No	64MB	D	M18E64S48HIG6
Toshiba	TC59S6408FTL-80H	Yes	64MB	S	MO4B064M1HE72224-C2100
Advantage	TC59S6408FTL-80H	Yes	64MB	S	
	TC59S6408FTL-80H	Yes	128MB	D	
SIEMENS	HYB39S64160AT-8	No	32MB	S	HYS64V4200GU-8
	HYB39S64800AT-8	No	64MB	S	HYS64V8200GU-8
	HYB39S64800AT-8	Yes	128MB	D	HYS72V16220GU-8
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)
	GM72V66441CT7J	Yes	256MB	D	7B.G4258.A01 (LGS)
	M5M4V64S20ATP	Yes	256MB	D	7B.G4258.701 (Mitsubishi)

## 8.2 Add-on Cards

### 8.2.1 Display Adapter Products

#### Test Configuration:

OS Ver ☒ Win 98 Ver: 4.10.1998

CPU Intel Pentium II 400MHz

Memory Fujitsu 64MB (81F16822D-102LFN)

HDD IBM DTTA-371010 10GB IDE

CD-ROM TEAC CD-532EA 32X IDE

Sound YAMAHA 740

Mouse Logitech MouseMan Mouse

☒ Intel

Total: 64 MB ☐ PC66 ☒ PC100

☐ PIO4 ☒ UDMA/33

Channel: ☒ PM ☐ PS ☐ SM ☐ SS

Channel: ☐ PM ☐ PS ☒ SM ☐ SS

☐ ISA\_Slot:     ☒ Onboard

☐ COM ☒ PS/2

The following PCI VGA cards test WinBench 99 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.



Vendor	VGA Chip	Product Description
ATI	ATI Mach64	ATI Mach64 VT
	ATI Rage II	ATI Rage II 3D
Diamond	S3 968	Stealth 4MB VRAM
ELSA	S3 Virge/VX	Winner 2000AVI/3D
	S3 Virge/VX	Winner 3000L 3D
	S3 Virge	Victory 3D-4
FIC	S3 Virge	1 st Grafx-67MP
Number #9	LSI 128	Image 128
Matrox	MGA-1064SG	Mystique 4MB SGRAM
	MGA-2164WP	Millennium II 8MB SGRAM
Canopus	S3 Virge/DX	S3 Virge/DX

### 8.2.2 SCSI Adapter Products

#### Test Configuration:

**OS Ver** ☒ Win 98 Ver: 4.10.1998   
☒ Win NT Ver: 4.0   
**CPU** Intel Pentium II 450MHz ☒ Intel   
**Memory** SEC 64MB (KM48S8030BT-GH) **Total: 128 MB** ☐ PC66 ☒ PC100   
**VGA** ATI Rage pro Turbo AGP VGA **PCI Slot:** ☐ Onboard ☒ 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** Plextor PX-32Tsi 32X SCSI ☒ Ultra SCSI ☐ Ultra Wide   
**Sound** YAMAHA 740 **ISA Slot:** ☐ Onboard   
**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-1542CS/CP	Adaptec AHA-1542C 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-1520/22B	Adaptec AHA-1520/22 ISA PnP SCSI	ISA PnP
	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

### 8.2.3 Network Card Products

#### Test Configuration:

OS Ver ☒ Novell Netware Ver: 4.11

☒ Win NT Server Ver: 4.0

CPU Intel Pentium II 333MHz ☒ Intel

Memory Fujitsu 64MB (PDC8UV6484A103TS) Total: 128 MB ☐ PC66 ☒ PC100

VGA ATI Rage pro Turbo AGP VGA ☐ PCI\_Slot:        ☒ Onboard AGP

HDD Fujitsu M1623TAU 1.7GB IDE ☐ PIO4 ☒ UDMA/33

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
3COM	3C595	ETHERNET 10/100 Mbps	PCI
	3C590	ETHERNET 10 Mbps	PCI
	3C905	ETHERNET 10/100 Mbps	PCI
	3C509B	ETHERNET PnP 10Mbps	ISA
	3C339	PnP Token-Ring	PCI
ACCTON	EN1203	ETHERNET 10 Mbps	PCI
	ACC40P	ETHERNET 10 Mbps	ISA
	EN1207	ETHERNET 100 MB	PCI
EVEREX	EV2064	ETHERNET PnP 10Mbps	ISA
IBM	TR900	PnP TOKEN RING 16Mbps	PCI
	92G7632	PnP TOKEN RING 16Mbps	ISA
	EN237	ETHERNET 10Mbps	PCI
	EN374	ETHERNET 100 Mbps	PCI
INTEL	PRO10+	ETHERNET 10Mbps	PCI
	E100B	ETHERNET 100 Mbps	PCI
OLICOM	OC-2183	ETHERNET 10Mbps	PCI



	OC-2185	ETHERNET 10Mbps	PCI
	OC-2325	ETHERNET 100Mbps	PCI
	OC-3118	TOKEN RING 4/16Mbps	ISA
	OC-3136	TOKEN RING 4/16Mbps	PCI
SMC	SMC9332	ETHERNET 100 Mbps	PCI
Genius	GE2500	ETHERNET 10Mbps	PCI
CNET	CNET970	ETHERNET 10Mbps	PCI
THOMAS	TC4048	TOKEN RING 4/16Mbps	PCI
	TC4145	PnP TOKEN RING 4/16Mbps	ISA
D-Link	DE220	ETHERNET 10Mbps	ISA
	EZ2000P	ETHERNET 10Mbps	ISA

#### 8.2.4 FAX / Modem Products

##### Test Configuration:

OS Ver ☒ Win 98 Ver: 4.10.1998

CPU Intel Celeron 366MHz

Memory Toshiba 64MB (TC59S6408FTL-80H)

VGA ATI Rage pro Turbo AGP VGA

HDD WD AC36400 6.4GB IDE

CD-ROM Hitachi CDR-8430 32X IDE

Sound YAMAHA 740

Mouse Microsoft IntelliMouse PS/2 Mouse

☒ Intel

Total: 64 MB ☐ PC66 ☒ PC100

☐ PCI\_Slot:\_\_\_\_ ☒ Onboard AGP

☐ PIO4 ☒ UDMA/33

Channel: ☒ PM ☐ PS ☐ SM ☐ SS

Channel: ☐ PM ☐ PS ☒ SM ☐ SS

☐ ISA\_Slot:\_\_\_\_ ☒ Onboard

☐ 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
HSP	V1456VQH-P1 56Kbps PCI	Internal



## 8.3 Storage

### 8.3.1 SCSI Peripheral Products

#### Test Configuration:

OS Ver ☒ Win 98 Ver: 4.10.1998  
☒ Win NT Ver: 4.0  
CPU Intel Pentium II 450MHz ☒ Intel  
Memory SIEMENS 64MB (HYB39S64800AT-8) Total: 128 MB ☐ PC66 ☒ PC100  
VGA ATI Rage pro Turbo AGP VGA ☐ PCI Slot:        ☒ Onboard 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 Ver: 4.10.1998  
☒ Win NT Ver: 4.0

CPU Intel Pentium II 450MHz

☒ Intel

Memory SEC 128MB (KM48S8030BT-GH)

Total: 128 MB ☐ PC66 ☒ PC100

CD-ROM Sony DDU220E 5X IDE DVD-ROM

Channel: ☐ PM ☐ PS ☒ SM ☐ SS

VGA ATI Rage pro Turbo AGP VGA

☐ PCI\_Slot:        ☒ Onboard AGP

Sound YAMAHA 740

☐ ISA\_Slot:        ☒ Onboard

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.

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
	Bigboot TX	Ultra DMA 33	4.0GB
	Bigboot TX	Ultra DMA 33	12.0GB
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
Samsung	Spinpoint VG34323A	Ultra DMA 33	4.3GB
IBM	DHEA-36480	Ultra DMA 33	6.4GB
	DTTA-371010	Ultra DMA 33	10.1GB



### 8.3.3 Floppy Disk Drive Products

#### Test Configuration:

**OS Ver** ☒ Win 98 Ver: 4.10.1998 .  
☒ Win NT Ver: 4.0 .  
**CPU** Intel Celeron 400MHz ☒ Intel  
**Memory** Mitsubishi 64MB (M04B064M1HE72224-C3100) **Total: 128 MB** ☐ PC66 ☒ PC100  
**VGA** ATI Rage pro Turbo AGP VGA ☐ PCI\_Slot:\_\_\_\_. ☒ Onboard AGP  
**HDD** Quantum Bigfoot TX 4300A 4.3GB IDE ☐ PIO4 ☒ UDMA/33  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** BTC BCD-40BXH 40X IDE **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** YAMAHA 740 ☐ ISA\_Slot:\_\_\_\_. ☒ Onboard  
**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: OSR2.5 .  
☒ Win 98 Ver: 4.10.1998 .  
**CPU** Intel Celeron 400MHz ☒ Intel  
**Memory** NEC 128MB (D4564841G5-A80-9JF) **Total: 128 MB** ☐ PC66 ☒ PC100  
**HDD** Maxtor 91000D8 10GB IDE ☐ PIO4 ☒ UDMA/33  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**VGA** ATI Rage pro Turbo AGP VGA ☐ PCI\_Slot:\_\_\_\_. ☒ Onboard AGP  
**Sound** YAMAHA 740 ☐ ISA\_Slot:\_\_\_\_. ☒ Onboard  
**Mouse** Logitech TrackmanMarble Mouse ☐ COM ☒ PS/2

The following IDE devices test HCT Stress and play VCD/DVD over night under indows 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-FX240S	ATAPI CD-ROM 24X Mode4
	CRMC-FX320S	ATAPI CD-ROM 32X Mode4
NEC	CDR-1800A	ATAPI CD-ROM 24X Mode4
	CDR-1900A	ATAPI CD-ROM 32X Mode4
Torisan	CDR-S112	ATAPI CD-ROM 12X
	CDR-S240	ATAPI CD-ROM 24X Mode3
Wearnes	CDS-32X	ATAPI CD-ROM 32X Mode4
Acer	632A	ATAPI CD-ROM 32X 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
Cyberdrive	120D	ATAPI CD-ROM 12X Mode3
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	ATAPI CD-ROM 40X UDMA2
Vuego	624A-304	ATAPI CD-ROM 24X Mode4
TEAC	CD-524EA	ATAPI CD-ROM 24X Mode3
	CD-532EA	ATAPI CD-ROM 32X Mode3
Pioneer	DR-502S	ATAPI CD-ROM 24X Mode4
BTC	BCD 32X	ATAPI CD-ROM 32X UDMA2
	BCD 40XH	ATAPI CD-ROM 40X UDMAc4

#### 8.3.4.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
Panasonic	SR-8582-B	ATAPI DVD-ROM 2X
	SR-8583-BXX	ATAPI DVD-ROM 5.0X
Toshiba	SD-M1002	ATAPI DVD-ROM 2X
	SD-M1202	ATAPI DVD-ROM 4.8X
Creative	SR-8581-B	ATAPI DVD-ROM 2X
Sony	DDU220E	ATAPI DVD-ROM 5.0X
Pioneer	DVD-102	ATAPI DVD-ROM 2.6X

### 8.3.5 ATAPI Disk Drive (IDE Interface)

#### Test Configuration:

**OS Ver** ☒ **MS-DOS Ver:** 6.22 .  
☒ **Win 98 Ver:** 4.10.1998 .  
**CPU** Intel Celeron 366MHz ☒ **Intel**  
**Memory** SIEMENS 64MB (HYB39S64800AT-8) **Total:** 64 MB ☐ **PC66** ☒ **PC100**  
**VGA** ATI Rage pro Turbo AGP VGA ☐ **PCI\_Slot:** \_\_\_\_ ☒ **Onboard 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** YAMAHA 740 ☐ **ISA\_Slot:** \_\_\_\_ ☒ **Onboard**  
**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
Mitsubishi	MF357G-111MA LSA-120
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 Ver:** 4.10.1998 .  
**CPU** Intel Pentium II 400MHz ☒ **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** ATI Rage pro Turbo AGP VGA ☐ **PCI\_Slot:** \_\_\_\_ ☒ **Onboard AGP**  
**Sound** YAMAHA 740 ☐ **ISA\_Slot:** \_\_\_\_ ☒ **Onboard**

**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	COM(IR)
Kodak	DC210	InfraRed/Serial port Digital camera	COM(IR)

#### 8.4.2 Mouse Products

##### Test Configuration:

OS Ver ☒ Win 95 Ver: OSR2.5☒ Win 98 Ver: 4.10.1998

CPU Intel Celeron 366MHz

☒ Intel

Memory Apacer 32MB (AM2V168A1T8)

Total: 64 MB ☐ PC66 ☒ PC100

HDD Seagate ST-39140A 9.1GB IDE

☐ PIO4 ☒ UDMA/33

CD-ROM Pioneer DR-502S 24X IDE

Channel: ☒ PM ☐ PS ☐ SM ☐ SS

VGA ATI Rage pro Turbo AGP VGA

Channel: ☐ PM ☐ PS ☒ SM ☐ SS☐ PCI\_Slot:\_\_\_\_. ☒ Onboard AGP

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
	TrackMan Marble	Logitech TrackMan Marble Serial - PS/2 Mouse	Serial/ PS2

### 8.4.3 USB Device Products

#### Test Configuration:

**OS Ver** ☒ Win 98 Ver: 4.10.1998  
**CPU** Intel Pentium II 400MHz ☒ Intel  
**Memory** SIEMENS 128MB (HYB39S64800AT-8) Total: 128 MB ☐ PC66 ☒ PC100  
**HDD** Seagate ST-34342A 4.3GB IDE ☐ PIO4 ☒ UDMA/33  
**CD-ROM** Hitachi CDR-8430 32X IDE Channel: ☒ PM ☐ PS ☐ SM ☐ SS  
**VGA** ATI Rage pro Turbo AGP VGA Channel: ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** YAMAHA 740 ☐ PCI\_Slot:\_\_\_\_ ☒ Onboard AGP  
**Mouse** Logitech First Mouse+ Mouse ☐ ISA\_Slot:\_\_\_\_ ☒ Onboard  
☐ COM ☒ PS/2

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

Type	Vendor	Description
Mouse	Logitech	M-UA35
	DEXIN	MA2R
	Cypress	7-895 Mouse
HUB	Belkin	Express Bus F5U001
Camera	Kodak	DVC323
	AXIS	PCAM-QU
Faxmodem	USRobotics	56K Voice Faxmodem
Keyboard	Silitek	
	Chicony	KU-8933
Printer	EPSON	Stylus Color 740
Ethernet	CATC	USB Ethernet Link
Monitor	Viewsonic	Professional Series PS775
Speaker	Philips	MAGNAVOX DSS350
Joystick	Genius	Flight2000 F-22X
	Thrustmaster	TOP Gun

### 8.4.4 Joystick & Game Pad

#### Test Configuration:

**OS Ver** ☒ Win 98 Ver: 4.10.1998  
**CPU** Intel Celeron 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**VGA** ATI Rage pro Turbo AGP VGA**Sound** YAMAHA 740**Mouse** Microsoft IntelliMouse Mouse**Channel:** ☐ PM ☐ PS ☒ SM ☐ SS☐ PCI\_Slot:\_\_\_\_. ☒ Onboard AGP☐ ISA\_Slot:\_\_\_\_. ☒ Onboard☐ 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
Gravis	Game Pad Pro
Logitech	Wing Man Extreme digital joystick
	CyberMan 2 Game Pad
PHAZER PAD	Advanced Digital Gamepad for DOS & Windows 95

## 8.5 Power Supply Products

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

Vendor	Model Name	Product Description
HIPRO	HP-200NLXAG	200W ATX Remote Power Supply
	HP-200NLXAA	200W ATX Remote Power Supply
	HP-200ATXAG	200W ATX Remote Power Supply
Leadman	LP-6100ATX	250W ATX Remote Power Supply
Sea Sonic	SSG-200GTX	200W ATX Remote Power Supply
Tiger	TG-2006-B	200W ATX Remote Power Supply
	TG-2007-B	200W ATX Remote Power Supply
YHI	YS-6200DJ	200W ATX Remote Power Supply

## 8.6 DVD Device Products

### Test Configuration:

**OS Ver** ☒ Win 95 Ver: SR 2.5☒ Win 98 Ver: 4.10.1998**CPU** Intel Pentium II 450MHz**Memory** SEC 64MB (KN48S8030BT-GH)**HDD** IBM DTTA-371010 10.0GB**VGA** ATI Rage pro Turbo AGP VGA☒ Intel**Total:** 128 MB ☐ PC66 ☒ PC100☐ PIO4 ☒ UDMA/33**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS☐ PCI\_Slot:\_\_\_\_. ☒ Onboard AGP

**Sound** YAMAHA 740ISA\_Slot: ☐ Onboard**Mouse** Microsoft IntelliMouse MouseCOM ☒ PS/2

The following DVD Kit play DVD over night under Windows 95/98 with their respective DVD drivers installed and set to the follow condition 800 x 600 x 16bit colors, resolution refresh rate of 85Hz, small font.

Vendor	Model Name	Product Description	Interface
Creative	MK5000	Creative PC-DVD Kit Include MATSUSHITA SR-8581-B DVD-ROM and LK-MAEP391A1 MPEG-2/Dolby Digital Decoder Board	PCI
Toshiba	Toshiba DVD	Toshiba PC-DVD Kit Include Toshiba SD-M1002 DVD-ROM and CINEMASTER MPEG-2/Dolby Digital DVD Board	PCI
Leadtek	WinFast 3D S800	Leadtek PC-DVD Kit Include Pioneer DVD-102 DVD-ROM and Winfast 3D S800 MPEG-2/Dolby Digital DVD Board	PCI

## 9. Software Compatibility Test Suite

### 9.1 Base Operating System

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

##### Test Configuration:

**CPU** Intel Celeron 366MHz

**Memory** Apacer 64MB (GM72V66841CT7J)

**HDD** Quantum Fireball EX 6.4GB IDE

**VGA** ATI Rage pro Turbo AGP VGA

**Sound** YAMAHA 740

**CD-ROM** TEAC CD-524EA 24X IDE

**Mouse** Logitech TrackMan Marble Mouse

☒ Intel

**Total:** 128 MB ☐ PC66 ☒ PC100

☐ PIO4 ☒ UDMA/33

**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS

☐ PCI\_Slot:\_\_\_\_ ☒ Onboard AGP

☐ ISA\_Slot:\_\_\_\_ ☒ Onboard

**Channel:** ☐ 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:

#### Test Configuration:

**CPU** Intel Pentium II 450MHz

☒ Intel

**Memory** Fujitsu 64MB (81F64842B-103FN)

**Total:** 128 MB ☐ PC66 ☒ PC100

**HDD** Maxtor Diamond 86480D6 6.4GB IDE

☐ PIO4 ☒ UDMA/33

**VGA** ATI Rage pro Turbo AGP VGA

**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS

**Sound** YAMAHA 740

☐ PCI\_Slot:\_\_\_\_ ☒ Onboard AGP

**CD-ROM** Pioneer DR-502S 24X IDE

☐ ISA\_Slot:\_\_\_\_ ☒ Onboard

**Mouse** Microsoft IntelliMouse Mouse

**Channel:** ☐ PM ☐ PS ☒ SM ☐ SS

☐ 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: <b>BATMAN &amp; ROBIN</b> )	PASS	
Video CD play (name: <b>TOP GUN</b> )	PASS	
ACPI test (HCT 8.0)	PASS	
Drive Converter (FAT32)	PASS	
PM function by WIN98 (H/W )	PASS	
GAME play (name: <b>TOMB RAIDER II</b> )	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 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:

#### Test Configuration:

**CPU** Intel Pentium II 400MHz  
**Memory** SEC 32MB (KM48S8030BT-GH)  
**HDD** Seagate ST-36530A 6.5GB IDE  
  
**VGA** ATI Rage pro Turbo AGP VGA  
**Sound** YAMAHA 740  
**CD-ROM** Mitsumi CRMC-FX320S 32X IDE  
**Mouse** Logitech Mouse+ Mouse

☒ Intel  
**Total:** 64 MB ☐ PC66 ☒ PC100  
☐ PIO4 ☒ UDMA/33  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
☐ PCI\_Slot:\_\_\_\_ ☒ Onboard AGP  
☐ ISA\_Slot:\_\_\_\_ ☒ Onboard  
**Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
☐ 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	



<b>Shutdown</b>	PASS	
<b>Shutdown &amp; Restart</b>	PASS	
<b>LS-120/ZIP install &amp; working</b>	PASS	
<b>Year 2000 test</b>	PASS	
<b>WinStone 98/99</b>	PASS	
<b>WinBench 98/99</b>	PASS	
<b>BAPCO for Win NT 4.0 (SYSmark32)</b>	PASS	
<b>HCT 8.0 Stress test</b>	PASS	
<b>PM function (H/W &amp; BIOS)</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
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 Server	4.0	English	Microsoft	Pass
	4.0	Japanese	Microsoft	Pass
	4.0	Chinese	Microsoft	Pass
Windows NT Workstation Service Pack	3.0	English	Microsoft	Pass

#### 9.1.4 IBM OS/2 3.0/4.0:

##### Test Configuration:

**CPU** Intel Celeron 400MHz

☒ Intel

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

**Total:** 64 MB ☐ PC66 ☒ PC100

**HDD** WD Caviar AC38400 8.4GB IDE

☐ PIO4 ☒ UDMA/33

**VGA** ATI Rage pro Turbo AGP VGA

**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS

**Sound** YAMAHA 740

☐ PCI\_Slot:\_\_\_\_ ☒ Onboard AGP

**CD-ROM** Philips PCA323CD 32X IDE

☐ ISA\_Slot:\_\_\_\_ ☒ Onboard

**Mouse** Logitech Mouse+ Mouse

**Channel:** ☐ PM ☐ PS ☒ SM ☐ SS

☐ COM ☒ PS/2

Test Item	Result	Remark
Install OS/2 (HPFS)	PASS	



<b>Format FDD</b>	PASS	
<b>XCOPY</b>	PASS	
<b>Diskcopy</b>	PASS	
<b>VGA Resolution/Color change</b>	PASS	
<b>DOS Windows</b>	PASS	
<b>OS/2 Windows</b>	PASS	
<b>Boot from A: feature ready</b>	PASS	
<b>Stress test</b>	PASS	
<b>PM function (H/W &amp; BIOS)</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
IBM OS/2 Warp	4.0	English	IBM	Pass
	3.0	English	IBM	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 Prefect 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
	Norton Utility	3.0	Windows 95	English	Pass
	QEMM386	8.00	Windows 95	English	Pass
TimeManagement	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



CD Title Game	Internet Explore	4.0	Windows 95	English	Pass
	3D Ultra 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



CD Title Multimedia	Need for Speed III		Window 95/98	English	Pass
	Klingon Honor Gurd		Window 95/98	English	Pass
	Cinderella		Windows	English	Pass
	LivingBook GrandMa&Me		Windows	English	Pass
	Top Gun		Windows	English	Pass
	Multimedia SuperPack		Windows	English	Pass
	Compton's Interactive Encyclopedia		Windows	English	Pass
	Adams Family		Windows	English	Pass
	Blank Rain		Windows	English	Pass