

# **FIC FR33 PCI SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT**

**Document Number:**    *MB-474*  
**Product Version:**    *V 2.3*  
**BIOS Version:**        *VEA42*  
**Report Date:**         *3/07/2001*  
**Revision:**              *1.01*

Supervisor	Tester

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### Revision History

Document Release	Date	Change Item	ECN
Revision 1.00	2/13/2001	Initial Release.	
Revision 1.01	3/07/2001	Update BIOS version to VEA42 Add support Intel Celeron 700MHz CPU with 1.7V Add support Cyrix III 667/700MHz CPU(Samuel-II).	M00301-E-009

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## 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** : FR33 PCB Rev 2.3  
**Product Name** : VIA Apollo PLE133 Based Mainboard  
**System BIOS** : Award BIOS Version VEA41  
**PCI IDE** : Internal PCI Mastre dual IDE  
**I/O** : VIA VT686A

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## 3. Mainboard CPU Supports:

### Intel :

Intel Processors	Bus	Package	Status
Celeron 533MHz	66	FC-PGA	Pass
Celeron 566MHz	66	FC-PGA	Pass
Celeron 600MHz	66	FC-PGA	Pass
Celeron 633MHz	66	FC-PGA	Pass
Celeron 667MHz	66	FC-PGA	Pass
Celeron 700MHz	66	FC-PGA	Pass
Celeron 766MHz	66	FC-PGA	Pass
Celeron 800MHz	100	FC-PGA	Pass
Pentium III 500MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 533MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 550MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 600MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 600MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 650MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 667MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 700MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 733MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 750MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 800MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 850MHz (Coppermine)	100	FC-PGA	Pass
Pentium III 866MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 933MHz (Coppermine)	133	FC-PGA	Pass
Pentium III 1GHz (Coppermine)	133	FC-PGA	Pass

### Cyrix :

Cyrix Processors	Bus	Package	Status
Cyrix III 533MHz (Samuel)	133	FPGA	Pass
Cyrix III 550MHz (Samuel)	100	FPGA	Pass
Cyrix III 600MHz (Samuel)	100	FPGA	Pass
Cyrix III 600MHz (Samuel)	133	FPGA	Pass
Cyrix III 667MHz (Samuel-II)	133	FPGA	Pass

Cyrix III 700MHz (Samuel-II)	100	FPGA	Pass
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## 4 System Specification for Hardware and Software Utilities

The mainboard hardware portion was configured as follows :

Item	Description
System Core Logic	VIA PLE133 (VT8601A_H+686A_C)
System Cache	128K/256K Pipeline Burst SRAM Built-in CPU
System Memory	Maximum : 1GB SDRAM/ VCM-SDRAM 168 pins single RAS and Double RAS DIMM RAM Module
System Slots	1 AGP/2 PCI/1 ISA and 1 AMR slots
Audio	OnChip VIA VT686A AC'97 Audio on board
IO Corelogic	VIA VT686A Support Normal,EPP,ECP mode and IR interface

### 4.1 Main Functionality :

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

### 4.2 Main Software Utilities :

Num.	M/B function	Version	Result
1	VIA IDE Bus Master for Win 98	2.1.49	PASS
2	VIA IDE Bus Master for Win NT	2.1.49	PASS
3	VIA AGP VxD Utilities for Win 95/98	4.03	PASS
4	VIA INF Driver	1.02	PASS
5	VIA IRQ Routing Miniport driver	1.30	PASS
6	VIA PLE133 VGA driver for Win 9x/ME	4.12.01.3103	PASS
7	VIA PLE133 VGA driver for Win NT	4.03.00.3100	PASS
8	VIA PLE133 VGA driver for Win 2000	5.12.01.3102	PASS
9	Onboard VIA VT686A Audio driver for Win 9x/ME	1.20a	PASS

10	Onboard VIA VT686A Audio driver for Win NT	1.20a	PASS
11	Award BIOS Flash ROM Utilities	7.79	PASS

## 5. Jumper Function Verification

Description	Jumper Name	Default Option	Status
Speaker Connector	SPK	Open	Pass
Power LED	PW_LED	Open	Pass
Sleep Button	SMI	Open	Pass
IDE LED Connector	HD_LED	Open	Pass
Reset Switch	RST	Open	Pass
Remote Power Switch	RPW_SW	Open	Pass
Sleep LED	SLP_LED	Open	Pass
CPU FAN Connector	CPU_FAN	Open	Pass
Chassis FAN Connector	CHS_FAN	Open	Pass
Clear CMOS	CLR_CMOS	1-2	Pass
LAN Wake Up	WOL1	Open	Pass
IR interface	IR	Open	Pass

## 6. Stability Test

### 6.1 CPU Over Clock Test: (1days)

System Configuration	
<b>CPU</b> : Intel P-III 866 <b>Cache Memory</b> : 256 K <b>Memory</b> : SDRAM 128MB (64MB x 2) <b>HDD (ATA/66)</b> : Seagate ST313032A 13GB <b>VGA</b> : VIA PLE133 onboard <b>DVD-ROM</b> : Toshiba SD-M1202 4.8X	<b>FDD</b> : NEC FD1231T 1.44MB <b>Audio</b> : Onboard 686A AC'97 Audio <b>Mouse</b> : Microsoft PS/2 mouse <b>PowerSupply</b> : HIPRO HP-1463F5 150W SFX <b>O.S. Environment:</b> Windows ME

NO.	Over clock level		Test Result				
	FSB	CPU ID	Cool boot	Install OS	PM	Winstone 99	3D Mark2000
1	140MHz	970MHz	Pass	Pass	Pass	Pass	Pass

### 6.2 PCB Cool Boot Test: (1days)

System Configuration	
<b>CPU</b> : Intel P-III 600 <b>Cache Memory</b> : 256 K <b>Memory</b> : SDRAM 256MB (128MB x 3) <b>VGA</b> : VIA PLE133 onboard	<b>FDD</b> : NEC FD1231T 1.44MB <b>PowerSupply</b> : Enlight SFX-1215A 145W SFX



Test Result	
Cool Boot (over 1500 times)	Pass

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

Software Name	Duration	Result
Winstone 99 Under WIN98 SE	12hr.	<i>Pass</i>
Test Configurations for Win 98	Intel Celeron 766MHz WD AC313000 Ultra DMA66 13GB HDD Buffalo 128MB SDRAM Memory.(Hitachi) VIA PLE133 Onboard AGP	
Winstone 99 Under WIN2000	12hr.	<i>Pass</i>
Test Configurations for Win 2000	Intel Pentium III 800MHz Maxtor 91021U2 Ultra DMA66 10.2GB HDD KingSton 256MB SDRAM Memory.(IBM) VIA PLE133 Onboard AGP	

## 8. Hardware Compatibility Test Suite

### 8.1 Memory

#### Test Configuration:

**OS Ver** ☒ Win 2000 Ver: 5.00.2195 .  
**CPU** Intel Pentium III 850MHz (Bus clock 100MHz) ☒ Intel  
 Intel Pentium III 866MHz (Bus clock 133MHz)  
**HDD** Maxtor 91021U2 10.2GB ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**CD-ROM** ASUS DVDE608 8X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** VIA VT686A **ISA\_Slot:** ☐ On board  
**Mouse** Microsoft IntelliMouse PS/2 Mouse ☐ COM ☒ PS/2

The following SDRAM module test Winstone 99 V1.3 under Windows 2000 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 (PC100)

Vender	IC Part No.	ECC	Size	Side	Module No.
KingSton	TC59SM716FT-80	No	64MB	S	KGM100X64C2/64
	PTT3S128081T-8	No	128MB	S	DT100128M8-T01151
SIMONS	D45128163G5-A10B-9JF	No	64MB	S	
SIEMENS	HYB39S64800CT-8	No	64MB	S	HYS64V8300GU-8-C
	HYB39S64800CT-8	Yes	128MB	D	HYS72V16220GU-8-C
Hyundia	HY57V658020B-10P	No	128MB	D	VSJ-D128M2
	HY57V1291620LTC-10S	No	128MB	S	
LGS	GM72V66841ET7J	No	64MB	S	
	GM72V66841ET7J	No	128MB	D	
Ramaxel	GM72V66841ET7K	No	64MB	S	RMB40L8B3T-8 (AG5)
	GM72V66841ET7K	No	64MB	S	RMB40L8B3T-8 (AA3)
	GM72V66841ET7K	No	128MB	D	RMB40L8B4T-8 (AA7)
Micron	48LC8M8A2-8E	No	64MB	S	MT8LSDT864AG-10CB4
SEC	KM48S2020CT-GH	Yes	32MB	D	BUFFALO VSJ-D32M

	KM48S8030BT-GH	Yes	64MB	S	BUFFALO VSJ-ES64M2
	KM48S8030BT-GH	No	128MB	D	BUFFALO VSJ-D128M2
	KM48S16030T-GL	Yes	256MB	D	
KingMAX	KSV884T4A1A-08A	No	64MB	S	MPC643S-882
	KSV884T4A1A-08A	No	128MB	D	MPCA83S-882
Apacer	GM72V66841XT7J	No	64MB	S	71.63320.065 (HYUNDAI)
	GM72V66841ET7K	No	128MB	D	71.73323.065 (HYUNDAI)
Buffalo	W981216AH-75	No	64MB	S	VSJ-S64M2
NEC	D4564841G5-A80-9JF	Yes	128MB	D	BUFFALO VSJ-ED128M2

### 8.1.2 SDRAM DIMM Module (PC133)

Vender	IC Part No.	ECC	Size	Side	Module No.
SIEMENS	HYB39S64800BT-7.5	No	64MB	S	HYS64V8300GU-7.5
	HYB39S64800BT-7.5	No	128MB	D	HYS64V16220GU-7.5
MICRON	MT48LC8M8A2-75B	No	64MB	S	MT8LSDT864AG-133B4
	MT48LC8M8A2-75B	Yes	64MB	S	MT9LSDT872AG-133B4
	MT48LC8M8A2-75B	No	128MB	D	MT16LSDT1664AG-133B4
	MT48LC8M8A2-75B	Yes	128MB	D	MT18LSDT1672AG-133B4
Hyundai	HY57V658020B TC-75	No	64MB	S	HYM7V63801BTFG-75
	HY57V658020B TC-75	No	128MB	D	HYM7V631601BTFG-75
	HY57V658020B TC-75	Yes	128MB	D	HYM7V73A1601BTFG-75
NEC	D4564841G5-A75-9JF	No	64MB	S	MC-458CB647LF-A75
Winbond	W981208AH-75	No	128MB	S	VS133-128M
KingMAX	KSV884T4A1A-07	No	64MB	S	MPG643S-883
	KSV884T4A1A-07	No	128MB	D	MPGA83S-883
	KSV884T4A1A-06	No	128MB	D	MPGA83S-883
Hitachi	5264805FTT75	No	64MB	S	VS133-64M
	5264805FTT75	No	128MB	D	VS133-128M
Mitsubishi	M2V64S30BTP	No	64MB	S	MH8S64BALD-6
Apacer	HYB39S64800BT-7.5	No	128MB	D	71.73350.114
	AM2V648C2T75	No	128MB	D	71.73350.034
Ramaxel	GM72V66841ET75	No	64MB	S	RMB160L8B3T-7 (AG6)
Buffalo	GM72V66841ET7K	No	64MB	S	VS133-64MB (Hyundai)
	GM72V66841ET7K	No	128MB	D	VS133-128M (Hyundai)
Transcend	K4S640832D-TC75	No	128MB	D	TS16MLS64V6W
V-TEC	GM72V66841ET75	No	64MB	S	
KingSton	TC59SM708FT-75	No	128MB	S	KGM133X64C3/128
	HYB39S64800BT-7.5	No	64MB	S	KVR-PC133/64 (8X64)
	HYB39S64800BT-7.5	No	128MB	D	KVR-PC133/128
	0312804CT3A-75A	No	256MB	D	KVR-PC133/256 (32X64)
SIMONS	D45128841G5-A80-9JF	No	128MB	S	

## 8.2 Add-on Cards

### 8.2.1 Display Adapter Products

#### Test Configuration:

**OS Ver** ☒ Win 98 SE Ver: 4.10.222A .  
**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** Apacer 128MB(HYB39S64800BT-7.5)Total: 256 MB ☐ PC100 ☒ PC133  
**HDD** Maxtor 54098U8 40GB ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Afreedy DD-4008E 8X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** VIA VT686A **☐ ISA\_Slot:** ☐ **☒ Onboard**  
**Mouse** Logitech MouseMan Mouse **☐ COM** ☒ PS/2

The following PCI VGA cards test WinBench 99 under Windows 98 SE 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.

#### PCI Display Adapter Products

Vendor	VGA Chip	Product Description
ATI	ATI Rage II	ATI Rage II 3D
	ATI Mach64	ATI Mach64 VT
ELSA	S3 Virge/VX	Winner 3000L 3D
Creative	S3 Savage 4	3D Blaster Savage 4
ASUS	Riva TNT2	PCI-V3800
Cardex	SiS 6326	Cardexpert 6326
3dfx	Voodoo 3-3000	3dfx Voodoo 3-3000 PCI
Matrox	MGA-1064SG	Mystique 4MB SGRAM

### 8.2.2 SCSI Adapter Products

#### Test Configuration:

**OS Ver** ☒ Win 98 SE Ver: 4.10.2222A .  
☒ Win NT Ver: 4.0 + SP6  
☒ Win 2000 Ver: 5.00.2195 .  
**CPU** Intel Pentium III 750MHz ☒ Intel  
**Memory** SIEMENS 128MB(HYB39S64800CT-8)Total: 128 MB ☐ PC66 ☒ PC100  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**HDD** Seagate ST39204LW 20.4GB ☐ Ultra SCSI ☒ Ultra Wide

**CD-ROM** TEAC CD-532S 32X SCSI ☒ Ultra SCSI ☐ Ultra Wide  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_ ☒ On board  
**Mouse** Logitech MouseMan Mouse ☐ COM ☒ PS/2

The following PCI SCSI cards run Winstone 99 under Windows 98/NT/2000 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-2940U2W	Adaptec AHA-2940U2W PCI SCSI card	PCI

### 8.2.3 FAX /AMR Modem Products

#### Test Configuration:

**OS Ver** ☒ Win ME Ver: 4.90.3000 .  
**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** Micron 64MB(MT48LC8M8A2-75B) **Total:** 128 MB ☐ PC100 ☒ PC133  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**HDD** IBM DJNA-371350 13.5GB IDE ☐ UDMA/33 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DVD-115 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_ ☒ On board  
**Mouse** Microsoft IntelliMouse PS/2 Mouse ☐ COM ☒ PS/2

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

Vendor	Product Description	Bus I/F
TAICOM	MP56A-FCC 56K BPS FCC Fax/Modem	AMR
Askey	1456VQH82 56K BPS FCC Fax/Modem	AMR
GVC	SF-1156HV/R21 KB3471	Internal/ISA
CIS	Soft 56K data/Fax/RTAP	Internal/PCI
Archtek	A12PW19085A 56Kbps	Internal/PCI
Aztech	MDP7800	Internal/PCI
Askey	1456VQH75	Internal/PCI

## 8.2.4 Network Card Products

### Test Configuration:

**OS Ver** ☒ Win ME Ver: 4.90.3000 .  
**CPU** Intel Pentium III 800MHz ☒ Intel  
**Memory** Micron 64MB(MT48LC8M8A2-75B) **Total: 128 MB** ☐ PC100 ☒ PC133  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**HDD** IBM DJNA-371350 13.5GB IDE ☐ UDMA/33 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DVD-115 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**Sound** VIA VT686A **ISA\_Slot:** ☐ On board  
**Mouse** Microsoft IntelliMouse PS/2 Mouse ☐ COM ☒ PS/2

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

Vendor	Product Description	Chipset	Bus
3COM	3C905B-TX Fast Etherlink	Lucent 40-04834	PCI
Adico	AE 310-TX 100 Fast PCI Ethernet	MX 98715AEC	PCI
Legend	LN-1018 10 ISA Ethernet	RTL8019AS	ISA
Realtek	10/100 Fast Etherlink	RTL8139C	PCI
Intel	Intel 10/100 PCI Ethernet V4.11	Intel GD82559	PCI
Accton	Cheetah PCI Adapter	1207F	PCI
3COM	3C905C-TX Etherlink 10/100 PCI V5.3	3Com 40-0579	PCI

## 8.3 Storage

### 8.3.1 IDE Fixed Disk Drive Products

#### Test Configuration:

**OS Ver** ☒ Win 98 SE Ver: 4.10.2222A .  
☒ Win 2000 Ver: 5.00.2195 .  
**CPU** Intel Celeron 633MHz ☒ Intel  
**Memory** KingSton 64MB (TC59SM716FT-80) **Total: 128 MB** ☐ PC66 ☒ PC100  
**CD-ROM** Creative CD5220E 52X IDE CD-ROM **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A **ISA\_Slot:** ☐ On board  
**Mouse** Logitech First Mouse+ Mouse ☐ COM ☒ PS/2

The following IDE devices test WinStone 99 under Windows 98/2000 with VIA IDE Bus Master drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

### 6.3.1.1 IDE Ultra DMA/66

Vendor	Model Name	Mode	Capacity
WD	AC313000	Ultra ATA 66	13GB
	AC205B	Ultra ATA 66	20.5GB
Seagate	ST-313032A	Ultra ATA 66	13GB
	ST-317242A	Ultra ATA 66	17.2GB
	ST-320420A	Ultra ATA 66	20.4GB
	ST-320423A	Ultra ATA 66	20.4GB
	ST-328040A	Ultra ATA 66	28.5GB
	ST-330630A	Ultra ATA 66	30.6GB
Fujitsu	MPE3102AH	Ultra ATA 66	10.2GB
	MPE3204AT	Ultra ATA 66	20.4GB
IBM	DJNA-371350	Ultra ATA 66	13.5GB
	DPTA-352030	Ultra ATA 66	20GB
	DPTA-353750	Ultra ATA 66	37.5GB
Maxtor	91360U4	Ultra ATA 66	13.6GB
	91531U3	Ultra ATA 66	15.3GB
	92040U6	Ultra ATA 66	20GB
	92049U4	Ultra ATA 66	20GB
	92720U8	Ultra ATA 66	27GB
	93073U6	Ultra ATA 66	30.7GB
	53073U6	Ultra ATA 66	30.7GB
	54098U8	Ultra ATA 66	40.9GB
Samsung	SV2046D	Ultra ATA 66	20.4GB

### 8.3.1.2 IDE Ultra DMA/100

Vendor	Model Name	Mode	Capacity
IBM	DTLA-307015	Ultra ATA 100	15.3GB
	DTLA-305020	Ultra ATA 100	20.5GB
	DTLA-307045	Ultra ATA 100	46.1GB
	DTLA-307075	Ultra ATA 100	76.8GB
Maxtor	54098H8	Ultra ATA 100	40.9GB
	98196H8	Ultra ATA 100	80GB
Seagate	Barracuda ST330631A	Ultra ATA 100	30.6GB

\* Note: These ATA/100 HDD always run in ATA/66 mode and performance because SB is VIA 686A.

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

Test Configuration:

**OS Ver** ☒ Win 98 SE Ver: 4.10.2222A .  
**CPU** Intel Celeron 766MHz ☒ Intel  
**Memory** SIEMENS 128MB (HYB39S64800CT-8) Total: 256 MB ☐ PC66 ☒ PC100  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA Slot:     ☒ On board  
**Mouse** Logitech First Mouse+ Mouse ☐ COM ☒ PS/2

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

### 8.3.2.1 ATAPI CD-ROM:

Vendor	Model Name	Product Description
ASUS	CD-S500/A	ATAPI CD-ROM 50X UDMA2
BTC	BCD 48SB	ATAPI CD-ROM 48X UDMA2
Pioneer	DR-744	ATAPI CD-ROM 36X Mode4
SONY	CDU-4811	ATAPI CD-ROM 48X UDMA2
Mitsumi	CRMC-FX4820T	ATAPI CD-ROM 48X UDMA2
LITE-ON	LTN-485S	ATAPI CD-ROM 48X UDMA2
TEAC	CD-540E	ATAPI CD-ROM 40X Mode3

### 8.3.2.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
Hitachi	GD-2500	ATAPI DVD-ROM 6X
Afreedy	DD-4008E	ATAPI DVD-ROM 8X
	DD-4010E	ATAPI DVD-ROM 10X
Panasonic	SR-8585-B	ATAPI DVD-ROM 8.0X
Pioneer	DVD-114	ATAPI DVD-ROM 10X
	DVD-115	ATAPI DVD-ROM 16X
	DVD-105S	ATAPI DVD-ROM 16X
Acer	DVP1640A	ATAPI DVD-ROM 16X
SONY	DDU-220E	ATAPI DVD-ROM 5.0X
Toshiba	SD-M1202	ATAPI DVD-ROM 4.8X
Creative	DVD1242E	ATAPI DVD-ROM 12X
Lite-on	LTD-122	ATAPI DVD-ROM 12X

## 8.4 Peripherals



#### 8.4.1 Parallel/Serial Port Products

##### Test Configuration:

**OS Ver** ☒ Win 98 **SE Ver:** 4.10.2222A .  
**CPU** Intel Pentium III 667MHz ☒ Intel  
**Memory** Buffalo 64MB (GM72V66841ET7K) **Total:** 128 MB ☐ PC100 ☒ PC133  
**HDD** Maxtor 92040U6 20.4GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Creative DVD1242E 12X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot:     ☒ On board  
**Mouse** Logitech TrackMan Marble Mouse ☐ COM ☒ PS/2

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

Vendor	Product Description	Bus I/F
EPSON	Stylus Color 900	LPT
iomega	Parallel ZIP 250	LPT
Kodak	DC210 InfraRed/Serial port Digital camera	COM

#### 8.4.2 Mouse Products

##### Test Configuration:

**OS Ver** ☒ Win 98 **SE Ver:** 4.10.2222A .  
**CPU** Intel Pentium III 667MHz ☒ Intel  
**Memory** Buffalo 64MB (GM72V66841ET7K) **Total:** 128 MB ☐ PC100 ☒ PC133  
**HDD** Maxtor 92040U6 20.4GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Creative DVD1242E 12X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot:     ☒ On board

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

Vendor	Product Description	Bus I/F
Microsoft	IntelliMouse Serial Mouse	Serial/ PS2
	IntelliMouse USB/PS2 Mouse (w IntelliEye)	USB/PS2
	IntelliMouse USB/PS2 Mouse (Optical)	USB/PS2
	IntelliMouse explorer USB/PS2 Mouse	USB/PS2
Logitech	Logitech MouseMan Serial Mouse	Serial/ PS2
	Logitech First Mouse+ Serial Mouse	Serial/ PS2
	Logitech TrackMan Marble Serial Mouse	Serial/ PS2

Logitech Wheel Mouse (Optical)	USB/PS2
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### 8.4.3 USB Device Products

#### Test Configuration:

**OS Ver** ☒ Win 98 **SE Ver:** 4.10.2222A  
**CPU** Intel Pentium III 550MHz ☒ Intel  
**Memory** Ramaxel 64MB(GM72V66841ET7K) **Total:** 128 MB ☐ PC66 ☒ PC100  
**HDD** IBM DJNA-371350 13.5GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DVD-115 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A **ISA\_Slot:**     ☒ On board  
**Mouse** Logitech First Mouse+ Mouse **COM** ☒ PS/2

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

Type	Vendor	Description
Mouse	Logitech	USB Wheel Mouse (M-BB48)
		USB MouseMan Wheel (M-BA47)
		USB Wheel optical Mouse (M-BD58)
	Microsoft	IntelliMouse Mouse (w IntelliEye)
		IntelliMouse Optical USB Mouse
		IntelliMouse explorer USB Mouse
HUB	Macally	MHUB-01 USB Hub
Camera	Kodak	DVC323
	IBM	XVP610
Faxmodem	USRobotics	56K Voice Faxmodem
Keyboard	BTC	8113W
	Microsoft	Natural Keyboard Pro
	Jetime	ACK-298H
Printer	EPSON	Stylus Color 740
		Stylus Color 900
ZIP	iomega	ZIP 250
Scanner	EPSON	GT-7000
	HP	ScanJet 4200C
Joystick	Logitech	WingMan Formula Force joystick
	Thrustmaster	TOP Gun
	Genius	Flight2000 F-22X
GamePad	Creative	Cobra USB GamePad

	Logitech	WingMan Extreme USB GamePad
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#### 8.4.4 Joystick & Game Pad

##### Test Configuration:

**OS Ver** ☒ Win 98 SE Ver: 4.10.2222A  
**CPU** Intel Pentium III 550MHz ☒ Intel  
**Memory** Ramaxel 64MB(GM72V66841ET7K) Total: 128 MB ☐ PC66 ☒ PC100  
**HDD** IBM DJNA-371350 13.5GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DVD-115 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA Slot:     ☒ On board  
**Mouse** Logitech First Mouse+ Mouse ☐ COM ☒ PS/2

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

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

#### 8.5 Power Supply Products

##### Test Configuration:

**OS Ver** ☒ Win 2000 Ver: 5.00.2195  
**CPU** Intel Pentium III 733MHz ☒ Intel  
**Memory** Apacer 128MB(GM72V66841ET7K) Total: 256 MB ☐ PC66 ☒ PC100  
**HDD** WD AC310200 10.2GB IDE ☐ UDMA/33 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Pioneer DVD-115 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS

**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_ ☒ On board  
**Mouse** Logitech TrackMan Marble Mouse ☐ COM ☒ PS/2

The following Power supply devices test Cool/Warm boot, restart and power management under Windows 2000 with over 10 times.

Vendor	Product Description	Power	Type
DELTA	DPS-75UB-1	75W	SFX
	DPS-88AB	88W	SFX
	DPS-145PB-91 A Rev:00	145W	SFX
	DPS-145PB-101B Rev:02	145W	SFX
	DPS-145PB-111 A Rev:00	145W	SFX
SIR TEC	SI-C145M2 REV:C0	145W	SFX
	SI-X145M3 REV:B1	145W	SFX
Seventeam	ST-150MK	150W	SFX
Enlight	SFX-1215A	150W	SFX
	SI-X145M2 REV:A0-01	145W	SFX
	SI-X145M3 REV:B0	145W	SFX
HIPRO	HP-A1463F5 Rev:03	145W	SFX
	HP-146SSG Rev:X01	145W	SFX

## 8.6 MPEG-2 DVD Display Products

### Test Configuration:

**OS Ver** ☒ Win 98 **SE Ver:** 4.10.2222A .  
**CPU** Intel Pentium III 533MHz ☒ Intel  
**Memory** KingStone 128MB(HYB39S64800BT-7.5) **Total:** 256 MB ☐ PC100 ☒ PC133  
**HDD** Seagate ST-320423A 20.4GB IDE ☐ PIO4 ☒ UDMA/66  
**Channel:** ☒ PM ☐ PS ☐ SM ☐ SS  
**CD-ROM** Creative DVD1242E 12X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot:\_\_\_ ☒ On board  
**Mouse** Microsoft IntelliMouse Mouse ☐ COM ☒ PS/2

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

Vendor	VGA Chip	Product Description
Realmagic	Sigma Designs EM8300	DVDmagic Pro DVD card
Creative	Creative CT7235-VBQ	PC-DVD ENCORE
Formosa	Sigma Designs EM8300	DVD8300 DVD card

## 9. Software Compatibility Test Suite

### 9.1 Microsoft Windows 98 SE:

#### Test Configuration:

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** Ramaxel 64MB (GM72V66841ET7K) Total: 128 MB ☐ PC66 ☒ PC100  
**HDD** Maxtor 54098U8 40GB IDE ☐ PIO4 ☒ UDMA/66  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA Slot: \_\_ ☒ On board  
**CD-ROM** Afreedy DD-4008E 8X IDE DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS  
**Mouse** Microsoft IntelliMouse Mouse ☐ COM ☒ PS/2

Test Item	Result	Remark
FDISK (FAT32)	PASS	
Install Win OS	PASS	
Format FDD	PASS	
Diskcopy	PASS	
Large file Copy	PASS	
Cool boot 2 times under every combination	PASS	
Reboot 2 times under every combination	PASS	

FIC CD-PRO all Application Install & Test	PASS	
CoreTest 92 (Transfer Rate test)	PASS	
Device Management check (No Caution)	PASS	
VGA Resolution/Color change	PASS	
Install Office 2000	PASS	
Auto Shutdown (system power off)	PASS	
Defrag test	PASS	
LS-120/ZIP install & working	PASS	
Year 2000 test	PASS	
VCD play (name: Mercury Rising )	PASS	
GAME play (name: __ Need For Speed III __)	PASS	
PM function by WIN98 (H/W )	PASS	
WinStone 99 (Business WS99)	PASS	18.5
CC WinStone 2000	PASS	13.3
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	
3D Winbench 99 (3D Quality/3D Winmark)	PASS	5.15

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 98 SE	4.10.2222A	English	Microsoft	Pass

## 9.2 Microsoft Windows 2000:

### Test Configuration:

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** Buffalo 128MB (W981208AH-75) **Total: 256 MB** ☐ PC100 ☒ PC133  
**HDD** Seagate ST-330630A 30.6GB IDE ☐ PIO4 ☐ UDMA/33 ☒ UDMA/66  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot: \_\_ ☒ On board  
**CD-ROM** Afreedy DD-4010E 10X IDE DVD **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	
Install OS	PASS	
Format FDD	PASS	
FIC CD-PRO all M/B drivers Install & Test	PASS	
FIC CD-PRO all Application Install & Test	PASS	
Device Management check (No Caution)	PASS	

VGA Resolution/Color change		PASS	
Large file Copy (one file Over 500MB)		PASS	
Install Office 2000		PASS	
VCD/DVD play (name: Mercury Rising )		PASS	
Power Management (Stand By function)	Power button	PASS	
	Keyboard Sleep Key	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
Hibernate (Suspend To Disk)	Power button	PASS	
	Start → Hibernate item	PASS	
	Time Out	PASS	
System Shutdown	Power button	PASS	
	Start → Shut down item	PASS	
WinStone 99 (Business WS99)		PASS	22.4/17.7
CC WinStone 2000		PASS	14.6
WinBench 99 (BD/BG/CPU/FPU/HD/HG)		PASS	

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

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

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

#### Test Configuration:

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** KingMax 128MB(KSV884T4A1A-07) Total: 256 MB ☐ PC100 ☒ PC133  
**HDD** Fujitsu MPE3204AH 20.4GB IDE ☐ PIO4 ☒ UDMA/66  
Channel: ☒ PM ☐ PS ☐ SM ☐ SS  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot: ☒ On board  
**CD-ROM** Creative DVD1242E 12X IDE DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS  
**Mouse** Logitech Mouse+ Mouse ☐ COM ☒ PS/2

Test Item	Result	Remark
Install Win NT with NTFS (boot from CD )	PASS	
Install Service Pack 6.0	PASS	

<b>Format FDD</b>	PASS	
<b>Cool boot 2 times under every combination</b>	PASS	
<b>Reboot 2 times under every combination</b>	PASS	
<b>PM function by Win NT</b>	PASS	
<b>WinStone 99 (Business/High End WS99)</b>	PASS	<b>24/17</b>
<b>CC WinStone 2000</b>	PASS	<b>14.7</b>
<b>WinBench 99 (BD/BG/CPU/FPU/HD/HG)</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.

<b>Operating System</b>	<b>Version</b>	<b>Language</b>	<b>Company</b>	<b>Status</b>
Windows NT Workstation	4.0	English	Microsoft	Pass
Windows NT Workstation Service Pack	6.0	English	Microsoft	Pass

#### 9.4 Microsoft Windows ME:

##### **Test Configuration:**

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** KingSton 128MB(HYB39S64800BT-7.5)Total: 256 MB ☐ PC100 ☒ PC133  
**HDD** WD AC205BA 20.5GB IDE ☐ PIO4 ☒ UDMA/66  
**VGA** VIA PLE133 ☒ Onboard ☐ AGP 4X  
**Sound** VIA VT686A ☐ ISA\_Slot:     ☒ On board  
**CD-ROM** Pioneer DVD-115 16X DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS  
**Mouse** Logitech Mouse+ 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 (Stand By function)	Power button	PASS
	Keyboard Sleep Key	PASS
	Start → Stand By item	PASS
	Time Out	PASS
Hibernate (Suspend To Disk)	Power button	PASS
	Start → Hibernate item	PASS
	Time Out	PASS
System Shutdown	Power button	PASS
	Start → Shut down item	PASS
IE 5.5 (Install LAN card to connect to Internet)	PASS	
System Restore	PASS	
WinStone 99 (Business WS99)	PASS	18.2
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

## 9.5 IBM OS/2 4.0:

### Test Configuration:

**CPU** Intel Pentium III 866MHz ☒ Intel  
**Memory** KingMax 128MB(KSV884T4A1A-07) Total: 256 MB ☐ PC100 ☒ PC133  
**HDD** Fujitsu MPB3032AT 3.2GB IDE ☐ PIO4 ☒ UDMA/33  
Channel: ☒ PM ☐ PS ☐ SM ☐ SS  
**VGA** S3 Trio64+ ☒ PCI\_Slot: 2 ☐ On board  
**CD-ROM** Creative DVD1242E 12X IDE DVD 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	
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

## 9.6 LINUX :

### Test Configuration:

CPU Intel Celeron 700MHz

Intel

Memory Buffalo 64MB(W981216AH-75)

Total: 128 MB PC100 PC133

HDD IBM DTLA-305020 20.5GB IDE

UDMA/66 UDMA/100

Channel: PM PS SM SS

VGA VIA PLE133

Onboard AGP 4X

LAN 3Com 3C905B-TX PCI

PCI\_Slot: 2 On board

CD-ROM Creative DVD1242E 12X IDE DVD

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
Open Linux	2.4	English	Pass
Red Hat	6.2	English	Pass

## Test Engineer:

BIOS: Benson Shen

OS: Scott Lin

I/O : Peter Churg

Audio: Brad Su



CPU/Memory: *Leon Liang*

VGA: *Lion Liou*

Logo: *Joy Tsai*

IDE Devices: *Scott Lin*

Check by: *Lion Liou*

Ownership: *Benson Shen*