

FIC AE31 PCI SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT

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Revision: *1.02*

Supervisor	Tester



Revision History

Document Release	Date	Change Item	ECN
Revision 1.00	7/04/2001	Initial Release.	
Revision 1.01	7/25/2001	Add support AMD Duron 900/950MHz CPU.	N/A
Revision 1.02	2/20/2002	BIOS update version to VJA43 Add support AMD Duron 1.0GHz CPU.	M01101-E-0027S



TABLE OF CONTENTS

1. Introduction
2. Mainboard Features
3. Mainboard CPU Support
4. System Specification for Hardware and Software Utilities
 - 4.1 Main Functionality
 - 4.2 Main Software Utilities
5. Jumper Function Verification
6. Stability Test
 - 6.1 CPU Over Clock Test
 - 6.2 Full Loading Test
 - 6.3 PCB Cool Boot Test
7. Field (Stress) Test : Dynamic Burn-in Tests
8. Hardware Compatibility Test Suite
 - 8.1 **Memory**
 - 8.1.1 SDRAM DIMM Module(PC100)
 - 8.1.2 SDRAM DIMM Module(PC133)
 - 8.2 **Add-on Cards**
 - 8.2.1 Display Adapter Products
 - PCI Display Adapter Products
 - 8.2.2 SCSI Adapter Products
 - 8.2.3 FAX /CNR Modem Products
 - 8.3 **Storage**
 - 8.3.1 SCSI Peripheral Products
 - 8.3.2 IDE Fixed Disk Drive Products
 - 8.3.2.1 IDE Ultra DMA66
 - 8.3.2.1 IDE Ultra DMA100
 - 8.3.3 ATAPI CD-ROM / DVD-ROM Device Products
 - 8.3.3.1 ATAPI CD-ROM
 - 8.3.3.2 ATAPI DVD-ROM
 - 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 **MPEG-2 DVD Display Products**
9. Software Compatibility Test Suite
 - 9.1 Microsoft Windows 98 SE
 - 9.2 Microsoft Windows 2000 + Service Pack 2
 - 9.3 Microsoft Windows NT 4.0 + Service Pack 6
 - 9.4 Microsoft Windows ME
 - 9.5 IBM OS/2 4.0
 - 9.6 LINUX



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 : AE31 PCB Rev 1.2
Product Name : VIA Apollo KLE133 Based Mainboard
System BIOS : Award BIOS Version VJA43
PCI IDE : Internal PCI Mastre dual IDE
I/O : VIA VT686B

3. Mainboard CPU Supports:

AMD :

AMD Processors	Bus	Status
Duron 600MHz	100	Pass
Duron 650MHz	100	Pass
Duron 700MHz	100	Pass
Duron 750MHz	100	Pass
Duron 800MHz	100	Pass
Duron 850MHz	100	Pass
Duron 900MHz	100	Pass
Duron 950MHz	100	Pass
Duron 1.0GHz (Morgan)	100	Pass
Athlon 700MHz	100	Pass
Athlon 800MHz	100	Pass
Athlon 850MHz	100	Pass
Athlon 900MHz	100	Pass
Athlon 950MHz	100	Pass
Athlon 1GHz	100	Pass
Athlon 1.1GHz	100	Pass

- Socket A Fan-Sink : Please refer to AMD's Web side recommendation. Especially, over 850 MHz CPUs.

4 System Specification for Hardware and Software Utilities

The mainboard hardware portion was configured as follows :

Item	Description
System Core Logic	VIA KLE133 (VT8361_A+686B_B)
System Cache	64K/256K Pipeline Burst SRAM Built-in CPU
System Memory	Maximum : 1GB SDRAM
	168 pins single RAS and Double RAS DIMM RAM Module
System Slots	3 PCI/1 ISA and 1 CNR slots
Audio	OnChip VIA VT686B AC'97 Audio on board
IO Corelogic	VIA VT686B 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	PASS
4	RTC Alarm Function	PASS
5	H/W Monitoring (+/-12V,+/-5V,Vccp,+5VR)	PASS
6	Ultra ATA-33/66/100 Enhanced IDE Interface	PASS
7	NOVUS II	Logo Genie
		BIOS Easy Kit
		BIOS Flash Protect (Guardian feature)
8	CNR Function	PASS
9	Front/Rear USB Function	PASS
10	Front Audio Function	PASS
11	Power Failure feature	PASS
12	Year 2000 Compliance	PASS

4.2 Main Software Utilities :

Num.	M/B function	Version	Result
1	VIA IDE Bus Master for Win 98 SE/ME/2000	3.01.1	PASS
2	VIA IDE Bus Master for Win NT	3.01.1	PASS
3	VIA AGP VxD Utilities for Win 95/98	4.05	PASS
4	VIA INF Driver	1.20	PASS
5	VIA IRQ Routing Miniport driver	1.30	PASS
6	VIA KLE133 VGA driver for Win 9x/ME	4.12.01.3109	PASS
7	VIA KLE133 VGA driver for Win NT	4.03.00.3108	PASS
8	VIA KLE133 VGA driver for Win 2000	5.12.01.3108	PASS
9	Onboard VIA VT686B Audio driver for Win 9x/ME	1.20a	PASS
10	Onboard VIA VT686B Audio driver for Win NT	1.20a	PASS
11	Award BIOS Flash ROM Utilities	8.02a	PASS

5. Jumper Function Verification

Description	Jumper Name	Default Option	Status
Speaker Connector	SPK	Open	Pass
Power LED (Single color)	PW_LED	Open	Pass
Power LED (Dual color)	LED_G/LED_Y	Open	Pass
IDE LED Connector	HD_LED	Open	Pass
Reset Switch	RST	Open	Pass
Remote Power Switch	PW_SW	Open	Pass
Sleep Switch	SP_SW	Open	Pass
CPU FAN Connector	CPU_FAN	Open	Pass
NB Chip FAN Connector	CHIP_FAN	Open	Pass
Chassis FAN Connector	SYS_FAN	Open	Pass
Clear CMOS	CLR_CMOS	1-2	Pass
LAN Wake Up	WOL	Open	Pass
IR interface	IRRX/IRTX	Open	Pass

6. Stability Test

6.1 CPU Over Clock Test: (1days)

System Configuration



CPU	: AMD Duron 700	FDD	: NEC FD1231T 1.44MB
Cache Memory	: 64K	Audio	: Onboard 686B AC'97 Audio
Memory	: SDRAM 256MB (128MB x 2)	Mouse	: Microsoft PS/2 mouse
HDD (ATA/66)	: Seagate ST330631A 30.6GB	PowerSupply	: HIPRO HP-200NLXAG 200W
VGA	: VIA KLE133 onboard	O.S. Environment	: Windows ME
DVD-ROM	: Afreedy DD-4008E 8X		

NO.	Over clock level		Test Result				
	FSB	CPU ID	Cool boot	Install OS	PM	Winstone 2000	3D Mark 2001
1	107MHz	750MHz	Pass	Pass	Pass	Pass	Pass
2	110MHz	770MHz	Pass	Pass	Pass	Pass	Pass

6.2 Full Loading Test:

System Configuration			
CPU	: AMD Athlon 1100MHz	PCI 1	: Intel 82559 10/100 LAN card
Cache Memory	: 256 K	PCI 2	: Askey 1456VQH75 modem card
Memory	: SDRAM 128MB (64MB x 2)	CNR	: Taicom 56KV.90 Modem card
HDD 1	: WD WD300 30GB	Audio	: Onboard 686B AC'97 Audio
HDD2	: Maxtor 92049U4 20GB	Mouse	: Microsoft PS/2 mouse
HDD3	: Seagate ST330631A 30.6GB	PowerSupply	: HIPRO HP-200NLXAG 200W
DVD-ROM	: Afreedy DD4008E 8X	O.S. Environment	: Windows ME
VGA	: VIA KLE133 onboard		
FDD	: NEC FD1231T 1.44MB		

Test Result						
Cool boot	BIOS detect	Install OS	All devices Driver install	PM	Winstone 2001	3D Mark 2001
Pass	Pass	Pass	Pass	Pass	Pass	Pass

6.3 PCB Cool Boot Test: (1days)

System Configuration			
CPU	: AMD Duron 850	FDD	: NEC FD1231T 1.44MB
Cache Memory	: 64 K	PowerSupply	: HIPRO HP-250NLXAK 250W
Memory	: SDRAM 512MB (256MB x 2)		
VGA	: VIA KLE133 onboard		

Test Result	
Cool Boot (over 1500 times)	Pass

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

Software Name	Duration	Result
Winstone 2001 Under WIN ME	12hr.	Pass



Test Configurations for Win ME	AMD Athlon 1100MHz IBM DTLA-307045 ATA/100 45GB HDD KingSton 256MB SDRAM Memory.(IBM) X 2 VIA KLE133 Onboard AGP	
CC Winstone 2001 Under WIN 2000	12hr.	<i>Pass</i>
Test Configurations for Win 2000	AMD Athlon 900MHz Maxtor 98196H8 ATA/100 80GB HDD KingMax 128MB SDRAM Memory.(KingMax) VIA KLE133 Onboard AGP	

8. Hardware Compatibility Test Suite

8.1 Memory

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000.

☒ Win 2000 Ver: 5.00.2195.

CPU AMD Duron 950 (Bus clock 100MHz) ☒ AMD
HDD Fujitsu MPG3204AT 20.4GB ☐ ATA/66 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
CD-ROM Pioneer DVD-116 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
Sound VIA VT686B **ISA_Slot:** ☐ ☒ On board
Mouse Microsoft IntelliMouse PS/2 Mouse **COM** ☒ PS/2

The following SDRAM module test Winstone 2001/3D Mark 2001 under Windows ME/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
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)
Winbond	W981216AH-75	No	64MB	S	VSJ-S64M2
NEC	D4564841G5-A80-9JF	Yes	128MB	D	BUFFALO VSJ-ED128M2
Hyundia	HY57V658020B-10P	No	128MB	D	VSJ-D128M2

8.1.2 SDRAM DIMM Module (PC133)

The Test under Pseudosynchronous with CPU FSB speed of 200MHz.

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
	HYB39S256800BT-7.5	Yes	512MB	D	HYS72V64220GU-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
NEC	D4564841G5-A75-9JF	No	64MB	S	MC-458CB647LF-A75
KingMAX	KSV884T4A1A-07	No	64MB	S	MPG643S-883
	KSV884T4A1A-07	No	128MB	D	MPGA83S-883
	KSV884T4A1A-06	No	128MB	D	MPGA83S-883
	KSV684T4A1A-06	No	256MB	D	MPJB63S-68KX
Transcend	K4S640832D-TC75	No	256MB	D	TS16MLS64V6W (SEC)
Apacer	HYB39S64800BT-7.5	No	64MB	S	71.63350.114 (Infineon)

	AM2V648C2T75	No	64MB	S	71.63350.034 (Apacer)
	HYB39S64800BT-7.5	No	128MB	D	71.73350.114 (Infineon)
	GM72V66841XT75	No	128MB	D	71.73350.064 (Hyundai)
	AM2V648C2T75	No	128MB	D	71.73350.034 (Apacer)
Buffalo	W981208AH-75	No	128MB	S	VS133-128M (Winbond)
	5264805FTT75	No	64MB	S	VS133-64M (Hitachi)
	5264805FTT75	No	128MB	D	VS133-128M (Hitachi)
	GM72V66841ET7K	No	128MB	D	VS133-128M (Hyundai)
	K4S6408320-TC1H	No	128MB	D	VS133-128M (SEC)
V-TEC	GM72V66841ET75	No	64MB	S	
PQI	PQ3S168V75	No	128MB	S	DT133128MB-T00951
	PQ3S168V75	No	256MB	D	DT133256MB-T00951
	PQ3S644S75	No	512MB	D	MS3812UPS
KingSton	TC59SM708FT-75	No	128MB	S	KGM133X64C3/128(Toshiba)
	HYB39S64800BT-7.5	No	64MB	S	KVR-PC133/64 (Infineon)
	HYB39S64800BT-7.5	No	128MB	D	KVR-PC133/128 (Infineon)
	0312804CT3A-75A	No	256MB	D	KVR-PC133/256 (IBM)
	V54C3128804VAT7	No	256MB	D	KVR133X64C3/256(Mosel)
	W981208BH-75	No	256MB	D	KVR133X64C3/256(Winbond)
	D45128841G5-A75-9JF	No	256MB	D	KVR133X64C3/256 (NEC)
SIMONS	D45128841G5-A80-9JF	No	128MB	S	
	HY57V28820HCT-H	No	256MB	D	

8.2 Add-on Cards

8.2.1 Display Adapter Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000

CPU AMD Athlon 1000MHz

☒ AMD

Memory Apacer 128MB(Infineon)

Total: 256 MB ☒ PC100 ☒ PC133

HDD Maxtor 92720U8 27GB

☒ ATA/66 ☒ ATA/100

Channel: ☒ PM ☒ PS ☒ SM ☒ SS

CD-ROM Pioneer DVD-105S 16X IDE DVD

Channel: ☒ PM ☒ PS ☒ SM ☒ SS

Sound VIA VT686B

☒ ISA_Slot: ☒ Onboard

Mouse Logitech MouseMan Mouse

☒ COM ☒ PS/2

The following PCI VGA cards test 3D Mark 2000/ZD Winbench99 v1.2 under Windows ME 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
Creative	S3 Savage 4	3D Blaster Savage 4
Cardex	SiS 6326	Cardexpert 6326
3dfx	Voodoo 5-5500	3dfx Voodoo 5-5500 PCI
3dfx	Voodoo 3-3000	3dfx Voodoo 3-3000 PCI

8.2.2 SCSI Adapter Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000 .
☒ Win 2000 Ver: 5.00.2195 .
CPU AMD Athlon 1100MHz ☒ AMD
Memory PQI 128MB(PQI) Total: 256 MB ☐ PC100 ☒ PC133
VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
HDD Quantum Atlas V 18GB ☐ Ultra SCSI ☒ Ultra Wide
CD-ROM TEAC CD-532S 32X SCSI ☒ Ultra SCSI ☐ Ultra Wide
Sound VIA VT686B ☐ ISA_Slot: __ ☒ On board
Mouse Logitech MouseMan Mouse ☐ COM ☒ PS/2

The following PCI SCSI cards run Winstone 2001/Large file copy under Windows ME and CC Winstone 2001 under Win 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
	ASC-29160N	Adaptec Ultra 160 PCI SCSI card 29160	PCI
	ASC-39160	Adaptec Ultra 160 PCI SCSI card 39160	PCI
Tekram	DC-390U3W	Tekram DC-390U2W PCI SCSI	PCI

8.2.3 FAX /CNR Modem Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000 .
CPU AMD Athlon 1100MHz ☒ AMD
Memory Buffalo 128MB(Hyundai) Total: 256 MB ☐ PC100 ☒ PC133
VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
HDD WD WD300 30GB IDE ☐ ATA/66 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
CD-ROM Afreedy DD-4008E 8X IDE DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS
Sound VIA VT686B ☐ ISA_Slot: __ ☒ On board
Mouse Microsoft IntelliMouse PS/2 Mous ☐ 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
Castle Net	56KV.90 Modem Riser Card (MC810)	CNR
CIS	Soft 56K data/Fax/RTAP	Internal/PCI
Askey	1456VQH75	Internal/PCI

8.3 Storage

8.3.1 SCSI Peripheral Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000 .

☒ Win 2000 Ver: 5.00.2195 .

CPU AMD Duron 900MHz ☒ AMD

Memory KingMax 128MB (KingMax) Total: 256 MB ☐ PC100 ☒ PC133

VGA VIA KLE133 ☒ Onboard ☐ AGP 4X

SCSI Adaptec 29160N Ultra2 Wide SCSI ☐ ISA ☒ PCI Solt: 2 .

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

The following SCSI devices test and WinStone 2001 under Windows ME/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.

ITEM	Vendor	Model Name	Product Description
Hard Disk	IBM	DDRS-39130	UltraII SCSI HDD 9.1GB
		DMVS IEC-950	Ultra2 Wide 36GB
	Quantum	Atlas V	Ultra2 Wide 18GB
	Seagate	ST-39173W	Barracuda 9LP Ultra Wide 9.1GB
		ST318436LW	Barracuda Ultra160 Wide 18GB
		ST318404LW	Cheetah Ultra160 Wide 18GB
		ST-34502LW	Cheetah 9LP Ultra2 Wide 4.5GB
CD-ROM CD-RW	Plextor	PX-40Tsi	Ultra SCSI CD-ROM 40X
	Toshiba	XM-6210B	Ultra SCSI CD-ROM 32X
	NEC	CDR-1910	Ultra SCSI CD-ROM 32X
	TEAC	CD-523S	Ultra SCSI CD-ROM 32X
		CD-R56S	SCSI-II CD-ROM 24R/6W/4RW

8.3.2 IDE Fixed Disk Drive Products

Test Configuration:



OS Ver ☒ Win ME Ver: 4.90.3000 .
☒ Win 2000 Ver: 5.00.2195 .
 CPU AMD Athlon 1100MHz ☒ AMD
 Memory Transcend 256MB (SEC) Total: 512 MB ☒ PC100 ☒ PC133
 CD-ROM NEC DV-5700B 12X IDE DVD Channel: ☒ YPM ☒ YPS ☒ SM ☒ YSS
 VGA VIA KLE133 ☒ Onboard ☒ YAGP 4X
 Sound VIA VT686B ☒ YISA Slot: ☒ On board
 Mouse Logitech First Mouse+ Mouse ☒ YCOM ☒ PS/2

The following IDE devices test and WinStone 2001/Copy large files under Windows ME/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.

8.3.2.1 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

8.3.2.2 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-307020	Ultra ATA 100	20.5GB
	DTLA-307030	Ultra ATA 100	30.7GB
	DTLA-307045	Ultra ATA 100	46.1GB
	DTLA-307060	Ultra ATA 100	61.4GB
	DTLA-307075	Ultra ATA 100	76.8GB
Maxtor	51536H2	Ultra ATA 100	15.3GB
	52049H4	Ultra ATA 100	20.4GB

	53073H6	Ultra ATA 100	30.6GB
	54098H8	Ultra ATA 100	40.9GB
	5T060H6	Ultra ATA 100	61GB
	98196H8	Ultra ATA 100	80GB
Seagate	ST320414A	Ultra ATA 100	20GB
	ST330631A	Ultra ATA 100	30.6GB
	ST340824A	Ultra ATA 100	40GB
WD	Caviar WD300	Ultra ATA 100	30GB
	Caviar WD400	Ultra ATA 100	40GB
Fujitsu	MPG3204AT	Ultra ATA 100	20.4GB
	MPG3307AT	Ultra ATA 100	30.7GB
Samsung	SV3063H	Ultra ATA 100	30.6GB

8.3.3 ATAPI CD-ROM /DVD-ROM Device Product

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000

CPU AMD Duron 800MHz

☒ AMD

Memory SIMONS 128MB (NEC)

Total: 256 MB ☐ PC100 ☒ PC133

VGA VIA KLE133

☒ Onboard ☐ AGP 4X

Sound VIA VT686B

 \dot{Y} ISA_Slot: ☒ On board

Mouse Logitech First Mouse+ Mouse

 \dot{Y} COM ☒ PS/2

The following IDE devices test play VCD or DVD under windows ME 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.

8.3.3.1 ATAPI CD-ROM:

Vendor	Model Name	Product Description
Mitsumi	CRMC-FX4820T	ATAPI CD-ROM 48X UDMA2
TEAC	CD-540E	ATAPI CD-ROM 40X UDMA2
LITE-ON	LTN-403L	ATAPI CD-ROM 40X UDMA2
	LTN-485S	ATAPI CD-ROM 48X UDMA2
Acer	650P	ATAPI CD-ROM 50X UDMA2
AOpen	CD-952E/AKH	ATAPI CD-ROM 52X UDMA2
BTC	BCD 48SB	ATAPI CD-ROM 48X UDMA2
Creative	CD4834E	ATAPI CD-ROM 48X Mode4
	CD5220E	ATAPI CD-ROM 52X Mode4
ASUS	CD-S400/A	ATAPI CD-ROM 40X UDMA2
	CD-S500/A	ATAPI CD-ROM 50X UDMA2
SONY	CDU-4811	ATAPI CD-ROM 48X UDMA2

8.3.3.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
ASUS	DVD-E608	ATAPI DVD-ROM 8X
	DVD-E612	ATAPI DVD-ROM 12X
SONY	DDU1211	ATAPI DVD-ROM 12X

Pioneer	DVD-114	ATAPI DVD-ROM 10X
	DVD-115	ATAPI DVD-ROM 16X
	DVD-105S	ATAPI DVD-ROM 16X
	DVD-116	ATAPI DVD-ROM 16X (UDMA66)
Panasonic	SR-8585-B	ATAPI DVD-ROM 8.0X
	SR-8587-B	ATAPI DVD-ROM 16X
Acer	DVP1640A	ATAPI DVD-ROM 16X
Afreedy	DD-4008E	ATAPI DVD-ROM 8X
	DD-4010E	ATAPI DVD-ROM 10X
Creative	DVD1242E	ATAPI DVD-ROM 12X
Lite-On	LTD-122	ATAPI DVD-ROM 12X

8.4 Peripherals

8.4.1 Parallel/Serial Port Products (Including IR)

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000

CPU AMD Athlon 800MHz ☒ AMD

Memory Apacer 128MB (Infineon) Total: 256 MB ☐ PC100 ☒ PC133

HDD IBM DTLA-305020 20GB IDE ☐ ATA/66 ☒ ATA/100

Channel: ☒ PM ☐ PS ☐ SM ☐ SS

CD-ROM Creative DVD1242E 12X IDE DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS

VGA VIA KLE133 ☒ Onboard ☐ AGP 4X

Sound VIA VT686B ☐ ISA Slot: ☒ On board

Mouse Logitech TrackMan Marble Mouse ☐ COM ☒ PS/2

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

Vendor	Product Description	Bus I/F
HP	HP LaserJet 6P support IR Interface	LPT/IR
EPSON	Stylus Color 900	LPT
Mustek	Mustek 1200CP Scanner	LPT
Parallel	DirectParallel universal cable	LPT
iomega	Parallel ZIP 250	LPT
Logitech	WingMan Formula Force joystick	COM
Kodak	DC210 InfraRed/Serial port Digital camera	COM/IR



ACTisys	ACT-IR210L	IR
IRwave	IRwave320F	IR

8.4.2 Mouse Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000 . . .
 CPU AMD Duron 800MHz ☒ AMD
 Memory Buffalo 128MB (SEC) Total: 256 MB ☐ PC100 ☒ PC133
 HDD Maxtor 92040U6 20.4GB IDE ☐ PIO4 ☒ ATA/66
 Channel: ☒ PM ☐ PS ☐ SM ☐ SS
 CD-ROM Creative DVD1242E 12X IDE DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS
 VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
 Sound VIA VT686B ☐ ISA_Slot: ☒ On board

The following Mouse devices test Office 2000 and Game under Windows ME 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

8.4.3 USB Device Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000 . . .
 CPU AMD Athlon 850MHz ☒ AMD
 Memory SIEMENS 128MB(SIEMENS) Total: 256 MB ☐ PC100 ☒ PC133
 HDD IBM DTLA-305020 20GB IDE ☐ ATA/66 ☒ ATA/100
 Channel: ☒ PM ☐ PS ☐ SM ☐ SS
 CD-ROM Pioneer DVD-115 16X IDE DVD Channel: ☐ PM ☐ PS ☒ SM ☐ SS
 VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
 Sound VIA VT686B ☐ ISA_Slot: ☒ On board

Mouse Logitech First Mouse+ Mouse

YCOM ☒ PS/2

The following USB devices be tested under Windows ME with Win ME 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	Belkin	Express Bus F5U001
	SOHOUSB	Unique Energy Saving (4-Port 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
Ethernet	CATC	USB Ethernet Link
Speaker	YAMAHA	YST-MS35D
Monitor	CTX	PR711F
HDD	Vipower	VP-8058 Mobile USB Adapter
CD-RW	SONY	Spessa CD-ReWritable Recorder
ZIP	iomega	ZIP 250
Scanner	EPSON	GT-7000
	HP	ScanJet 4200C
Joystick	Logitech	WingMan Formula Force joystick
	Microsoft	SideWinder Precision 2
	Thrustmaster	TOP Gun
	Genius	Flight2000 F-22X
GamePad	Creative	Cobra USB GamePad
	Logitech	WingMan Extreme USB GamePad

8.4.4 Joystick & Game Pad

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000

CPU AMD Athlon 800MHz ☒ AMD

Memory KingMax 64MB(KingMax) Total: 128 MB YPC100 ☒ PC133

HDD Maxtor 34098H4 40.9GB IDE YATA/66 ☒ ATA/100

Channel: ☒ PM YPS YSM YSS

CD-ROM Lite-On LTD-122 12X IDE DVD Channel: YPM YPS ☒ SM YSS

VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
Sound VIA VT686B ☐ ISA_Slot: __, ☒ On board
Mouse Logitech First Mouse+ Mouse ☐ COM ☒ PS/2

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

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

8.5 Power Supply Products

Test Configuration:

OS Ver ☒ Win 2000 Ver: 5.00.2195 .
CPU AMD Athlon 850MHz ☒ AMD
Memory Transcend 256MB(Winbond) **Total: 512 MB** ☐ PC100 ☒ PC133
HDD Maxtor 34098H4 40.9GB IDE ☐ ATA/66 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
CD-ROM Lite-On LTD-122 12X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
Sound VIA VT686B ☐ 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-300KB-1 A Rev:00	300W	ATX
HIPRO	HP-250NLXAA	250W	NLX
	HP-300SN Rev:02	300W	ATX
Seventeam	ST-250GL	250W	ATX
	ST-301HR	300W	ATX
	ST-400GL	400W	ATX
	ST-300BLV	300W	ATX
Enlight	HPC-250-101 Rev:C	250W	ATX
	HPC-300-101 Rev:C0	300W	ATX
TELTA	HI-250PB	250W	ATX
	HI-300PB	300W	ATX
AOpen	FSP300-60GT	300W	ATX
FSP	FSP250-61GN(AMD)	250W	ATX
ACHME	AM607BS-250W	250W	ATX
HOPELY	ATX-250S	250W	ATX
Golden Field	K7-335 V2.02	300W	ATX

8.6 MPEG-2 DVD Display Products

Test Configuration:

OS Ver ☒ Win ME Ver: 4.90.3000.

CPU AMD Athlon 1000MHz ☒ AMD

Memory Buffalo 128MB(Hyundai)

Total: 256 MB ☐ PC100 ☒ PC133

HDD Seagate ST-320414A 20GB IDE

☐ ATA/66 ☒ ATA/100

Channel: ☒ PM ☐ PS ☐ SM ☐ SS

CD-ROM Acer DVP1640A 16X IDE DVD

Channel: ☐ PM ☐ PS ☒ SM ☐ SS

VGA VIA KLE133

☒ Onboard ☐ AGP 4X

Sound VIA VT686B

☐ ISA_Slot: ☒ On board

Mouse Microsoft IntelliMouse Mouse

☐ COM ☒ PS/2

The following DVD player over night under Windows ME 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 AMD Athlon 1000MHz ☒ AMD
 Memory Buffalo 128MB(Hyundai) Total: 256 MB ☐ PC100 ☒ PC133
 HDD Fujitsu MPG3307AT 30.7GB IDE ☐ ATA/66 ☒ ATA/100
 Channel: ☒ PM ☐ PS ☐ SM ☐ SS
 VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
 Sound VIA VT686B ☐ ISA_Slot: __, ☒ On board
 CD-ROM ASUS DD-E612 12X IDE DVD 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	
FIC CD-PRO all M/B drivers Install & Test		PASS	
FIC CD-PRO all Application Install & Test (LogoGenie,FirstAID)		PASS	
CoreTest 92 (Transfer Rate test)		PASS	
Large file Copy from CD/DVD-ROM (one file Over 500MB)		PASS	
Device Management check (No Caution)		PASS	
VGA Resolution/Color change (800x600x32bit / 1024x768x16bit)		PASS	
Install Office 2000		PASS	
Auto Shutdown (system power off)		PASS	
VCD/DVD play (name: Runaway Bride)		PASS	
Power Management (Stand By function)	Power button	PASS	
	Keyboard Sleep Key (98keyboard)	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
WinStone 2001		PASS	39.6
CC WinStone 2001		PASS	44.2
WinBench 99 V1.2 (BD/BG/CPU/FPU/HD/HG)		PASS	
3D Mark 2001		PASS	225

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

Operating System	Version	Language	Company	Status
MS Windows 98 SE	4.10.2222A	English	Microsoft	Pass

9.2 Microsoft Windows 2000 + Service Pack 2:

Test Configuration:

CPU AMD Athlon 1000MHz ☒ AMD
Memory Buffalo 128MB (SEC) **Total:** 256 MB ☐ PC100 ☒ PC133
HDD IBM DTLA-307060 61.4GB IDE ☐ ATA/66 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
Sound VIA VT686B ☐ ISA_Slot: __ ☒ On board
CD-ROM Creative DVD1242E 12X 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: Runaway Bride)	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 2001	PASS	
CC WinStone 2001	PASS	
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	
3D Mark 2001	PASS	134

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
Windows 2000 Service Pack	2.0	English	Microsoft	Pass

9.3 Microsoft Windows NT 4.0 + Service Pack 6:

Test Configuration:

CPU AMD Athlon 1000MHz ☒ AMD
Memory KingMax 128MB(KSV884T4A1A-07) Total: 256 MB ☐ PC100 ☒ PC133
HDD IBM DTLA-307045 46.1GB IDE ☐ ATA66 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA VIA KLE133 ☒ Onboard ☐ AGP 4X
Sound VIA VT686B ☐ ISA_Slot: __ ☒ On board
CD-ROM Panasonic SR-8585-B 8X 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	
Format FDD	PASS	
Cool boot 2 times under every combination	PASS	
Reboot 2 times under every combination	PASS	
VGA Resolution/Color change	PASS	
VCD/DVD play (name: Mercury Rising)	PASS	
PM function by Win NT	PASS	
WinStone 2001	PASS	45.3
CC WinStone 2001	PASS	52.7
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

Operating System	Version	Language	Company	Status
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 AMD Athlon 1000MHz ☒ AMD
Memory KingSton 256MB(IBM) Total: 512 MB ☐ PC100 ☒ PC133



HDD Maxtor 54098H8 40.9GB IDE ☐ATA/66 ☒ATA/100
 Channel: ☒PM ☐PS ☐SM ☐SS
VGA VIA KLE133 ☒Onboard ☐AGP 4X
Sound VIA VT686B ☐ISA_Slot: __ ☒On board
CD-ROM Pioneer DVD-105S 16X IDE 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
	Power button	PASS
System Shutdown	Start → Shut down item	PASS
IE 5.5 (Install LAN card to connect to Internet)	PASS	
System Restore	PASS	
WinStone 2001	PASS	37.4
CC WinStone 2001	PASS	42.5
WinBench 99 (BD/BG/CPU/FPU/HD/HG)	PASS	
3D Mark 2001	PASS	227

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 AMD Athlon 1000MHz ☒AMD
Memory Buffalo 128MB (Hitachi) Total: 256 MB ☐PC100 ☒PC133
HDD Fujitsu MPB3032AT 3.2GB IDE ☐PIO4 ☒ATA/33
 Channel: ☒PM ☐PS ☐SM ☐SS
VGA S3 Trio64V+ ☒PCI_Slot: 2 ☐On board



CD-ROM Acer DVP 1640A 16X 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

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

9.6 LINUX:

Test Configuration:

CPU AMD Athlon 850MHz

☒AMD

Memory KingSton 64MB(Infineon)

Total: 128 MB ☐PC100 ☒PC133

HDD Maxtor 91531U3 15.3GB IDE

☒ATA/66 ☐ATA/100Channel: ☒PM ☐PS ☐SM ☐SS

VGA VIA KLE133

☒Onboard ☐AGP 4X

LAN Intel 82559 10/100 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	7.1	English	Pass

Test Engineer:

BIOS: Benson ShenOS: Scott LinI/O : Brad SuAudio: Stevent HuangCPU/Memory: Lion LiouVGA: Leon LiangLogo: Joy TsaiIDE Devices: Scott Lin



Check by: *Lion Liou*

Ownership: *Benson Shen*