

FIC VI13L SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT

Document Number: *MB-508*

Product Version: *V 1.3*

BIOS Version: SAI42 (for With LAN)
SAJ42 (for Without LAN)

Report Date: 10/22/2002

Revision: 1.01

Supervisor	Tester



Revision History

Document Release	Date	Change Item	ECN
Revision 1.00	10/14/2002	Initial Release.	
Revision 1.01	10/22/2002	Add support DDR333/PC2700 DRAM as below: KingSton 256MB/Infineon IC. KingSton 512MB/Nanya IC. Infineon 256MB/Infineon IC. Add support 4X AGP card as below: ATI Xpert 2000 pro AGP ATI Radeon AGP ATI Radeon 9000 Pro AGP ASUS V7700 TI AGP ASUS V7700 Deluxe AGP ASUS V8200 Deluxe AGP ASUS V8420 Deluxe AGP ELSA GLADIAC Ultra AGP ELSA GLADIAC 311 AGP ELSA GLADIAC 525 TV AGP Leadtek WinFast Geforce3 AGP Viontek Geforce3 AGP FIC A70L AGP (ATI Radeon 7000) FIC A91L AGP (ATI Radeon 9000)	



Table of Contents

1. Introduction	4
2. Mainboard Features	5
3. Mainboard CPU Supports:	5
4. System Specification for Hardware and Software Utilities	6
5. Jumper Function Verification	7
6. Stability Test/Dynamic Burn-in Tests:	8
7. Hardware Compatibility Test Suite	9
7.1 Memory	9
7.1.1 DDR DRAM Module (DDR266/PC2100)	9
7.1.2 DDR DRAM Module (DDR333/PC2700)	9
7.2 Add-on Cards	10
7.2.1 Display Adapter Products	10
7.2.2 SCSI Adapter Products	12
7.2.3 PCI Audio Products	12
7.3 Storage	13
7.3.1 SCSI Peripheral Products	13
7.3.2 IDE Fixed Disk Drive Products	14
7.3.3 ATAPI CD-ROM /DVD-ROM Device Product	15
7.3.3.1 ATAPI CD-ROM:	15
7.3.3.2 ATAPI DVD-ROM:	16
7.4 Peripherals	17
7.4.1 Parallel/Serial Port Products	17
7.4.2 USB Device Products	17
7.4.2.1 USB 1.1 Devices	18
7.4.2.2 USB 2.0 Devices	18
7.5 Power Supply Products	19
8. Software Compatibility Test Suite	20
8.1 Base Operating System	20
8.1.1 Microsoft Windows 98 SE:	20
8.1.2 Microsoft Windows ME:	21
8.1.3 Microsoft Windows XP/Home Edition + Service Pack 1:	22
8.1.4 Microsoft Windows 2000 + Service Pack 3:	23
8.1.5 Microsoft Windows NT 4.0 + Service Pack 6:	24

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 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 : VI13L PCB Rev 1.3
Product Name : SiS 645DX Based Mainboard
System BIOS : Award BIOS Version SAI42/SAJ42
PCI IDE : Internal PCI Mastre dual IDE
LPC : ITE IT8705F

3. Mainboard CPU Supports:

Intel : (Celeron/L2 cache 128KB)

Intel Processors	FSB	Package	Status
Celeron 1.7GHz	400	FC-PGA2	Pass
Celeron 1.8GHz	400	FC-PGA2	Pass
Celeron 1.9GHz	400	FC-PGA2	Pass
Celeron 2.0GHz	400	FC-PGA2	Pass

Intel : (Willamette/L2 cache 256KB)

Intel Processors	FSB	Package	Status
Pentium 4 1.4GHz	400	FC-PGA2	Pass
Pentium 4 1.5GHz	400	FC-PGA2	Pass
Pentium 4 1.6GHz	400	FC-PGA2	Pass
Pentium 4 1.7GHz	400	FC-PGA2	Pass
Pentium 4 1.8GHz	400	FC-PGA2	Pass
Pentium 4 1.9GHz	400	FC-PGA2	Pass
Pentium 4 2.0GHz	400	FC-PGA2	Pass

Intel : (Northwood/L2 cache 512KB)

Intel Processors	FSB	Package	Status
Pentium 4 1.6GHz	400	FC-PGA2	Pass
Pentium 4 1.73GHz	533	FC-PGA2	Pass
Pentium 4 1.8GHz	400	FC-PGA2	Pass
Pentium 4 2.0GHz	400	FC-PGA2	Pass
Pentium 4 2.2GHz	400	FC-PGA2	Pass
Pentium 4 2.26GHz	533	FC-PGA2	Pass
Pentium 4 2.4GHz	400/533	FC-PGA2	Pass
Pentium 4 2.5GHz	400	FC-PGA2	Pass
Pentium 4 2.53GHz	533	FC-PGA2	Pass
Pentium 4 2.66GHz	533	FC-PGA2	Pass
Pentium 4 2.8GHz	533	FC-PGA2	Pass

4. System Specification for Hardware and Software Utilities

The mainboard hardware portion was configured as follows :

Item	Description
System Core Logic	SiS 645DX + SiS 962L
System Cache	128/256/512K Pipeline Burst SRAM Built-in CPU
System Memory	DDR200/266/300/333 (PC1600/2100/2400/2700) Support
	Maximum : 3GB DDR DRAM
	3 DIMM slots for 184 pins DDR SDRAM Module
System Slots	1 AGP ,6 PCI slots
Audio (Option)	Realtek ALC650 AC'97 Audio codec support 5.1 Channel
	Realtek ALC202A AC'97 Audio codec support 2 Channel
LAN (Option)	Realtek RTL8201BL (PHY) 10/100 LAN Chip Onboard
LPC (I/O)	ITE IT8705F Support Normal,EPP,ECP mode and IR interface

4.1 Main Functionality :

Num.	M/B function	Result
1	ACPI Ready (support S0/S1/S3/S4/S5)	PASS
2	RTC Alarm Function	PASS
3	NOVUS II LogoGenie	PASS
	BIOS Easy Kit	PASS
	BIOS Flash Protect (Guardian feature)	PASS
4	Ultra ATA-33/66/100/133 Enhanced IDE Interface	PASS
5	Onboard Realtek ALC650/202A AC'97 Audio	PASS
6	Onboard Realtek RTL8201BL (PHY) 10/100 LAN	PASS
7	USB 1.1/2.0 Function (Front/Rear)	PASS
8	Power Failure feature	PASS

4.2 Main Software Utilities :

Num.	M/B function	Version	Result
1	SiS Graphic Port Driver	1.11	PASS
2	ALC202A/650 codec driver for Win 9x/ME/2000/XP	5.10.3940	PASS
3	SiS LAN driver for Win 9x/ME/2000/XP	1.16	PASS
4	Award BIOS Flash ROM Utilities	8.20A	PASS

5. Jumper Function Verification

Description	Jumper Name	Default Option	Result
Speaker Connector	SPK	Open	Pass
Power LED (Single color-2/3 pin)	LED	Open	Pass
Power LED (Dual color)	FNT_PNL	Open	Pass
IDE LED Connector		Open	Pass
Reset Switch		Open	Pass
Remote Power Switch		Open	Pass
CPU FAN Connector	CPU_FAN	Open	Pass
Chipset FAN Connector	CHIP_FAN	Open	Pass
Chassis FAN Connector	SYS_FAN	Open	Pass
Clear CMOS	CLR_CMOS	1-2	Pass
Clear Password	CLR_PWD	Open	Pass
IR interface	IR	Open	Pass
Front Audio Connector	F_AUDIO (Intel SPEC)	Open	Pass
Front USB Connector 4/5	USB 4/5 (Intel SPEC)	Open	Pass
CD_IN Connector (RGGL)	CD_IN	Open	Pass
AUX_IN Connector (RGGL)	AUX_IN	Open	Pass
Game Port Connector	GAME	Open	Pass
5.1 Channel Audio Connector (For FIC A73 Audio bracket)	5_1_AUDIO	Open	Pass

6. Stability Test/Dynamic Burn-in Tests:

Software Name	Duration	Result
CC Winstone 2002	12hr.	<i>Pass</i>
Test Configurations for Windows XP	Intel Pentium 4 1.8GHz (Northwood/FSB400) WD Caviar 1200JB ATA/100 120GB HDD Samsung 512MB DDR266 Memory.(Samsung) X 2 ELSA GLADIAC 525 AGP	
3D MARK 2001 SE	12hr.	<i>Pass</i>
Test Configurations for Windows XP	Intel Pentium 4 1.9GHz (Willamette/FSB400) Seagate ST-340016A ATA/100 40GB HDD Infineon 256MB DDR266 Memory.(Infineon) X 2 Gainward 420T AGP (Gefore4 MX420)	
BCM	12hr.	<i>Pass</i>
Test Configurations for Windows ME	Intel Pentium 4 2.26GHz (Northwood/FSB533) WD Caviar 300BB ATA/100 30GB HDD Buffalo 256MB DDR266 Memory.(Samsung) X 2 ELSA GLADIAC 525 AGP	
DVD Play (Deep Blue Sea)	12hr.	<i>Pass</i>
Test Configurations for Windows XP	Intel Pentium 4 1.8GHz (Willmatte/FSB400) WD 1200JB ATA/100 120GB HDD Apacer 256MB DDR266 Memory.(Mosel) X 3 ELSA GLADIAC 517 SVAGP (Geforce4 MX 420) PowerDVD XP 4.0	
Cool Boot (over 500 times)	12hr.	<i>Pass</i>
Test Configurations for Real DOS mode	Intel Pentium 4 2.4GHz (Northwood/FSB533) KingMax 128MB DDR33 Memory.(KingMax) X 3 Compro Geforce4 MX420 AGP Hopely ATX-250SE-P4 250W Power Supply	

7. Hardware Compatibility Test Suite

7.1 Memory

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002
 CPU Intel Pentium 4 2.53GHz(FSB533) ☒ Intel
 HDD Maxtor 6L060J3 60GB IDE ☒ ATA/100 ☒ ATA/133
 Channel: ☒ PM ☒ PS ☒ SM ☒ SS
☒ AGP 4X ☒ Onboard
 VGA ASUS V8170 AGP Channel: ☒ PM ☒ PS ☒ SM ☒ SS
 CD-ROM NEC DV-5700B 12X DVD ☒ PCI_Slot: ☒ Onboard
 Sound Realtek ALC202A AC'97 ☒ PCI_Slot: ☒ Onboard
 LAN Realtek RTL8201BL(PHY) ☒ COM ☒ PS/2
 Mouse Microsoft IntelliMouse PS/2 Mouse

The following DDR DRAM module test CC Winstone 2002/3D Mark 2001 SE under Windows XP and run Memtest86 3.0 with BIOS set up default value and set to the follow condition 1024 x 768 x 32bit colors, resolution refresh rate of 85Hz, small font.

7.1.1 DDR DRAM Module (DDR266/PC2100)

Vender	IC Part No.	Size	Side	Module No.
Micron	MT46V32M8-75	512MB	D	MT16VDDT6464AG-265B1
Crucial	MT46V16M8-75A	256MB	D	CT3272Z265.18T (Micron)
Apacer	HYB25D128800AT-7	128MB	D	77.10303.112 (Infineon)
	K4H280838B-TCB0	128MB	D	77.10304.460 (Samsung)
	V58C2128804SAT7	256MB	D	77.10203.560 (Mosel)
	NT5DS16M8AT-7K	256MB	D	77.10203.540 (Nanya)
	HYB25D128800T-7	256MB	D	77.10203.110 (Infineon)
	HYB25D256800AT-7	512MB	D	77.10703.110 (Infineon)
	W942508AH-7	512MB	D	77.10703.580 (Winbond)
	K4H280838D-TCBO	256MB	D	77.10204.460 (Samsung)
SEITEC	DDR32M8AT-7	512MB	D	184DR512M638
KingMax	KDL684T4A2A-07A	128MB	S	MPDA82D-68KX2
	KDL684T4A2A-07A	256MB	D	MPDB62D-68KX2
Infineon	HYB25D256800AT-7	256MB	D	HYS64D32000GU-7-A
	HYB25D256800BT-7	512MB	D	HYS64D64020GU-7-B
Kingston	NT5DS16M8AT-7K (Nanya)	256MB	D	KVR266X64C25/256
	W942508AH-75 (Winbond)	512MB	D	KVR266X64C25/512
Buffalo	K4H280838B-TCB0	128MB	S	PC266DD128N8C
elixir	N2DS25680AT-75B	256MB	S	M2U25664DS88AOG-75B
	N2DS12880AT-75B	256MB	D	M2U25664DS8HA0G-75B

7.1.2 DDR DRAM Module (DDR333/PC2700)

Vender	IC Part No.	Size	Side	Module No.
Nanya	NT5DS32M8AT-7K	256MB	S	NT256D64S88A0G-6
KingMax	KDL684T4A2A-05	128MB	S	MPMA82D-68KX3
	KDL684T4A2A-05	256MB	D	MPMB62D-68KX3
	KDL684T4AA-60	256MB	D	MPMB62D-68KX3

Transcend	K4H560838C-TCB3	256MB	S	TS32MLD64V3F5
Infineon	HYB25D256800BT-6	256MB	S	HYS64D32000GU-6-B
KingSton	HYB25D256809AT-6	256MB	S	KVR333X64C25/256
	NT5DS32M8AT-6	512MB	D	KVR333X64C25/512

7.2 Add-on Cards

7.2.1 Display Adapter Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002

CPU Intel Pentium 4 2.4GHz (FSB533) ☒ Intel

HDD WD Caviar 1200BB 120GB IDE ☐ ATA/100 ☒ ATA/133

Channel: ☒ PM ☐ PS ☐ SM ☐ SS

Memory Infineon 128MB(Infineon)

Total: 256 MB ☐ PC1600 ☒ PC2100

CD-ROM ASUS CD-S520/A 52X IDE

Channel: ☐ PM ☐ PS ☒ SM ☐ SS

Sound Realtek ALC202A AC'97

☐ PCI_Slot: ☒ Onboard

Mouse Logitech MouseMan Mouse

☐ COM ☒ PS/2

The following AGP 4X VGA cards test 3Dmark 2001 SE/AMD N-Bench 2.0/Suspend to RAM(S3) under Windows XP with their respective VGA drivers installed and set to the follow condition 1024 x 768 x 32bit colors, resolution refresh rate of 85Hz, small font.

AGP Display Adapter Products

Vendor	VGA Chip	Product Description	Driver version
Matrox	MGA-G550	Millennium G550	5.13.01.1320
ATI	Rage 128 Pro	XPRT 2000 Pro	6.13.10.6143
	Radeon	Radeon	6.13.10.6143
	Radeon 7500	Radeon 7500	6.13.10.6071
	Radeon 8500 LE	Radeon 8500 LE	6.13.10.6143
	Radeon 8500	Radeon 8500	6.13.10.6071
	Radeon 9000 Pro	Radeon 9000 Pro	6.13.10.6102
FIC	ATI Radeon 7000	A70L	6.13.10.6143
	ATI Radeon 9000	A91L	6.13.10.6143
	ATI Radeon 9000 Pro	AT009	6.13.10.6015
ASUS	GeForce2 MX	AGP-V7100	6.13.10.3082
	Riva Geforce2 GTS	AGP-V7700 Deluxe (TV out)	6.13.10.2958
	GeForce2 Ti200	AGP-V7700 TI	6.13.10.3082
	Riva Geforce3	AGP-V8200 Deluxe (TV out)	6.13.10.2958
	GeForce3 Ti200	AGP-V8200 T2 Deluxe	6.13.10.2880
	GeForce3 Ti500	V8200 T5 Deluxe (TV out)	6.13.10.2880
	GeForce4 MX 400	V8170 DDR(TV out)	6.13.10.2880
	GeForce4 Ti 4200	V8420 Deluxe	6.13.10.3082
	GeForce4 Ti 4400	V8440 /TD	6.13.10.3082

	GeForce4 Ti 4600	V8460 Ultra /TD	6.13.10.2880
Gainward	GeForce4 MX 420	420T	6.13.10.2832
	GeForce4 Ti 4400	4400XP	6.13.10.2832
	GeForce4 Ti 4600	4600XP	6.13.10.2832
Leadtek	Riva Geforce3	WinFast Geforce3	6.13.10.3082
Visiontek	Riva Geforce3	Geforce3 (TV out)	6.13.10.3082
Compro	GeForce4 MX 420	VideoMate MX /GeForce4 MX 420	6.13.10.2832
	GeForce4 MX 440	VideoMate MX /GeForce4 MX 440	6.13.10.2832
	GeForce4 Ti 4200	VideoMate Cinema /GeForce4 Ti 4200	6.13.10.2832
	GeForce4 Ti 4600	VideoMate Cinema /GeForce4 Ti 4600	6.13.10.3082
ELSA	Geforce2 Ultra	GLADIAC Ultra	6.13.10.3100
	GeForce2 MX 200	GLADIAC 311	6.13.10.3100
	GeForce4 MX 420	GLADIAC 517SV	6.13.10.2832
	GeForce4 MX 440	GLADIAC 517TV-Out	6.13.10.3100
	GeForce4 Ti 4200	GLADIAC 525	6.13.10.3100
	GeForce4 Ti 4600	GLADIAC 925ViVo	6.13.10.2832

7.2.2 SCSI Adapter Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002.
CPU Intel Pentium 4 2.4GHz(FSB533) ☒ Intel
Memory KingMax 256MB (KingMax) **Total: 512 MB** ☐ PC1600 ☒ PC2100
VGA Compro Geforce4 MX440 AGP ☒ AGP 4X ☐ Onboard
HDD Seagate ST-318406LW 18GB ☐ Ultra II SCSI ☒ Ultra Wide
CD-ROM TEAC CD-W512S-B82 32X SCSI CD-RW ☒ Ultra SCSI ☐ Ultra Wide
Sound Realtek ALC202A AC'97 ☐ PCI_Slot: __ ☒ Onboard
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot: __ ☒ Onboard
Mouse Logitech MouseMan Mouse ☐ COM ☒ PS/2

The following PCI SCSI cards run Winstone 2001/Copy large files(over 500MB) under Windows XP/2000 with their respective SCSI drivers installed and set to the follow condition 1024 x 768 x 32bit colors, resolution refresh rate of 85Hz, small font.

Vendor	Model Name	Product Description	Bus I/F
Adaptec	ASC-19160	Adaptec Ultra 160 PCI SCSI card 19160	PCI
	ASC-29160N	Adaptec ASC-29160N PCI SCSI card	PCI
	ASC-29160	Adaptec Ultra 160 PCI SCSI card 29160	PCI
	ASC-39160	Adaptec Ultra 160 PCI SCSI card 39160	PCI
Tekram	DC-390U2W	Tekram DC-390U2W PCI SCSI	PCI
	DC-390U3W	Tekram DC-390U3W PCI SCSI	PCI

7.2.3 PCI Audio Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002.
CPU Intel Pentium 4 2.4GHz(FSB533) ☒ Intel
Memory Seitec 512MB(Seitec) **Total: 1000 MB** ☐ PC1600 ☒ PC2100
VGA FIC AT009 (ATI Radeon 9000 pro) ☒ AGP 4X ☐ Onboard
HDD IBM IC35L120A 120GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
CD-ROM Pioneer DVD-116/2 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
Mouse Microsoft IntelliMouse PS/2 Mouse ☐ COM ☒ PS/2

The following PCI sound cards test play WAV/MIDI/CD audio and DVD under Windows XP with their respective sound drivers installed .

Vendor	Model Name	Product Description
Creative	CT-4750	Sound Blaster PCI128 Digital
	CT-4790	Sound Blaster PCI512 Digital
	SB-0090	Sound Blaster Audigy Platinum

7.3 Storage

7.3.1 SCSI Peripheral Products

Test Configuration:

OS Ver ☒ Win XP Ver: 2002
☒ Win 2000 Ver: 5.00.2195
 CPU Intel Pentium 4 2.4GHz(FSB533) ☒ Intel
 Memory Elixir 256MB (elixir) Total: 512 MB ☐ PC1600 ☒ PC2100
 VGA Compro Geforce4 MX440 AGP ☒ AGP 4X ☐ Onboard
 SCSI Adaptec ASC-29160 Ultra160 ☐ ISA ☒ PCI Slot: 2
 Sound Realtek ALC202A AC'97 ☐ PCI Slot: ☒ On board
 Mouse Logitech First Mouse+ Mouse ☐ COM ☒ PS/2

The following SCSI devices test and WinStone 2001/Copy large files(over 500MB) under Windows XP/2000 with their respective SCSI drivers installed and set to the follow condition 1024 x 768 x 32bit colors, resolution refresh rate of 85Hz, small font.

ITEM	Vendor	Model Name	Product Description
Hard Disk	IBM	COMP IEC-950	Ultra2 Wide 9.1GB
		COMP IEC-950	Ultra2 Wide 36GB
		DDRS-39130	UltraII SCSI HDD 9.1GB
		DDYS-T36950	Ultra2 Wide 36.7GB
	Seagate	ST-39173W	Barracuda 9LP Ultra Wide 9.1GB
		ST-39236LW	Barracuda Ultra160 Wide 9GB
		ST-318437LW	Barracuda Ultra160 Wide 18GB
		ST-39204LW	Cheetah Ultra160 Wide 9GB
		ST-318406LW	Cheetah Ultra160 Wide 18GB
		ST318452LW	Cheetah Ultra160 Wide 18GB
CD-ROM	Plextor	PX-40Tsi	Ultra SCSI CD-ROM 40X
		PX-W124Tsi	(32R12W4RW) CD-RW 32X
	Toshiba	XM-6210B	Ultra SCSI CD-ROM 32X
	Panasonic	CR-508	SCSI-II CD-ROM 24X
		LF-D291	SCSI-II 4.7GB DVD-RAM
	Afreedy	CD-2050S	Ultra SCSI CD-ROM 50X
	TEAC	CD-532S	Ultra SCSI CD-ROM 32X
		CDR 56S	(24R6W) CD-RW 24X
		CD-W512S-B82	(32R12W10RW) CD-RW 32X
	Nichimen	CDR-BP3N	(32R12W10RW) CD-RW 32X
MO	Konica	GF-640	Super MO II External MO
	Fujitsu	MDG3064SS	DYNA MO 640 SF
ZIP	Iomage		SCSI ZIP 250 (External)

7.3.2 IDE Fixed Disk Drive Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002 .
☒ Win 2000 Ver: 5.00.2195 .
CPU Intel Pentium 4 2.4GHz(FSB533) ☒ Intel
Memory Micron 512MB (Micron) **Total:** 1000 MB ☐ PC1600 ☒ PC2100
VGA ASUS V8440 AGP ☒ AGP 4X ☐ Onboard
CD-ROM ASUS DVD-E616 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
Sound Realtek ALC650 AC'97 ☐ PCI_Slot: ☒ Onboard
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot: ☒ Onboard
Mouse Logitech First Mouse+ Mouse ☐ COM ☒ PS/2

The following IDE devices test and CC WinStone 2002/Copy large files(over 500MB) under Windows XP/2000 with OS default drivers installed and set to the follow condition 1024 x 768 x 32bit colors, resolution refresh rate of 85Hz, small font.

IDE ATA/100

Vendor	Model Name	Capacity
IBM	DTLA-307015	15.3GB
	DTLA-305020	20.5GB
	DTLA-307020	20.5GB
	DTLA-307030	30.7GB
	IC35L040AVER07-0	40GB
	DTLA-307045	46.1GB
	DTLA-307060	61.4GB
	IC35L060A	61.5GB
	DTLA-307075	76.8GB
	IC35L080AVVA07	82.3GB
	IC35L120AVVA07	120GB
Maxtor	51536H2	15.3GB
	52049H4	20.4GB
	53073H6	30.6GB
	34098H4	40.9GB
	54098H8	40.9GB
	4K040H2	40GB
	5T060H6	61GB
	98196H8	80GB
	4K080H4	80GB
	4W100H6	100GB
Seagate	ST320414A	20GB
	ST330631A	30.6GB
	ST340016A	40GB
	ST340810A	40GB
	ST340824A	40GB
	ST380020A	80GB

	ST380021A	80GB
WD	Caviar WD300BB	30GB
	Caviar WD400BB	40GB
	Caviar WD600BB	60GB
	Caviar WD800BB	80GB
	Caviar WD800JB	80GB
	Caviar WD1000BB	100GB
	Caviar WD1200BB	120GB
	Caviar WD1200JB	120GB
Samsung	SV3063H	30.6GB
	SV4084H	40.8GB

IDE ATA/133

Vendor	Model Name	Capacity
Maxtor	6L040J2	40GB
	6L040L2	40GB
	6L060J3	60GB
	6L060L3	60GB
	6L080J4	80GB
	6L080L4	80GB
	4G160JB	160GB

7.3.3 ATAPI CD-ROM /DVD-ROM Device Product

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002
CPU Intel Pentium 4 1.8GHz(FSB400) ☒ Intel
Memory Crucial 256MB (Micron) **Total: 512 MB** ☐ PC1600 ☒ PC2100
VGA ELSA GLADIAC 517SV AGP ☒ AGP 4X ☐ Onboard
HDD WD Caviar 1200JB 120GB IDE ☐ ATA/133 ☒ ATA/100
Sound Realtek ALC202A AC'97 **Channel:** ☒ PM ☐ PS ☐ SM ☐ SS
Mouse Logitech Trackman Marble Mouse **PCI_Slot:** ☐ On board
☐ COM ☒ PS/2

The following IDE devices test play VCD or DVD/Copy large files(over 500MB) under windows XP with OS default drivers installed and set to the follow condition 1024 x 768 x 32bit colors, resolution refresh rate of 85Hz, small font.

7.3.3.1 ATAPI CD-ROM:

Vendor	Model Name	Product Description
Genuine	GC-952B	ATAPI CD-ROM 52X UDMA33
ASUS	CD-S520/A	ATAPI CD-ROM 52X UDMA33
4KUS	CCD-52X6D	ATAPI CD-ROM 52X UDMA33
LG	CRD-8522B	ATAPI CD-ROM 52X Mode4

7.3.3.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
ASUS	DVD-E616	ATAPI DVD-ROM 16X (UDMA100)
SONY	DDU1621	ATAPI DVD-ROM 16X
Pioneer	DVD-116/2	ATAPI DVD-ROM 16X (UDMA66)
AOpen	DVD1648	ATAPI DVD-ROM 16X (UDMA66)
Panasonic	SR-8587-B	ATAPI DVD-ROM 16X
NEC	DV-5800A	ATAPI DVD-ROM 16X (UDMA33)
BTC	BDV 316B	ATAPI DVD-ROM 16X (UDMA33)
LG	DRD-8120B	ATAPI DVD-ROM 12X

7.4 Peripherals

7.4.1 Parallel/Serial Port Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002.
CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Buffalo 128MB(Samsung) **Total:** 256 MB ☐ PC1600 ☒ PC2100
HDD WD Caviar 300BB 30GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
CD-ROM EPO DVD-8216 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
VGA Compro Geforce4 MX440 AGP ☒ AGP 4X ☐ Onboard
Sound Realtek ALC202A AC'97 ☐ PCI_Slot: __. ☒ On board
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot: __. ☒ On board
Mouse Logitech TrackMan Marble Mouse ☐ COM ☒ PS/2

The following Parallel/Serial devices be tested under Windows XP with OS default drivers installed.

Vendor	Product Description	Bus I/F
Iomega	Parallel ZIP250	LPT
HP	DeskJet 990cxi	LPT
	DeskJet 1220c	LPT
EPSON	Stylus Color 900	LPT
ELSA	MicroLink 56K Internet	COM
Logitech	WingMan Formula Force joystick	COM

7.4.2 USB Device Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002.
CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Buffalo 128MB(Samsung) **Total:** 256 MB ☐ PC1600 ☒ PC2100
HDD WD Caviar 300BB 30GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
CD-ROM EPO DVD-8216 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
VGA Compro Geforce4 MX440 AGP ☒ AGP 4X ☐ Onboard
Sound Realtek ALC202A AC'97 ☐ PCI_Slot: __. ☒ On board
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot: __. ☒ On board
Mouse Logitech TrackMan Marble Mouse ☐ COM ☒ PS/2

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

7.4.2.1 USB 1.1 Devices

Type	Vendor	Description
Mouse	Logitech	USB Wheel Mouse (Optical) (M-BD58)
		MouseMan Dual Optical (M-BL63B)
	Microsoft	IM Explorer 3.0 U/P Mouse (X06-25120)
		Wireless Explorer USB Mouse (X08-12616)
HUB	Belkin	Express Bus F5U001
Keyboard	Microsoft	Natural Keyboard Pro
Printer	HP	DeskJet 1220c
	EPSON	Stylus Color 900
Scanner	HP	ScanJet 4200C
MO	OLYMPUS	Turbo MO MINI (MOS3390S)
ZIP	iomega	ZIP 250
FDD		Generic USB FDD
Flash H_Disk	TREK	ThumbDrive USB Flash Hard Disk
GamePad	Logitech	WingMan Extreme USB GamePad
Joystick	Microsoft	SideWinder Precision 2

7.4.2.2 USB 2.0 Devices

Type	Vendor	Description
HUB	Hung	USB 2.0 Hi-Speed Hub
HDD	Fujitsu	DYNA DISQ 20GB (MMA2200VB)
CD-R/RW	Plextor	PX-W2410TU (40R24W10RW)
Scanner	EPSON	Perfection 2450 Photo
MO	Fujitsu	DYNA MO 1300U2 (MDG3130UB)

7.5 Power Supply Products

Test Configuration:

OS Ver ☒ Win XP + SP1 Ver: 2002
CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Buffalo 128MB(Samsung) **Total: 256 MB** ☐ PC1600 ☒ PC2100
HDD WD Caviar 300BB 30GB IDE ☐ ATA/133 ☒ ATA/100
CD-ROM EPO DVD-8216 16X IDE DVD **Channel: ☒ PM ☐ PS ☐ SM ☐ SS**
VGA Compro Geforce4 MX440 AGP **Channel: ☐ PM ☐ PS ☒ SM ☐ SS**
Sound Realtek ALC202A AC'97 ☒ AGP 4X ☐ Onboard
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot: ☒ Onboard
Mouse Logitech TrackMan Marble Mouse ☐ PCI_Slot: ☒ Onboard
☐ COM ☒ PS/2

The following Power supply devices test Cool/Warm boot, restart and power management under Windows XP with over 5 times.

Vendor	Product Description	Power	AC Input Voltage	Type
DELTA	DPS-300KB A Rev:00	300W	110/220	ATX
	DPS-300KB-1 A Rev:00	300W	110/220	ATX
Seventeam	ST-250BLP	250W	110/220	ATX
	ST-250BLV	250W	110/220	ATX
	ST-250GL	250W	110/220	ATX
	ST-300BLV	300W	110/220	ATX
	ST-350GL	350W	110/220	ATX
Enlight	HPC-340-101	340W	110/220	ATX
Seasonic	SS-250FS	250W	110/220	ATX
	SS-300FS	300W	110/220	ATX
ICute	AL-3000P4	300W	110/220	ATX
	P4-3000TC	300W	110/220	ATX
L&C	LC-A250ATX	250W	110/220	ATX
Good Vision	XP-375X	375W	110/220	ATX
HEC (HeroIchi)	HEC-250VR-T	250W	110/220	ATX
	HEC-300VD-T	300W	110/220	ATX
	HEC-350LD-T	350W	110/220	ATX
SD	SD-300W-12V	300W	110/220	ATX
HOPELY	ATX-250SE-P4	250W	220	ATX
	ATX-300SE-P4	300W	220	ATX
	ATX-300S	300W	220	ATX
Golden Field	ATX-320WB&P4	300W	220	ATX
..QY	QY-300T	300W	220	ATX
....	ST-ATX325	300W	220	ATX
STR	SPS-300W Rev:03	300W	220	ATX

8. Software Compatibility Test Suite

8.1 Base Operating System

8.1.1 Microsoft Windows 98 SE:

Test Configuration:

CPU Intel Pentium 4 2.26GHz(FSB533) ☒Intel
Memory Apacer 256MB(Infineon) **Total: 512 MB** ☐PC1600 ☒PC2100
HDD IBM DTLA-307075 76.8GB IDE ☐ATA/133 ☒ATA/100
Channel: ☒PM ☐PS ☐SM ☐SS
VGA ATI Radeon 8500 AGP ☒AGP 4X ☐Onboard
Sound Realtek ALC202A AC'97 ☐PCI_Slot:__. ☒On board
CD-ROM BenQ DVD1648A 16X IDE DVD **Channel:** ☐PM ☐PS ☒SM ☐SS
LAN Realtek RTL8201BL(PHY) ☐PCI_Slot:__. ☒On board
Mouse Microsoft IntelliMouse Mouse ☐COM ☒PS/2

Test Item		Result	Remark
FDISK (FAT32)		PASS	
Format FDD		PASS	
FIC CD-PRO all M/B drivers Install & Test		PASS	
FIC CD-Plus V2.0 Auto run test		PASS	
CoreTest 92 (Transfer Rate test)		PASS	
Large file Copy from CD/DVD-ROM (Over 500MB)		PASS	
Device Management check (No Caution)		PASS	
VGA Resolution/Color change		PASS	
Defrag test		PASS	
Install Office XP		PASS	
Auto Shutdown (system power off)		PASS	
DVD play (name: <i>Deep Blue Sea</i>)		PASS	
Power Management	Power button	PASS	
	Keyboard Sleep Key	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
S3 (Suspend To Memory)	Power button	PASS	
	Keyboard Sleep Key (98keyboard)	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
System Shutdown	Power button (Setting from PM)	PASS	
	Start → Shut down item	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 98 SE	4.10.2222A	English	Microsoft	Pass

8.1.2 Microsoft Windows ME:

Test Configuration:

CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Apacer 256MB(Infineon) **Total: 512 MB** ☐ PC1600 ☒ PC2100
HDD IBM DTLA-307075 76.8GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA ATI Radeon 8500 AGP ☒ AGP 4X ☐ Onboard
Sound Realtek ALC202A AC'97 ☐ PCI_Slot:_. ☒ On board
CD-ROM BenQ DVD1648A 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot:_. ☒ On board
Mouse Microsoft IntelliMouse Mouse ☐ COM ☒ PS/2

Test Item		Result	Remark
FDISK (FAT32)		PASS	
FIC CD-PRO all M/B drivers Install & Test		PASS	
FIC CD-Plus V2.0 Auto run test		PASS	
Device Management check (No Caution)		PASS	
Large file Copy from CD/DVD-ROM (Over 500MB)		PASS	
Install Office XP		PASS	
Defrag test		PASS	
DVD play (name: <i>Deep Blue Sea</i>)		PASS	
Power Management (Stand By function)	Power button	PASS	
	Keyboard Sleep Key	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
S3 (Suspend To Memory)	Power button	PASS	
	Keyboard Sleep Key (98keyboard)	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	

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

8.1.3 Microsoft Windows XP/Home Edition + Service Pack 1:

Test Configuration:

CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Apacer 256MB(Infineon) **Total: 512 MB** ☐ PC1600 ☒ PC2100
HDD IBM DTLA-307075 76.8GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA ATI Radeon 8500 AGP ☒ AGP 4X ☐ Onboard
Sound Realtek ALC202A AC'97 ☐ PCI_Slot:_. ☒ On board
CD-ROM BenQ DVD1648A 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot:_. ☒ On board
Mouse Microsoft IntelliMouse Mouse ☐ COM ☒ PS/2

Test Item		Result	Remark
Install Win XP with NTFS (boot from CD)		PASS	
FIC CD-PRO all M/B drivers Install & Test		PASS	
Device Management check (No Caution)		PASS	
Large file Copy from CD/DVD-ROM (Over 500MB)		PASS	
Install Office XP		PASS	
Defrag test		PASS	
DVD play (name: <i>Deep Blue Sea</i>)		PASS	
Power Management (Stand By function)	Power button	PASS	
	Keyboard Sleep Key	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
S3 (Suspend To Memory)	Power button	PASS	
	Keyboard Sleep Key (98keyboard)	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	

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 XP / Home Edition	2002	English	Microsoft	Pass
Windows XP Service Pack	1.0	English	Microsoft	Pass

8.1.4 Microsoft Windows 2000 + Service Pack 3:

Test Configuration:

CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Apacer 256MB(Infineon) **Total: 512 MB** ☐ PC1600 ☒ PC2100
HDD IBM DTLA-307075 76.8GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA ATI Radeon 8500 AGP ☒ AGP 4X ☐ Onboard
Sound Realtek ALC202A AC'97 ☐ PCI_Slot:_. ☒ On board
CD-ROM BenQ DVD1648A 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
LAN Realtek RTL8201BL(PHY) ☐ PCI_Slot:_. ☒ On board
Mouse Microsoft IntelliMouse Mouse ☐ COM ☒ PS/2

Test Item		Result	Remark
Install Win 2000 with NTFS (boot from CD)		PASS	
Format FDD		PASS	
FIC CD-PRO all M/B drivers Install & Test		PASS	
VGA Resolution/Color change		PASS	
Large file Copy from CD/DVD-ROM (Over 500MB)		PASS	
Install Office XP		PASS	
DVD play (name: <i>Deep Blue Sea</i>)		PASS	
Power Management (Stand By function)	Power button	PASS	
	Keyboard Sleep Key	PASS	
	Start → Stand By item	PASS	
	Time Out	PASS	
S3 (Suspend To Memory)	Power button	PASS	
	Keyboard Sleep Key (98keyboard)	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	

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	3.0	English	Microsoft	Pass

8.1.5 Microsoft Windows NT 4.0 + Service Pack 6:

Test Configuration:

CPU Intel Pentium 4 2.26GHz(FSB533) ☒ Intel
Memory Apacer 256MB(Infineon) **Total: 512 MB** ☐ PC1600 ☒ PC2100
HDD IBM DTLA-307075 76.8GB IDE ☐ ATA/133 ☒ ATA/100
Channel: ☒ PM ☐ PS ☐ SM ☐ SS
VGA ATI Radeon 8500 AGP ☒ AGP 4X ☐ Onboard
Sound Realtek ALC202A AC'97 ☐ PCI_Slot: ☒ On board
CD-ROM BenQ DVD1648A 16X IDE DVD **Channel:** ☐ PM ☐ PS ☒ SM ☐ SS
Mouse Microsoft IntelliMouse 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	
Large file Copy (one file Over 500MB)	PASS	
VCD/DVD play (name: <i>Deep Blue Sea</i>)	PASS	
CC WinStone 2002	PASS	
WinStone 2001 V1.02	PASS	

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

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



Test Engineer:

BIOS: Benson Shen

OS: Kai Dane

I/O : Leon Liang

Audio: Lion Liou

CPU: Steven Huang

VGA: Scott Lin

Memory: Jimmy Kuo

IDE Devices: Frando Tzeng

Power: RIC Lu

Check by: Lion Liou

Ownership: Benson Shen