

Test Report

LV-670 VER : A

Chipset	BIOS	CPU
Intel 82845GV(GMCH) Intel 82801DB(ICH4)	Phoenix Award 6.00PG 11/25/2002-i845G-AD-6A69VTPLC-00	Socket478

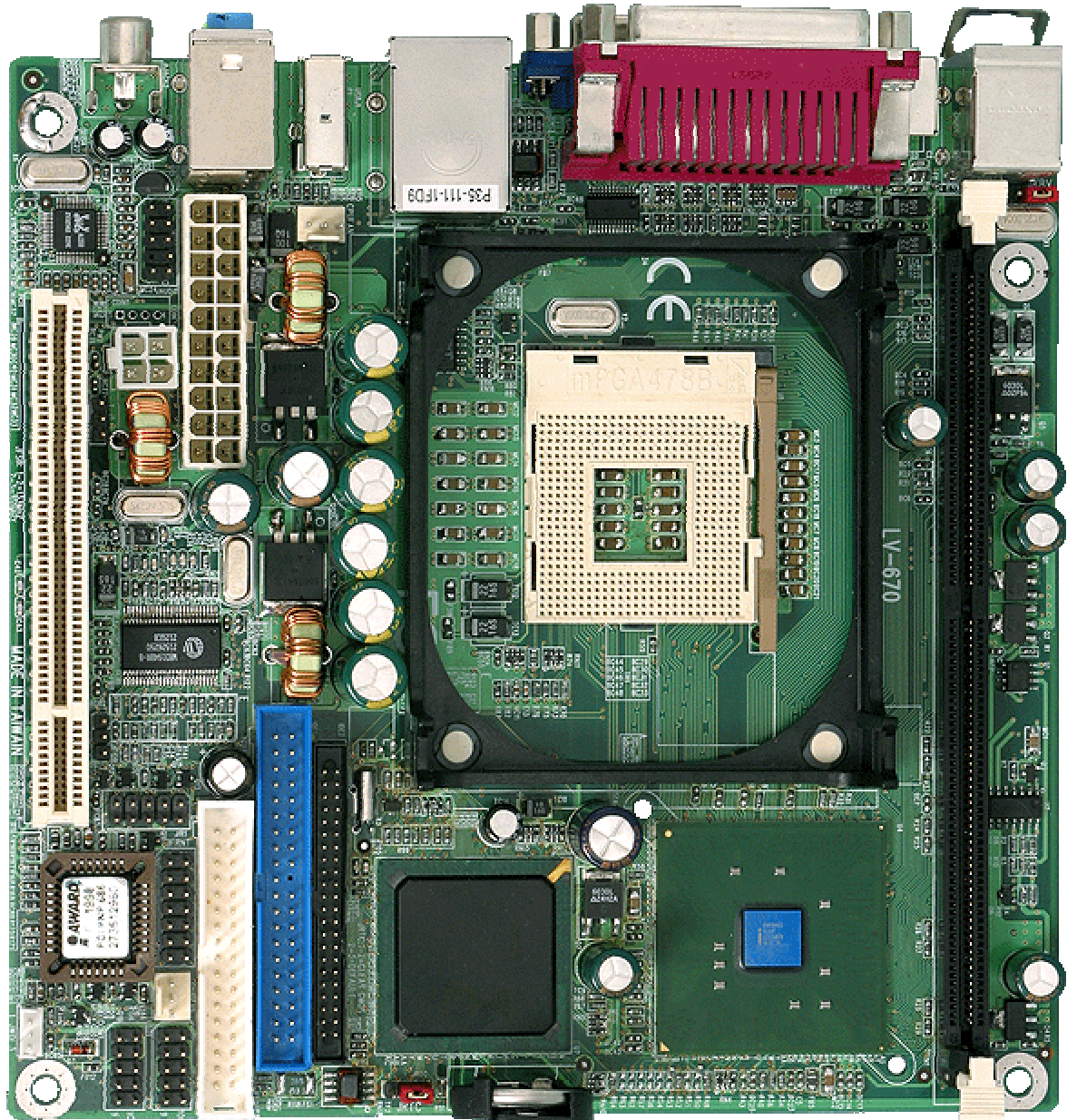


On Board 6-Channel / SPDIF Audio and TV-Out Interface

On Board Intel PRO/100+LAN Ethernet Controller

Hi-Speed USB 2.0 and IEEE1394

LV-670



Compact Mini-FlexATX Form Factor @ 170 x 170 mm

LV-670

Product Name : ***LV-670***

BIOS File Name : ***PHOENIX AWARD BIOS***

BIOS Revision : ***Rev. 1.1***

Released on : ***Nov.28 2002***

PCB Board : ***VER.A***

Sampling Quantity : ***20 Sampling Boards***

Testing Engineer : ***Antony Liang***

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Testing Period : ***From Nov.11 2002 ~ Dec.04 2002***

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LV-670 Mainboard Specification

- **Introduction :**

Commell LV670 is optimally designed for high performance feature-rich enthusiast IPC. Powered by the latest Intel 845G (845GL/845GV/845GE) chipset with integrated Intel Extreme Graphics Engine , supporting Intel Pentium 4 processor with HT Technology and the latest and fastest DDR memory maximizes the system performance for current and future intensive application.
- **Chipset :**
 1. **Intel 845GV Chipset (788 FC-BGA)**
 - Support 400/533 MHz FSB
 - Support Intel Extreme Graphics
 - Support DVO.
 2. **ICH4 Chipset (421 BGA)**
 - AC'97 2.2 Interface (Realtek ALC650 Chipset)
 - 4 USB 2.0/1.1 port
 - 2 IDE channel support ATA100 (Up to 4 Devices)
 - Support SMBus 2.0
 - Intel PRO / 100 LAN (Intel 82562ET Chipset)
 - IEEE1394 Agere FW323 Chipset.
 3. **Onboard I/O :**
 - I/O integrated with K/B , Mouse , FDD , SIR , Parallel and Serial.
- **DDRAM Module :**

184 pin DIMM for DDR200/DDR266 (**DDR266/DDR333 FOR LV670GE**)
Support DDRAM up to 1GB.
- **6 Channel Audio with S/P-DIF Function :**

Integrated Realtek ALC650 AC97 audio codec chip , enabling users to experience the seamless high quality 6-channel audio while watch Movies or gaming.
- **Hi-Speed USB2.0 and IEEE1394 :**

Dual-port rear connectors and one headers for two front panel port.
With data transfer rate up to 480Mbps , 40 times faster than USB1.1 providing a faster data transfer rate between platform and peripheral
But IEEE1394 with data transfer rate up to 100/200/400Mbps.
- **Form Factor :**

Commell LV670 is based on the ultra compact mini-Flex ATX form factor with only 170 x 170 mm of dimension ultra compact size.

LV-670

CPU Compatibility Test

CPU FSB	Operating System	AGP	DDR	Test Environment	Cc. Winstone 2001 Score	Result
P4-1.6GHz 100MHz	Windows 98SE (English)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	56.2 / 57.8	Pass
Celeron 1.7GHz 100MHz	Windows 98SE (English)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	51.2 / 53.7	Pass
P4-1.8GHz 100MHz	Windows ME (English)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	62.4 / 63.5	Pass
P4-1.8AGHz 133MHz	Windows2000 (Professional)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	70.1 / 73.5	Pass
P4-2.8GHz 133MHz	Windows XP (Professional)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	89.4 / 91.3	Pass
P4-2.4GHz 100MHz	Windows XP (Professional)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	70.9 / 76.6	Pass
P4-2.53GHz 133MHz	Windows XP Home Edition	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	72.6 / 73.8	Pass
P4-2.8GHz 133MHz	Windows XP Home Edition	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	76.8 / 77.9	Pass
P4-3.06GHz 133MHz	Windows XP (Professional)	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	70.2 / 71.9	Pass
P4-2.4GHz 100MHz	Red Heat Linux 7.3	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	NA	Pass
Celeron 1.7GHz 100MHz	Red Heat Linux 8.0	On board 845GV	DDR266 512MB K4H60838C-TCB0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	NA	Pass

DDR DRAM Compatibility Test

CPU Type	DRAM DDR Freq	Capacity Mbytes	IC Vendor	IC Module	Test Environment	Operating System	Result
P4-2.4GHz (100 x 24)	DDR-333	512MB	SAMSUNG	K4H5608380-TC B3	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	512MB	SAMSUNG	K4H60838C-TCB 0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	WINBOND	W942508AH-75	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	SAMSUNG	K4H280838C-TC B0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	MICRON	MT46V16M8	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	ELIXIR	N2DS12880AT-75 B	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	SAMSUNG	K4H60838B-TCB 0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	NANYA	NT5DS16M8AT-7 K	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass
P4-2.4GHz (100 x 24)	DDR-266	256MB	HYUNDAI	HY5DU28822T-H	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AMH	Windows 98SE	Pass

Windows Application Function Test

CPU FSB	Operating System	Software	Test Key Point	Version	Test Environment	Result
P4-2.4GHz 100MHz	Windows2000 (Professional)	Adobe Photoshop	Installation	7.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Adobe Acrobat	Installation	5.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	U lead Photo Impact	Installation	8.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	MGI Photo Vista	Installation	2.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Ultra Edit	Installation	9.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Dream weaver Ultra Dev	Installation	4.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	CorelDraw	Installation	9.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Media Player	Installation	7.1	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	ACDSee	Installation	5.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Norton AntiVirus 2002	Installation	Professional	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Norton Ghost 2002	Installation	2002	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Norton AntiVirus For Gateways	Installation	2.5	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Dr.eye2002	Installation	2002	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Real player	Installation	8.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass

CPU Type	Software	Software	Test Key Point	Version	Test Environment	Result
P4-2.4GHz 100MHz	Windows2000 (Professional)	SiSoFtware Sandra2001	Installation	Professional	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Visual Basic	Installation	6.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	PC-CILLIN 2002	Installation	2002	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Dap5300	Installation	4.03	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Cyber Link Power DVD	Installation Play DVD	4.0	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	NAVIS WIN DVD	Installation Play DVD	Professional	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Open Office	Installation	Professional	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Nero-Burning	Installation	5599	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Daytona USA	Installation Play Game	Game	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	EMPIRE EARTH	Installation Play Game	Game	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	War zone 2100	Installation Play Game	Game	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Quake III Arena	Installation Play Game	Game	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	Age of Empires II	Installation Play Game	Game	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	H LF-LIFE	Installation Play Game	Game	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	FIFA World Cup 2002	Installation Play Game	2002	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
P4-2.4GHz 100MHz	Windows2000 (Professional)	NBA 2003	Installation Play Game	2003	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass

On Board Sound Function Test

CPU Type	Operating System	Function Tested	Function Check List	Test Environment	Result
Socket 478 P4-2.4GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	Speak Out (Back) Check channel-L and channel-R	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-1.8GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	Speak Out (Front) Check channel-L and channel-R	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.53GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	MIC 1 mono record with Speak Out (Front)	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	Line In (Front) Check channel-L and channel-R	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	5.1 Channel with Speak Out (Back)	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	5.1 Channel with SPDIF Audio (Back)	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	Before Suspend On Board Sound function	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Front Panel Function Check	After Resume On Board Sound function	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

On Board LAN Function Test

CPU Type	Operating System	Chipset	Model Name	Speed	Link Internet	Test Environment	Result
Socket 478 P4-2.4GHz	Win 98SE、 Win 2K Pro Win ME、 Win XP Pro	Intel Pro	Intel Pro / 100 LAN Ethernet	10/100	IE6.0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

On Board VGA Function Test

Operating System	Function Tested	Application Used	Resolution (Color Bit)	Lowest Refresh Rate	Highest Refresh Rate	Test Environment	Result
Windows XP Professional	2D / 3D Benchmark Application Test	3D Mark2001	1024x768 (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 2K Professional	2D / 3D Benchmark Application Test	3D Mark2001	1024x768 (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 98SE Windows ME	2D / 3D Benchmark Application Test	3D Mark2001	1024x768 (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows NT 4.0	2D / 3D Benchmark Application Test	Win bench 99	1024x768 (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows XP Professional	Resolution & Refresh Rate Check		800x600 1024x768 (32 Bit)	60Hz	120Hz	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows XP Professional	Resolution & Refresh Rate Check		1024x768 2048x1536 (16 Bit)	60Hz	75Hz	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 2K Professional	Resolution & Refresh Rate Check		640x480 800x600 (256)	60Hz	120Hz	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 2K Professional	Resolution & Refresh Rate Check		1024x768 2048x1536 (16 Bit)	60Hz	85Hz	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 98SE Windows ME	Resolution & Refresh Rate Check		640x480 800x600 (16 Bit)	60Hz	60Hz	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 98SE Windows ME	Resolution & Refresh Rate Check		1024x768 (16 Bit)	60Hz	60Hz	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

Operating System	Function Tested	Application Used	Resolution (Color Bit)	Lowest Refresh Rate	Highest Refresh Rate	Test Environment	Result
Windows 98SE Windows ME Win 2K Pro Win XP Pro	Dual Display on Monitor and TV	Primary : On Board VGA Secondary : TV-OUT & Video	800x600 1024x768 (16Bit) (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 98SE Windows ME Win 2K Pro Win XP Pro	Dual Display on Monitor	Primary : On Board VGA Secondary : S3 Trio64 V2/D3	800x600 1024x768 (16Bit) (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 98SE Windows ME Win 2K Pro Win XP Pro	3D Game Compatibility Test	Quake III Arena Final Reality FIFA World Cup 2002	800x600 1024x768 (16Bit) (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Windows 98SE Windows ME Win 2K Pro Win XP Pro	VCD / DVD Playback	Media Player Win DVD Power DVD	800x600 1024x768 (16Bit) (32 Bit)	NA	NA	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

On Board USB Function Test

CPU Type	Operating System	Device Type	Model Name	Vendor	Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows 98SE Windows ME	USB Mouse	HID-compliant mouse	DCS	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Windows 98SE Windows ME	USB Keyboard	Natural Keyboard Pro	Microsoft	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Windows 2000 Professional	USB Camera	I-Cam USB Camera	DCS	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Windows XP Professional	USB 2.0 Hard Disk	Genesys Logic 1394 Storage Device IEEE1394 SBP2 Device	Logic	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

On Board IEEE1394 Function Test

CPU Type	Operating System	Device Type	Model Name	Vendor	Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows 98SE Windows ME	IEEE1394 Hard Disk			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 Celeron 1.7GHz	Windows 98SE Windows ME	IEEE1394 PCI Card	Agere FW323-05 1394A Link / PHY	Agere	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

OS (Microsoft) Installation Test

CPU Type	FSB	AGP	DDR	Operating System	OS Version	Test Environment	Result
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Windows NT 4.0		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Windows 98SE (English)		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Windows 98SE (Chinese)		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Windows ME (English)		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Windows ME (Chinese)		HDD : Seagate ST330630A 30.6GB <i>DVD : Aopen 16XDVD-ROM/AM</i>	Pass
Socket 478 P4-2.4GHz	100MHz	On board 845GV	DDR266 512MB K4H60838C-TCB0	Windows 2000 Professional	5.00.219 5	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	100MHz	On board 845GV	DDR266 512MB K4H60838C-TCB0	Windows 2000 Advance Server		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	100MHz	On board 845GV	DDR266 512MB K4H60838C-TCB0	Windows XP Professional	5.1.Build 2600	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	100MHz	On board 845GV	DDR266 512MB K4H60838C-TCB0	Windows XP Home Edition	5.1.Build 2600	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

OS (Linux) Installation Test

CPU Type	FSB	AGP	DDR	Operating System	OS Version	Test Environment	Result
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Linux Red Hat	7.3	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	133MHz	On board 845GV	DDR266 256MB MT46V16M8	Linux Red Hat	8.0	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

IDE Device Compatibility Test

IDE1 IDE2	Master Slave	Device Vendor	Device Type	Model Name	UDMA PIO	Cable Type	Test Environment	Result
IDE1	Master	Seagate	HDD	ST34520A 30.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Seagate	HDD	ST330630A312 30.6 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Slave	IBM	HDD	DJNA-313000 13.6 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	IBM	HDD	DJNA-352030 20.3 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	IBM	HDD	DTLA-307030 30.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Quantum	HDD	KX13600AT 15.3 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Quantum	HDD	AS20A014-03-B 20.5 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Slave	Quantum	HDD	AS20A014-03-B 20.5 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Slave	Maxtor	HDD	5T020H2 20.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Maxtor	HDD	2B020H1 20.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Maxtor	HDD	98196H8 80.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Maxtor	HDD	4G160J8 160.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Western Digital	HDD	AC313000 13.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE1	Master	Western Digital	HDD	WD400EB 40.0 GB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

IDE1 IDE2	Master Slave	Device Vendor	Device Type	Model Name	UDMA PIO	Cable Type	Test Environment	Result
IDE2	Master	Traxdata	CDRW	24x10x40 CD-RW			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	Panasonic	DVDROM	SR-8583-B			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	Pioneer	DVDROM	DVD-020			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	A Open	DVDROM	DVD1648			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	Hitachi	DVDROM	GD-2500			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	ASUS	CDROM	CD-S520/A			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	TEAC	CDROM	CD-540E1.0A 52X			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	SONY	CDROM	CDU4811 PY09 48X			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	ACER	CDROM	CD-2050E 50X			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	CREATIVE	CDROM	CD-5233E 52X			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
IDE2	Master	PHILIPS	CDROM	PCA 323CD 50X			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

BIOS Check Function Test

CPU Type	DDR	Function on System BIOS	OS	Test Environment	Result
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	CPU L1 , L2 Cache		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Quick Power on Self Test		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	On Chip Primary PCI IDE		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	On Chip Secondary PCI IDE		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	First Boot Device HDD		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Second Boot Device CDROM		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Boot to DOS from driver A		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Enable / Disable USB KB Support		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Init Display First on PCI Slot or On board AGP		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Boot Display On CRT or TV		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	ACPI Enable / Disable Function	Win2K	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	CPU Warning Temperature		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	CPU Frequency Control		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	PWR ON After PWR-Fail		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	On board Serial Port 1		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU Type	DDR	Function on System BIOS	OS	Test Environment	Result
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	On board Parallel Port		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Current CPU FAN Speed		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Current System FAN Speed		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Soft-Off by PWR-BTTN		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	DDR266 256MB W942508AH-75	Power On Self Test		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Wake Up On LAN		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Resume by Alarm		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Wake-Up by PCI Card		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Set User Password		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	DDR266 256MB W942508AH-75	Set Supervisor Password		HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

ACPI Function Test

Function Tested	OS	Test Utility	ACPI Status	Comment	Test Environment	Result
Check RTC	DOS	Wake Up From Suspend Mode By KB			HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Check ACPI	Win2k Pro	Suspender.exe 5 times	S3	WHCT (Windows Hardware compatibility Test) 12hour	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

Performance Test

CPU	OS	DDR	Content Creation Winstone2001					Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows 98 SE	DDR266 256MB K4H60838B-TCB0	63.5	63.6	63.5	63.4	63.6	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-1.8GHz	Windows 98 SE	DDR266 256MB K4H60838B-TCB0	71.5	71.3	71.8	70.9	71.4	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	Content Creation Winstone2001					Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows 2K Pro	DDR266 256MB K4H60838B-TCB0	69.8	69.4	69.5	64.5	64.3	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	Windows 2K Pro	DDR266 256MB K4H60838B-TCB0	80.6	80	79.8	79.9	80.1	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	Content Creation Winstone2001					Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows XP Pro	DDR266 256MB W942508AH-75	61.3	61.7	62.4	62.5	62.3	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.8GHz	Windows XP Pro	DDR266 256MB W942508AH-75	91.3	93	92.4	92.6	92.2	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	Business Winstone2001					Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows 98 SE	DDR266 512MB K4H60838C-TCB0	34.5	34.8	34.6	34.6	34.9	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-1.8GHz	Windows 98 SE	DDR266 512MB K4H60838C-TCB0	40.5	40.8	41.2	41.1	40.8	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	Business Winstone2001					Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows 2K Pro	DDR266 512MB K4H60838C-TCB0	43.5	43.9	43.8	44.1	43.8	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.4GHz	Windows 2K Pro	DDR266 512MB K4H60838C-TCB0	60.8	59.4	60.2	59.9	59.4	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	Business Winstone2001					Test Environment	Result
Socket 478 Celeron 1.7GHz	Windows XP Pro	DDR266 512MB K4H60838C-TCB0	41.5	41.2	40.5	40.6	41.3	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.26GHz	Windows XP Pro	DDR266 512MB K4H60838C-TCB0	59.8	58.8	59.2	59.1	58.2	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	VGA	Resolution (Color Bit)	3D Mark 2001	Test Environment	Result
Socket 478 P4-2.8GHz	Windows XP Pro	DDR266 512MB K4H60838C-TCB0	On Board 845GE	1024x768 (16Bit, 60Hz)	1552	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.8GHz	Windows 2K Pro	DDR266 512MB K4H60838C-TCB0	On Board 845GE	1024x768 (16Bit, 60Hz)	1448	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.8GHz	Windows 98 SE	DDR266 512MB K4H60838C-TCB0	On Board 845GE	1024x768 (16Bit, 60Hz)	1397	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	OS	DDR	VGA	Resolution (Color Bit)	Final Reality	Test Environment	Tester
Socket 478 P4-2.8GHz	Windows XP Pro	DDR266 512MB K4H60838C-TCB0	On Board 845GE	1024x768 (16Bit, 60Hz)	52.8	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.8GHz	Windows 2K Pro	DDR266 512MB K4H60838C-TCB0	On Board 845GE	1024x768 (16Bit, 60Hz)	49.6	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass
Socket 478 P4-2.8GHz	Windows 98 SE	DDR266 512MB K4H60838C-TCB0	On Board 845GE	1024x768 (16Bit, 60Hz)	41.6	HDD : Seagate ST330630A 30.6GB DVD : Aopen 16XDVD-ROM/AM	Pass

CPU	DDR	OS	VGA	Quick Tech Professional	Version	Test Environment	Result
Socket 478 P4-2.8GHz	DDR266 512MB K4H60838C-TCB0	DOS	On Board 845GV	Display Test Run	V4.16	HDD : Maxtor 4G160J8 GAK819K0 160.0GB CD-ROM : IDE/ATAPI CD-ROM 52XS 172G	Pass
				Activity is keyboard LED			
				Test CPU			
				Test NPU			
				Test Timer			
				Test RTC			
				Test Keyboard Ctrl			
				Test INT#1			
				Test INT#2			
				Test DMA#1			
				Test DMA#2			
				Test Speaker			
				Test Base Memory			
				Test Extended Memory			
				Test Cache Memory			
				Test Drive#1 Quick Auto			
				Test Atapi#3			
				Com1 (3F8) AutoDetect			
LPT1 (378) AutoDetect							
Test VESA Memory							

Dear Customer :

**If you have any question regarding this report , please feel free to contact us.
We will be glad to help you.**

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