

P4LA
Test Report
Edition 1.0
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Identify:

Index

Index	2
1. Function test	4
1.1 Hardware function	4
1.2 BIOS function	6
1.3 Driver	8
2. Compatibility test	9
2.1 CPU Test	9
2.2 Memory Test	13
2.3 VGA Graphic Test	16
2.4 Audio Test	18
2.5 HDD Test	20
2.6 USB Test	28
2.7 Serial Port Test	30
2.8 IrDA Test	31
2.9 Keyboard Test	32
2.10 Mouse Test	33
2.11 LAN Module Test	34
2.12 Power Supply Test	35
2.13 CD-ROM Test	36
2.14 Floppy Drive Test	40
2.15 Boot Up Test	42
2.16 Os Install	42
3. Environmental test	43
3.1 Temperature Test	43
4. Reliability Test	44
4.1 Power Consumption Test	44
4.2 Thermal measurements at various points on the board	50
5. Performance Test	51
5.1 Business Win Stone 2001	51

5.2 Business Win Stone 2002	52
5.3 Business Win Stone 2004	53
5.4 Multimedia Content Creation Winstone 2004	54
5.5 3D MARK	55
5.6 3D MARK2006	55
5.7 PCMARK 2002.....	56
5.8 PCMARK 2004.....	57
5.9 PCMARK 2005.....	58
5.10 Win Bench 99.....	59

1. Function test

1.1 Hardware function

Base Function Test

1	Power Button	Pass
2	Reset	Pass
3	Power LED	Pass
4	HDD LED	Pass
5	IDE Channel 0 Master	Pass
6	IDE Channel 0 Slave	Pass
7	IDE Channel 2 Master	Pass
8	IDE Channel 2 Slave	Pass
9	IDE Channel 3 Master	Pass
10	IDE Channel 3 Slave	Pass
11	Floppy	Pass
12	LAN Port	Pass
13	DIMM	Pass
14	VGA Port	Pass
15	Keyboard	Pass
16	Mouse	Pass
17	Audio Port	Pass
18	CDIN	Pass
19	COM 1	Pass
20	COM 2	Pass
21	COM 3	Pass
22	COM 4	Pass
23	COM 5	Pass
24	COM 6	Pass
25	SPDIF	Pass

26	IRDA	Pass
27	SYSFAN	Pass
28	CPUFAN	Pass
29	USB Port	Pass
30	PCI Express x 16	Pass
31	PCI Express x 4	Pass
32	PCI Express x 1	Pass
33	PCI	Pass
34	CF	Pass
35	Doc	Pass
36	SATA	Pass
37	RAID	Pass
38	Printer Port	Pass

2.0 PITCH (DIP)

1	JRTC	Pass
2	JCFSEL	Pass
3	JDOC	Pass

1.2 BIOS function

Item	Description	Result	Remark
1	Press 'Del' to run Setup Utility	Pass	
2	Ctrl-Alt-Del – Soft-Reboot	Pass	
3	Save & Exit Setup	Pass	
4	Date & Time Setting	Pass	
5	Drive A	Pass	
6	Audio Mode	Pass	
7	Quick Power On Self Test	Pass	
8	Boot Device Setting	Pass	
9	Boot Up Floppy Seek	Pass	
10	Boot Up Num Lock Status	Pass	
11	USB 2.0 Controller	Pass	
12	USB Controller	Pass	
13	On Chip Primary IDE	Pass	
14	ACPI Suspend Type	Pass	
15	PCIE LAN	Pass	
16	USB Keyboard Support	Pass	
17	USB Mouse Support	Pass	
18	Onboard FDC Controller	Pass	
19	Soft-Off by PWRBTN	Pass	
20	Power On Function	Pass	
21	PS2MS Wakeup from S3 /S4 /S5	Pass	
22	PS2KB Wakeup from S3 /S4 /S5	Pass	
23	Wake-Up On PCI Card	Pass	
24	PWRON After PWR-Fail	Pass	
25	Resume by Alarm	Pass	
26	Watching Dog Timer Select	Pass	

27	On Chip Serial ATA	Pass	
28	SATA Mode	Pass	
29	UART Mode Select	Pass	

1.3 Driver

1. Windows 2000 SP4 Driver Test

Item	Description	Result	Remark
1	Chip set Driver	Pass	
2	VGA Driver	Pass	
3	Audio Driver	Pass	
4	LAN Driver	Pass	

2. Windows 2003 Server Standard Edition Driver Test

Item	Description	Result	Remark
1	Chip set Driver	Pass	
2	VGA Driver	Pass	
3	Audio Driver	Pass	
4	LAN Driver	Pass	

3. Windows XP SP2 Driver Test

	Description	Result	Remark
1	Chip set Driver	Pass	
2	VGA Driver	Pass	
3	Audio Driver	Pass	
4	LAN Driver	Pass	

4. LINUX SUSE10 Driver Test

	Description	Result	Remark
1	Chip set Driver	Pass	
2	VGA Driver	Pass	
3	Audio Driver	Pass	
4	LAN Driver	Pass	

2. Compatibility test

2.1 CPU Test

Processor: Intel Pentium 4 3.40GHZ

O.S:MS-DOS 6.22

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Windows 2000

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Windows 2003 Server

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Windows XP

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

LINUX Suse10

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Processor: Intel Pentium 4 3.00GHZ

O.S:MS-DOS 6.22

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Windows 2000

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Windows 2003 Server

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

Windows XP

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

LINUX Suse10

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

2.2 Memory Test

1. ADATA DDR2 677 1GB(ELPIDA E5108AE-6E-E)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

1. ADATA DDR2 677 1GB(ADATA AD2960BABA-3EC)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

2. SAMSUNG DDR2 533 512MB (K4T51083QB-GCD5)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

3. SAMSUNG DDR2 533 1GB (K4T51083QB-GCD5)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	

3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

4. ELPIDA DDR2 533 2GB(E1108AA-5C-E)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

5. ELPIDA DDR2 667 1GB(E5108AB-6E-E)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

6. Kingston DDR2 533 1GB (hynix HY5PS12821)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

7. Kingston DDR2 667 1GB (ELPIDA E5108AE-6E-E)

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 2000	Pass	
4	Windows 2003 Server	Pass	
5	Windows XP	Pass	
6	LINUX Suse10	Pass	

2.3 VGA Graphic Test

1. Windows 2000

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	CRT Display Test	Pass	
4	CRT Display Quality Test	Pass	

2. Windows XP

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	CRT Display Test	Pass	
4	CRT Display Quality Test	Pass	

3. Windows 2003 Sever

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	CRT Display Test	Pass	
4	CRT Display Quality Test	Pass	

4. LINUX Suse10

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	CRT Display Test	Pass	

4	CRT Display Quality Test	Pass	
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2.4 Audio Test

1. Windows 2000

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer	Pass	
6	Microphone	Pass	

2. Windows 2003 Server

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer	Pass	
6	Microphone	Pass	

3. Windows XP

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer	Pass	
6	Microphone	Pass	

4. LINUX Suse10

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	

2.5 HDD Test

Model: Western Digital WD1600JB-00mh80 160GB

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
4	HDD LED Check	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows 2003

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: Western Digital WD800BB-22JHC0 80GB

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
5	HDD LED Check	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows 2003

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: Western Digital WD2500JB-00REA0 250GB

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
5	HDD LED Check	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows 2003

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: Maxtor DiamondMax Plus 16 ATA/133 160GB

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
5	HDD LED Check	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows 2003

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

2.6 USB Test

1. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
5	Direct Connect by USB Test	Pass	
6	Hot plugging test	Pass	

2. Windows 2003 Server

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
5	Direct Connect by USB Test	Pass	
6	Hot plugging test	Pass	

3. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
5	Direct Connect by USB Test	Pass	
6	Hot plugging test	Pass	

4. LINUX Suse10

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
5	Direct Connect by USB Test	Pass	
6	Hot plugging test	Pass	

2.7 Serial Port Test

1. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test (PNP)	Pass	
4	RS-232 Modem Test (PNP)	Pass	
5	B&B Electronics COM Port RS-232 Test (W/Loop-Back)	Pass	

2. Windows 2003 Server

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test (PNP)	Pass	
4	RS-232 Modem Test (PNP)	Pass	
5	B&B Electronics COM Port RS-232 Test (W/Loop-Back)	Pass	

3. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test (PNP)	Pass	
4	RS-232 Modem Test (PNP)	Pass	
5	B&B Electronics COM Port RS-232 Test (W/Loop-Back)	Pass	

2.8 IrDA Test

1. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	SIR Mode Data Transfer Test	Pass	
3	SIR Data Transfer Quality Test	Pass	
4	SIR Loop-Back Test	Pass	

2. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	SIR Mode Data Transfer Test	Pass	
3	SIR Data Transfer Quality Test	Pass	
4	SIR Loop-Back Test	Pass	

2.9 Keyboard Test

1. MS-DOS 6.22

Item	Description	Result	Remark
1	QAPLUS Keyboard Test	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Command Test	Pass	
4	Keyboard Typing Test	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

3. Windows 2003 Server

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

4. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

2.10 Mouse Test

1. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test	Pass	

2. Windows 2003 Server

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test	Pass	

3. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test	Pass	

4. LINUX Suse10

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	

2.11 LAN Module Test

1. Windows 2000

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	

2. Windows 2003 Server

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	

3. Windows XP

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	

4. LINUX Suse10

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	

2.12 Power Supply Test

1. MS-DOS 6.22

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300BLV(300W)
2	ATX Power On/Off	Pass	Sea Sonic SS-430HB(430W)

2. Windows 2000

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300WAP(300W)
2	ATX Power On/Off	Pass	Sea Sonic SS-430HB(430W)

3. Windows 2003 Server

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300WAP(300W)
2	ATX Power On/Off	Pass	Sea Sonic SS-430HB(430W)

4. Windows XP

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300WAP(300W)
2	ATX Power On/Off	Pass	Sea Sonic SS-430HB(430W)

5. LINUX Suse10

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300BLV(300W)
2	ATX Power On/Off	Pass	Sea Sonic SS-430HB(430W)

2.13 CD-ROM Test

Model: ATAPI A52T

1. SONY DVD ROM (CRX320-AE-K (CE7))

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows 2003 Server

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

Model: BenQ CB523C

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows 2003 Server

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

Model: SYNEX DVD COMBO COM-5216/B/BLACK

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows 2003 Server

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

Model: TEAC CD-ROM CD-540E

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows 2003 Server

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

2.14 Floppy Drive Test

Model: Sony (MPF920-E)

1. MS-DOS 6.22

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Boot from Floppy	Pass	
4	Floppy Data Transfer	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

3. Windows 2003 Server

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

4. Windows XP

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

5. LINUX Suse10

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

2.15 Boot Up Test

Item	Description	Result	Remark
1	Soft boot from HDD	Pass	Times
2	Soft boot from CD-ROM	Pass	Times
3	Reboot test with Win 2000	Pass	Times
4	Reboot test with Win 2003 Server	Pass	Times
5	Reboot test with Win XP	Pass	Times
6	Reboot test with LINUX Suse10	Pass	Times

2.16 Os Install

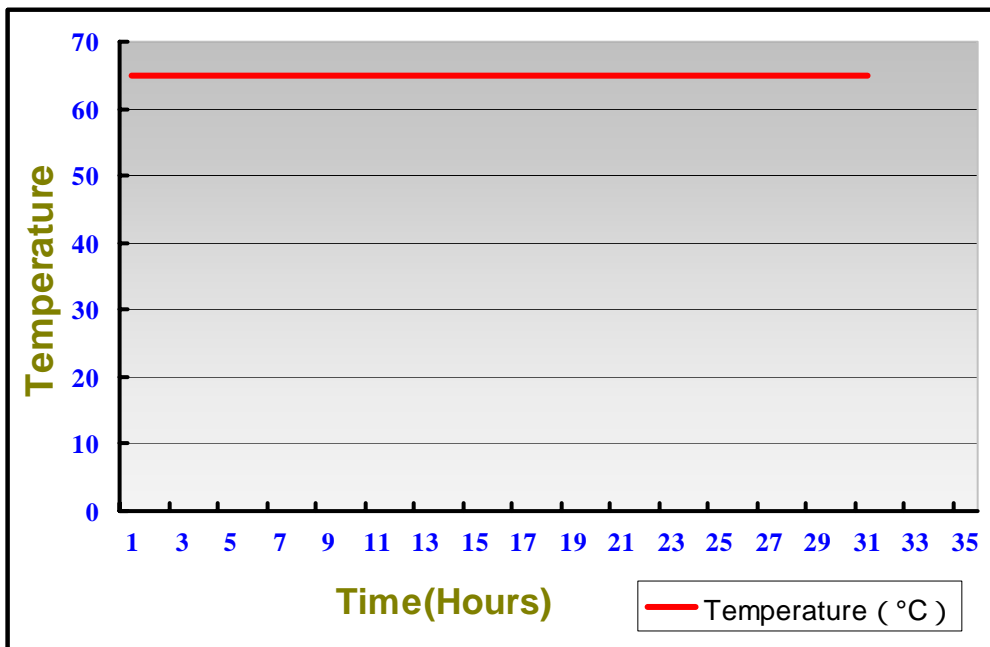
Item	Description	Result	Remark
1	Windows Server 2003	Pass	
2	Windows 2000 SP4	Pass	
3	Windows XP SP2	PASS	
4	Linux Suse10	Pass	

3. Environmental test

3.1 Temperature Test

Hardware Device list:

System Board	P4LA
CPU	Intel Pentium
Memory	SAMSUNG DDR2 533 1GB (K4T51083QB-GCD5)
HDD	Western Digital WD1600JS-00MHB0 160GB(SATA)
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3D Mark2003



Test Result:

Item	Description	Result	Remark
1	70°C Boot Test	Pass	times
2	-20°C Boot Test	Pass	times

4. Reliability Test

4.1 Power Consumption Test

1.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Seven team ST-300BLV(300W)

Voltage	Max Current (A)	Power (W)	Remark
12V	0.14	1.68	Stand By Power
12V	5.4	64.8	Boot (In Post Screen)
12V	5.36	64.32	Boot (Max Power)

Voltage	Max Current (A)	Power (W)	Remark
5V	0.14	0.7	Stand By Power
5V	4.82	24.1	Boot (In Post Screen)
5V	4.26	21.3	Boot (Max Power)

Voltage	Max Current (A)	Power (W)	Remark
3.3V	0.13	0.429	Stand By Power
3.3V	0.41	1.353	Boot (In Post Screen)
3.3V	0.41	1.353	Boot (Max Power)

2.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Seven team ST-300BLV(300W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)

Voltage	Max Current (A)	Power (W)	Remark
12V	0.14	1.68	Stand By Power
12V	6.51	78.12	Boot (In Post Screen)
12V	6.17	74.04	Boot (Max Power)

Voltage	Max Current (A)	Power (W)	Remark
5V	0.14	0.7	Stand By Power
5V	5.73	28.65	Boot (In Post Screen)
5V	4.78	23.9	Boot (Max Power)

Voltage	Max Current (A)	Power (W)	Remark
3.3V	0.14	0.462	Stand By Power
3.3V	0.4	1.32	Boot (In Post Screen)
3.3V	0.4	0.32	Boot (Max Power)

3.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Sea Sonic SS-430HB(430W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
Operating System	Windows XP SP2

Voltage	Max Current (A)	Power (W)	Remark
12V	6.53	78.36	Do nothing
5V	5.75	28.75	Do nothing
3.3V	0.42	1.386	Do nothing

4.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Sea Sonic SS-430HB(430W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Current (A)	Power (W)	Remark
12V	7	84	
5V	6.58	32.9	
3.3V	0.4	1.32	

5.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Sea Sonic SS-430HB(430W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
CD-ROW	BenQ CB523C
Operating System	Windows XP SP2

Voltage	Max Current (A)	Power (W)	Remark
12V	6.64	79.68	Do nothing
5V	5.94	29.7	Do nothing
3.3V	0.4	1.32	Do nothing

6.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Sea Sonic SS-430HB(430W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
CD-ROW	BenQ CB523C
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	7.07	84.84	
5V	6.63	33.15	
3.3V	0.4	1.32	

7.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Sea Sonic SS-430HB(430W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
CD-ROW	BenQ CB523C
Floppy	SONY MPF920-E
Operating System	Windows XP SP2

Voltage	Max Current (A)	Power (W)	Remark
12V	6.79	81.84	Do nothing
5V	6.01	30.05	Do nothing
3.3V	0.41	1.353	Do nothing

8.Test Environment:

Motherboard	P4LA
CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
Power Supply	Sea Sonic SS-430HB(430W)
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
CD-ROW	BenQ CB523C
Floppy	SONY MPF920-E
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	7.07	84.84	
5V	6.01	30.05	
3.3V	0.41	1.353	

4.2 Thermal measurements at various points on the board

Test Environment A:

CPU	Intel Pentium 4 3.40GHZ
Memory	ELPIDA DDR2 533 2GB(E1108AA-5C-E) Kingston DDR2 533 1GB (hynix HY5PS12821)
15" Monitor	SOLARISM AC-100-240
HDD	Western Digital WD1600JS-00MHB0 160GB (SATA)
CD-ROM	BenQ CB523C
Floppy	SONY MPF920-E
Test Program	3DMark 2003

Test Result:

CPU	52
NB	42
SB	48
U1	45
U12	39
U14	54

5. Performance Test

5.1 Business Win Stone 2001

Processor: Intel Pentium 4 3.40GHZ

1. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores	Pass	73 72.1 71.5 71.3 72.1

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores	Pass	52.3 52.4 53.5 53 52.4

3. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores	Pass	65.6 51 54.1 64.7 53.5

5.2 Business Win Stone 2002

Processor: Intel Pentium 4 3.40GHZ

1. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2002 Win stone 2002 Scores	Pass	36 35.9 35.8 35.9 .6

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2002 Win stone 2002 Scores	Pass	33.9 33.4 31.3 32.3 31.9

3. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2002 Win stone 2002 Scores	Pass	33.3 28.4 26.2 34 38.4

5.3 Business Win Stone 2004

Processor: Intel Pentium 4 3.40GHZ

1. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Multimedia Content Creation Winstone 2003 Scores	Pass	16.3 17.5 19 10.9 19.1

2. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	Multimedia Content Creation Winstone 2003 Scores	Pass	23.9 24 23.8 24.1 24

5.4 Multimedia Content Creation Winstone 2004

Processor: Intel Pentium 4 3.40GHZ

1. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	Multimedia Content Creation Winstone 2004 Scores	Pass	28.7 26.9 28.4 26.9 27.9

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Multimedia Content Creation Winstone 2004 Scores	Pass	29.1 30.4 30.3 30 30.3

3. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	Multimedia Content Creation Winstone 2004 Scores	Pass	31.3 31.2 31.2 31.3 31.3

5.5 3D MARK

Processor: Intel Pentium 4 3.40GHZ

1. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	3DMARK2001 Scores	Pass	4771
2	3DMARK2003 Scores	Pass	1511
3	3DMARK2005 Scores	Pass	408

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	3DMARK2001 Scores	Pass	5651
2	3DMARK2003 Scores	Pass	1570
3	3DMARK2005 Scores	Pass	485

5.6 3D MARK2006

Processor: Intel Pentium 4 3.40GHZ

Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	3DMark Source	Pass	143
2	SM2.0 Source	Pass	65
3	HDR/SM3.0 Source	Non-pass	N/A
4	CPU Source	Pass	1016

5.7 PCMARK 2002

Processor: Intel Pentium 4 3.40GHZ

2. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	5401
2	Memory Score	Pass	14007
3	HDD Score	Pass	1315

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	7502
2	Memory Score	Pass	16387
3	HDD Score	Pass	628

3. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	7520
2	Memory Score	Pass	16400
3	HDD Score	Pass	756

5.8 PCMARK 2004

Processor: Intel Pentium 4 3.40GHZ

1. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	4641
2	Memory Score	Pass	4660
3	HDD Score	Pass	3780
4	Graphics Score	Pass	1455

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	5243
2	Memory Score	Pass	4618
3	HDD Score	Pass	N/A
4	Graphics Score	Pass	1250
5	PCMARK Score	Pass	4403

3. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	5277
2	Memory Score	Pass	4653
3	HDD Score	Pass	2930

5.9 PCMARK 2005

Processor: Intel Pentium 4 3.40GHZ

1. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	4333
2	Memory Scores	Pass	3805
3	HDD Score	Pass	3195
4	Graphics Score	Pass	1101
5	PCMARK Score	Pass	2823

2. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPU Score	Pass	4380
2	Memory Score	Pass	3817
3	HDD Score	Pass	3091

5.10 Win Bench 99

Processor: Intel Pentium 4 3.40GHZ

1. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark99	Pass	187
2	FPU Win Mark	Pass	9780
3	Business Disk Win Mark 99	Pass	10200 Thousand Bytes/Sec
4	High-End Disk Win Mark 99	Pass	38800 Thousand Bytes/Sec
5	Business Graphics Win Mark 99	Pass	306
6	High-End Graphics Win Mark 99	Pass	875

2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark99	Pass	198
2	FPU Win Mark	Pass	10000
3	Business Disk Win Mark 99	Pass	7360 Thousand Bytes/Sec
4	High-End Disk Win Mark 99	Pass	26100 Thousand Bytes/Sec
5	Business Graphics Win Mark 99	Pass	297
6	High-End Graphics Win Mark 99	Pass	909

3. Windows Sever 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark99	Pass	198
2	FPU Win Mark	Pass	6490
3	Business Disk Win Mark 99	Pass	7440 Thousand Bytes/Sec
4	High-End Disk Win Mark 99	Pass	31600 Thousand Bytes/Sec
5	Business Graphics Win Mark 99	Pass	311
6	High-End Graphics Win Mark 99	Pass	1110