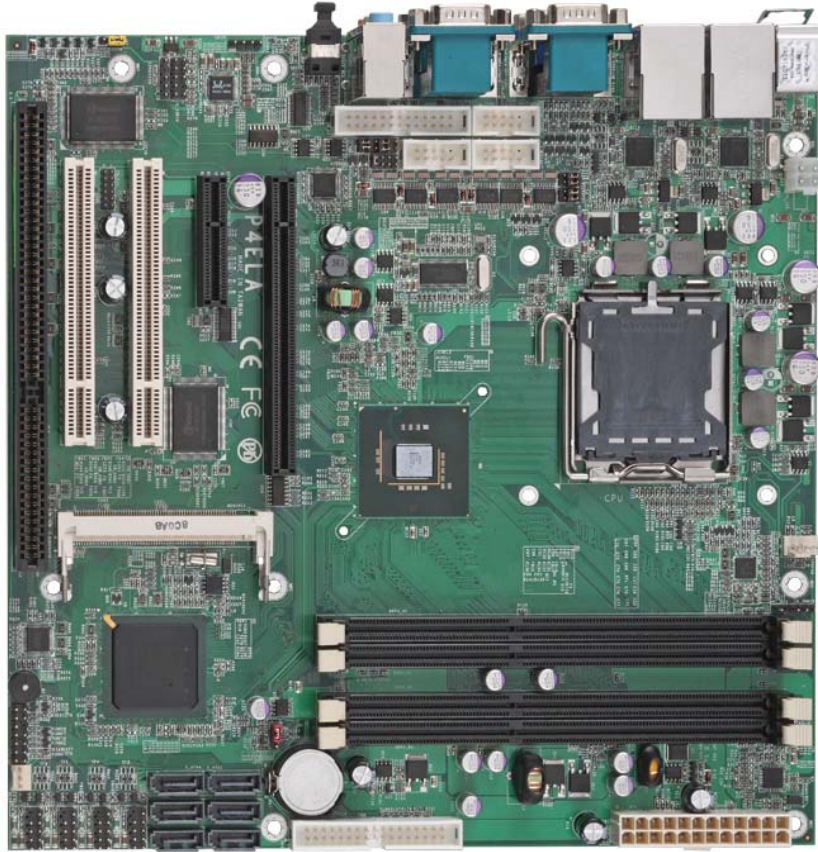


Product Test Report



Product Name	P4ELA
Product Version	A
Issued Date	15.Dec.2009
Report Edition	1.1
BIOS Version	2.1
Testing Engineer	RICK
Check Engineer	BORLIN

REVISION HISTORY			
DATE	REVISION NO.	PAGE	DESCRIPTONS
9.Dec.2009	Ver. 1.0	66	New release
15.Dec.2009	Ver. 1.1	66	Add hardware and mini card

Index

1.Function test	5
1.1Hardware function.....	5
1.2 BIOS function	7
1.3 Driver	9
2. Compatibility test.....	11
2.1 CPU Test.....	11
2.2 Operation System Test	12
2.3 Memory Test	13
2.4 VGA Graphic Quality Test.....	14
2.5 Audio	15
2.6 HDD Test	17
2.7 CD-ROM Test	18
2.8 USB device Test	19
2.9 Serial Port Test	22
2.10 Print Port Test.....	24
2.11 Floppy Drive Test.....	25
2.12 PS2 Keyboard 、 Mouse Test.....	26
2.13 LAN Test.....	28
2.14 Power Supply Test	29
2.15 PCI Express mini card.....	29
3. Environmental test	30
3.1 Temperature Test.....	30
3.2 Thermal measurements at various points on the board	33
4.Reliability Test	35
4.1 Power Consumption Test	35
5. Performance Test.....	40
5.1 Business Win Stone 2002.....	40
5.2 Business Win Stone 2004.....	41

5.3 Content Creation Winstone 2004	42
5.4 3D MARK(2001、2003、2005)	44
5.5 3D MARK2006	48
5.6 PC MARK2002	52
5.7 PC MARK2004	56
5.8 PC MARK2005	59
5.9 Storage Performance	63
5.10 Vibration Test	66

1.Function test

1.1Hardware function

Base Function Test

Item	Description	Result
1	Power Button	PASS
2	Reset	PASS
3	Power LED	PASS
4	HDD LED	PASS
5	SATA 1/2/3/4/5/6	PASS
6	USB 1/2/3/4/5/6/7/8/9/10/11/12	PASS
7	DDRIII 1/2/3/4	PASS
8	Floppy	PASS
9	COM 1/2/3/4/5/6	PASS
10	VGA Port	PASS
11	PS2	PASS
12	AUDIO	PASS
13	CN_AUDIO	PASS
14	CD_IN	PASS
15	DIO	PASS
16	CPUFAN	PASS
17	SYSFAN	PASS
18	PCI 1/2	PASS
19	Mini PCI	PASS
20	PCIE 16x	PASS
21	PCIE 4x	PASS
22	ISA	PASS
23	LAN 1/2	PASS
24	IrDA	PASS

25	SPDIF	PASS
26	LPT	PASS

Jumper

Item	Description	Result
1	JRTC	PASS
2	JAT	PASS
3	JCSEL1	PASS
4	JCSEL2	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	Quick Power On Self Test	PASS	
6	Boot Device Setting	PASS	
7	Boot Up Num Lock Status	PASS	
8	ACPI Suspend Type	PASS	
9	Halt On	PASS	
10	Onboard Serial Port	PASS	
11	USB Keyboard Support	PASS	
12	Soft-Off by PWRBTN	PASS	
13	Power On Function	PASS	
14	ACPI Function	PASS	
15	Onboard FDC Controller	PASS	
16	Hot Key Password	PASS	
17	Wake-up by PCI card (mini PCI LAN card)	PASS	
18	Resume by Alarm	PASS	
19	Watch Dog Timer Select	PASS	
20	Init Display First	PASS	
21	Power On by Ring	PASS	
22	PWRON After PWR-Fail	PASS	
23	Set Supervisor Password	PASS	
24	Onboard Parallel Port	PASS	
25	Set User Password	PASS	
26	UART Mode Select	PASS	

27	RxD , Txd Active	PASS	
28	IR Transmission Delay	PASS	
29	UR2 duplex Mode	PASS	
30	Use IR Pins	PASS	
31	CPU Warning Temperature	PASS	
32	Shutdown Temperature	PASS	
33	USB KB Wake Up by S3	PASS	
34	Smart CPUFAN Temp.	PASS	

1.3 Driver

CD Edition : IPCI 2-1.4

2 Windows XP SP2 Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.0.0.1008
2	VGA Driver	PASS	6.14.0.5009
3	Audio Driver	PASS	5.10.0.5464
4	LAN Driver	PASS	10.3.49.0

2.Windows 2000 SP4 Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.0.0.1008
2	VGA Driver	PASS	6.14.10.5009
3	Audio Driver	PASS	5.10.0.5464
4	LAN Driver	PASS	10.3.49.0

3. Windows Server 2003 Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.0.0.1008
2	Audio Driver	PASS	5.10.0.5464
3	LAN Driver	PASS	10.3.49.0

4. Windows Vista 32 bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.0.0.1008
2	VGA Driver	PASS	7.15.10.1518
3	Audio Driver	PASS	6.0.1.5473
4	LAN Driver	PASS	10.3.49.0

5. Windows Vista 64 bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.0.0.1008
2	VGA Driver	PASS	7.15.10.1688
3	Audio Driver	PASS	6.0.1.5473
4	LAN Driver	PASS	10.3.49.0

2. Compatibility test

2.1 CPU Test

Test environment:

OS Windows XP professional SP2

Test program : PC MARK 2005

Spec	CPU Speed	Family	Processor	FSB	L2 Size	Result
<u>SL9XL</u>	2.00 GHz	Celeron	440	800MHz	512KB	PASS
<u>SLAQZ</u>	2.20 GHz	Celeron	E1500	800 MHz	512KB	PASS
<u>SL9TA</u>	1.86 GHz	Core 2 Duo	E6300	1066MHz	2 MB	PASS
<u>SLA9V</u>	2.66 GHz	Core 2 Duo	E6750	1333MHz	4 MB	PASS
<u>SLACR</u>	2.40 GHz	Core 2 Quad	Q6600	1066MHz	8 MB	PASS
<u>SL9UM</u>	2.40 GHz	Core 2 Quad	Q6600	1066MHz	8 MB	PASS
<u>SLAWE</u>	2.50 GHz	Core 2 Quad	Q9300	1333MHz	6 MB	PASS
<u>SLGUH</u>	2.93 GHz	Pentium	E6500	1066MHz	2 MB	PASS

2.2 Operation System Test

Item	Description	Result	Remark
1	Windows 7	PASS	
2	Windows Server 2008	PASS	
3	Windows Vista 64 bit	PASS	
4	Windows Vista 32 bit	PASS	
5	Windows XP SP2	PASS	
6	Windows Server 2003	PASS	
7	Windows 2000 SP4	PASS	
8	Ubuntu 9.04 (2.6.28-16-generic)	PASS	
9	Fedora 10 (2.6.27.5-117.fc10.i686)	PASS	
10	Suse 9 (2.4.21-99-default)	PASS	

2.3 Memory Test

Test environment:

OS Windows XP professional SP2

Test program : PC MARK 2005

Manufacturer	Chip	Frequency	Capacity Mbytes	Result
A-DATA	AD309080BD-151G	DDR3 1333	1 GB	PASS
A-DATA	AD30908CBD-151G	DDR3 1333	2 GB	PASS
Transcend	K4B1G0846D	DDR3 1066	2 GB	PASS
Kingston	J1108ABG-DJ-E	DDR3 1333	2 GB	PASS

Supported DIMM Module Configurations

Memory Type	Raw Card Version	DIMM Capacity	DRAM Device Technology	DRAM Organization	# of DRAM Devices	# of Physical Device Ranks	# of Row/ Col Address Bits	# of Banks Inside DRAM	Page Size
DDR3 800 and 1066	A	512 MB	512Mb	64M X 8	8	1	13/10	8	8K
		1 GB	1Gb	128M X 8	8	1	14/10	8	8K
	B	1 GB	512Mb	64M X 8	16	2	13/10	8	8K
		2 GB	1Gb	128M X 8	16	2	14/10	8	8K
	C	256 MB	512Mb	32M X 16	4	1	12/10	8	8K
		512 MB	1Gb	64M X 16	4	1	13/10	8	8K
	F	512 MB	512Mb	32M X 16	8	2	12/10	8	8K
		1 GB	1Gb	64M X 16	8	2	13/10	8	8K

2.4 VGA Graphic Quality Test

Test environment:

OS Windows XP professional SP2

Driver version : 6.14.0.5009

Resolution	Color	Result	Remark
800*600	16 /32bit	PASS	
1024*768	16 /32bit	PASS	
1152*864	16 /32bit	PASS	
1280*600	16 /32bit	PASS	
1280*720	16 /32bit	PASS	
1280*768	16 /32bit	PASS	
1280*960	16 /32bit	PASS	
1280*1024	16 /32bit	PASS	
1400*1050	16 /32bit	PASS	
1600*900	16 /32bit	PASS	
1600*1200	16 /32bit	PASS	
1680*1050	16 /32bit	PASS	
1792*1344	16 /32bit	PASS	
1920*1080	16 /32bit	PASS	

2.5 Audio

Test environment:

OS Windows XP professional SP2

Driver version : 5.10.0.5464

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	LINE	PASS	
4	CDIN	PASS	
5	SPDIF	PASS	

OS Windows Server 2000 SP4

Driver version : 5.10.0.5464

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	LINE	PASS	
4	CDIN	PASS	
5	SPDIF	PASS	

OS Windows Server 2003

Driver version : 5.10.0.5464

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	LINE	PASS	
4	CDIN	PASS	
5	SPDIF	PASS	

OS Windows Vista 32 bit**Driver version : 6.0.1.5473**

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	LINE	PASS	
4	CDIN	PASS	
5	SPDIF	PASS	

OS Windows Vista 64 bit**Driver version : 6.0.1.5473**

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	LINE	PASS	
4	CDIN	PASS	
5	SPDIF	PASS	

2.6 HDD Test

Test environment:

OS Windows XP professional SP2

MODEL	INTERFACE	Capacity	Size Detect	Data Transfer
Western Digital WD800JD-00LSA0	SATA	80 GB	PASS	PASS
Western Digital WD800JD-75MSA3	SATA	80 GB	PASS	PASS
Western Digital WD1600AAJS-22B4A0	SATA	160 GB	PASS	PASS
HITACHI HDS721616PLA380	SATA	160 GB	PASS	PASS
Western Digital WD2500AAJS-00B4A0	SATA	250 GB	PASS	PASS
Western Digital WD10EADS-00L5B1	SATA	1000 GB	PASS	PASS

2.7 CD-ROM Test

Test environment:

OS Windows XP professional SP2

MODEL	INTERFACE	Detect	Data Transfer	PLAY DVD
ASUS DVD DRW-1814BLT	SATA	PASS	PASS	PASS
PIONEER DVD DVR-212BK	SATA	PASS	PASS	PASS
LG DVD GSA-H62L	SATA	PASS	PASS	PASS
LG DVD GGW-H20L	SATA	PASS	PASS	PASS
LITEON DVD SOSC-2485KX	USB	PASS	PASS	PASS
LITEON DVD SOSW-833SX	USB	PASS	PASS	PASS

2.8 USB device Test

1. Windows XP SP2

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

2 Windows 2000 SP4

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

3 Windows Server 2003

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

4. Windows Vista 32 bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

5. Windows Vista 64 bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

6. Windows Server 2008

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

7. Windows 7

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

2.9 Serial Port Test

1. MS-DOS

Item	Description	Result	Remark
1	RS-232 Mouse Test	PASS	
2	RS422/485	PASS	
3	PC Check	PASS	
4	TS	PASS	

2. Windows 2000 SP4

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

3. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

4. Windows XP SP2

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

5. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	

6. Windows Vista 64 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	

7. Windows Server 2008

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

8. Windows 7

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	

2.10 Print Port Test

1. MS-DOS

Item	Description	Result	Remark
1	PC Check	PASS	
2	TS	PASS	

2. Windows 2000 SP4

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

3. Windows Server 2003

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

4. Windows XP SP2

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

5. Windows Vista 32 bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

6. Windows Vista 64 bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

7. Windows Server 2008

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

8. Windows 7

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

2.11 Floppy Drive Test

Floppy	Floppy Drive Detect	Floppy Data Transfer
MITSUMI D353M3D	PASS	PASS
MITSUMI D353M3	PASS	PASS
MITSUMI D353T6	PASS	PASS
NEC FD1231H	PASS	PASS
Panasonic JU-257A606P	PASS	PASS
MITSUMI D353FUE	PASS	PASS
MITSUMI D353GUE	PASS	PASS

2.12 PS2 Keyboard 、 Mouse Test

1. MS-DOS

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

2. Windows 2000 SP4

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

3. Windows Server 2003

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

4. Windows XP SP2

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

5. Windows Vista 32 bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

6. Windows Vista 64 bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

7. Windows Server 2008

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

8. Windows 7

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

2.13 LAN Test

Data Transfer Test environment:

-CAT 6 UTP 100M

-8 HR. continuous

1. Windows XP SP2

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

2. Windows 2000 SP4

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

3. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

4. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

5. Windows Vista 64 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

2.14 Power Supply Test

Item	TYPE	Description	Result	Remark
1	ATX Power	CHANNEL WELL TECHNOLOGY CO.,LTD CWT-300BDP-F 300W	PASS	
2	ATX Power	COOLER MASTER RS-390-PMSR-A3 390W	PASS	
3	ATX Power	COOBEE0 B-300ATX 300W	PASS	

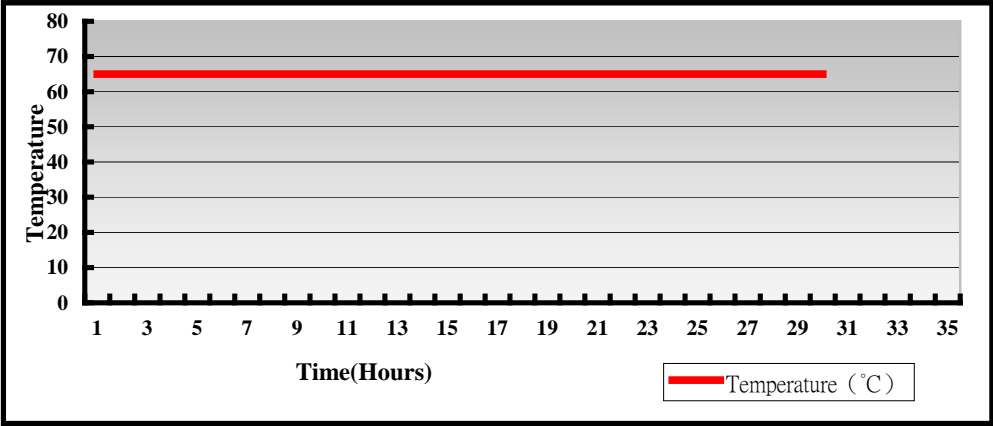
2.15 PCI Express mini card

Motherboard	PCI Express mini card	Remark
P4ELA	MP-541D2	PASS
P4ELA	MP-6100	PASS

3. Environmental test

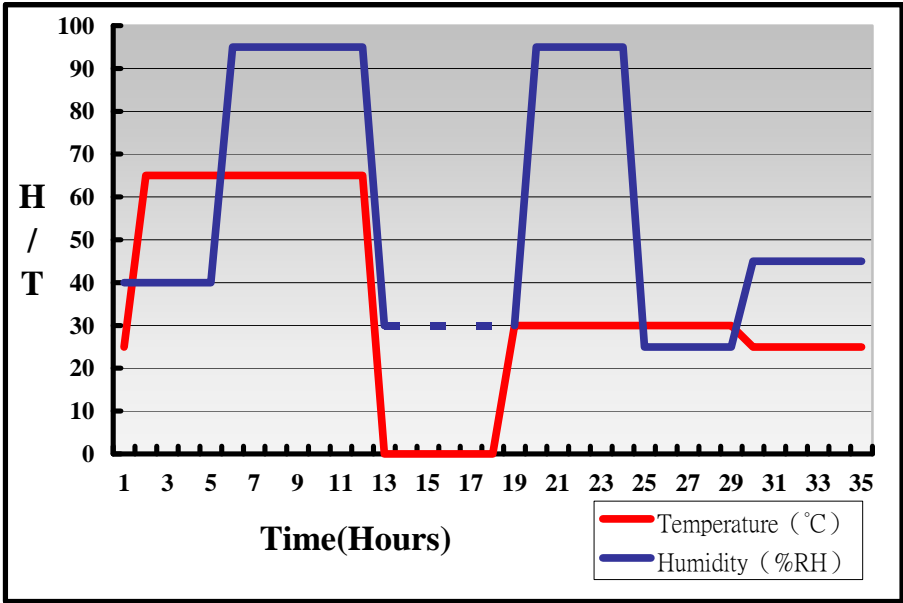
3.1 Temperature Test

System Board	P4ELA
CPU	Intel(R) Core(TM)2 Duo E6300 1.86GHz
Memory	A-DATA DDR3 1333 2GB (AD309080BD-151G)
Operating OS	Windows XP
Test Equipment	GIANT FORCE (GTH-150-60-CP-AR)
Test Program	3DMark 2003



Hardware Device list:

System Board	P4ELA
CPU	Intel(R) Core(TM)2 Duo E6300 1.86GHz
Memory	A-DATA DDR3 1333 2GB (AD309080BD-151G)
Operating OS	Windows XP
Test Equipment	GIANT FORCE (GTH-150-60-CP-AR)
Test Program	3DMark 2003



Definition : When the temperature is 30 degrees below arrive, humidity measurements have not, so by the dashed line express.

Boot Up Test:**Hardware Device list:**

System Board	P4ELA
CPU	Intel(R) Core(TM)2 Duo E6750 2.66GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G)
HDD	Western Digital WD800JD-00LSA0 80GB

Temperature	Result	Remark
-40°C	PASS	50 Times
75°C	PASS	50 Times

3.2 Thermal measurements at various points on the board

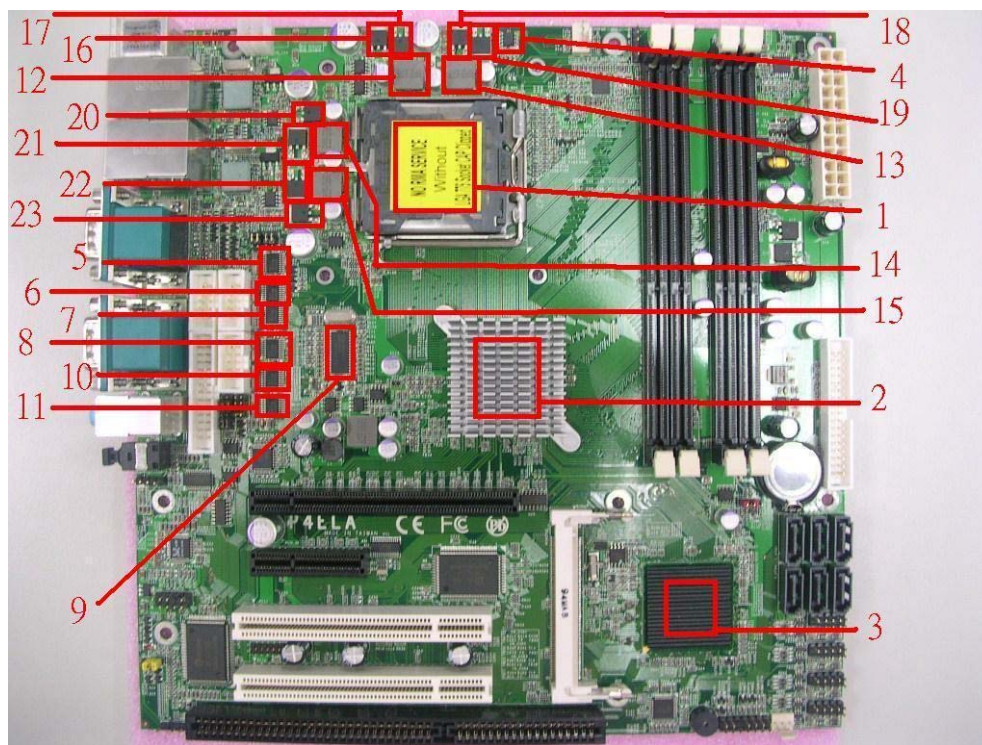
Test Environment :

CPU	Intel(R) Core(TM)2 Quad Q6600 2.40GHz
Memory	Transcend DDR3 1066 2GB (K4B1G0846D)
HDD	Western Digital WD800JD-00LSA0 80GB
Power	COOLER MASTER RS-390-PMSR-A3
Operating System	Windows XP
Test Program	Burnin 5.3

Test Result:

Item	Environmental temperature	26°C
1	CPU	74°C
2	Q45(Northbridge)	48.3°C
3	ICH10DO(Southbridge)	53.8°C
4	U1(ISWHIP6601CB)	56.8°C
5	U17(ITS75232S)	54.8°C
6	U18(ITS75232S)	55.1°C
7	U19(ITS75232S)	57°C
8	U20(ITS75232S)	55.4°C
9	U21(ICS9LP505)	55.6°C
10	U22(ITS75232S)	57.2°C
11	U24(ITS75232S)	52.7°C
12	DL1(LLC0.36UH/0445)	60.3°C
13	DL2(LLC0.36UH/0445)	57.2°C

14	DL3(LLC0.36UH/0445)	59.9°C
15	DL4(LLC0.36UH/0445)	61.5°C
16	DQ1(TMSTRFR3709ZTRPBF)	64.3°C
17	DQ2(TMSTRFR3709ZTRPBF)	62.5°C
18	DQ3(TMSTRFR3709ZTRPBF)	62.6°C
19	DQ4(TMSTRFR3709ZTRPBF)	60.6°C
20	DQ5(TMSTRFR3709ZTRPBF)	62.1°C
21	DQ6(TMSTRFR3709ZTRPBF)	62.2°C
22	DQ7(TMSTRFR3709ZTRPBF)	59.7°C
23	DQ8(TMSTRFR3709ZTRPBF)	57.8°C



4. Reliability Test

4.1 Power Consumption Test

1. Test Environment:

Motherboard	P4ELA
CPU	Intel(R) Core(TM)2 Duo E6300 1.86GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G)*2 Transcend DDR3 1333 2GB (K4B1G0846D)*2

Power Supply : COOLER MASTER RS-390-PMSR-A3

Voltage	MS-DOS Boot up		Windows XP SP2 Burnin 5.3	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.49	29.88	2.91	34.92
5V	5.16	25.8	4.74	23.7
3.3V	0.76	2.508	0.67	2.211
5VSB	0.3	1.5	0.003	0.015

Voltage	Windows XP SP2 3DMARK 2003		Windows XP SP2 PRIME 95	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.73	32.76	3.63	43.56
5V	6.98	34.9	4.44	22.2
3.3V	0.68	2.244	0.68	2.244
5VSB	0.001	0.005	0.005	0.025

2.Test Environment:

Motherboard	P4ELA
CPU	Intel(R) Core(TM)2 Quad Q9300 2.5GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G) Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Transcend DDR3 1333 2GB (K4B1G0846D)*2

Power Supply : COOLER MASTER RS-390-PMSR-A3

Voltage	MS-DOS Boot up		Windows XP SP2 Burnin 5.3	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.84	34.08	3.94	47.28
5V	5.95	29.75	5.88	29.4
3.3V	0.77	2.541	0.67	2.211
5VSB	0.312	1.56	0.008	0.04

Voltage	Windows XP SP2 3DMARK 2003		Windows XP SP2 PRIME 95	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.94	35.28	5.24	62.88
5V	7.49	37.45	5.64	28.2
3.3V	0.7	2.31	0.69	2.277
5VSB	0	0	0.008	0.04

3.Test Environment:

Motherboard	P4ELA
CPU	Intel(R) Pentium(R) Processor E6500 2.93GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G) Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Transcend DDR3 1333 2GB (K4B1G0846D)*2

Power Supply : COOLER MASTER RS-390-PMSR-A3

	MS-DOS Boot up		Windows XP SP2 Burnin 5.3	
Voltage	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.11	25.32	2.64	31.68
5V	5.34	26.7	5.78	28.9
3.3V	0.78	2.574	0.68	2.244
5VSB	0.341	1.705	0.002	0.01

	Windows XP SP2 3DMARK 2003		Windows XP SP2 PRIME 95	
Voltage	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.35	28.2	3.19	38.28
5V	7.16	35.8	4.87	24.35
3.3V	0.69	2.277	0.68	2.244
5VSB	0.005	0.025	0.006	0.03

4. Test Environment:

Motherboard	P4ELA
CPU	Intel(R) Core(TM)2 Quad Q6600 2.4GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G) Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Transcend DDR3 1333 2GB (K4B1G0846D)*2

Power Supply : COOLER MASTER RS-390-PMSR-A3

	MS-DOS Boot up		Windows XP SP2 Burnin 5.3	
Voltage	Current (A)	Power (W)	Current (A)	Power (W)
12V	4.36	52.32	5.86	70.32
5V	5.68	28.4	5.32	26.6
3.3V	0.79	2.607	0.7	2.31
5VSB	0.487	2.435	0	0

	Windows XP SP2 3DMARK 2003		Windows XP SP2 PRIME 95	
Voltage	Current (A)	Power (W)	Current (A)	Power (W)
12V	4.6	55.2	7.76	93.12
5V	7.28	36.4	5.48	27.4
3.3V	0.71	2.343	0.72	2.376
5VSB	0.013	0.065	0	0

5. Test Environment:

Motherboard	P4ELA
CPU	Intel(R) Celeron(R) Processor E1500 2.20GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G)*2 Transcend DDR3 1333 2GB (K4B1G0846D)*2

Power Supply : CHANNEL WELL TECHNOLOGY CO.,LTD CWT-300BDP-F

	M\$-DOS Boot up		Windows XP SP2 Burnin 5.3	
Voltage	Current (A)	Power (W)	Current (A)	Power (W)
12V	2.35	28.2	2.7	32.4
5V	4.84	24.2	5.02	25.1
3.3V	0.79	2.607	0.71	2.343
5VSB	0.298	1.49	0	0

6. Test Environment:

Motherboard	P4ELA
CPU	Intel(R) Core(TM)2 Duo E6750 2.66GHz
Memory	A-DATA DDR3 1333 2GB (AD30908CBD-151G)*2 Transcend DDR3 1333 2GB (K4B1G0846D)*2

Power Supply : CHANNEL WELL TECHNOLOGY CO.,LTD CWT-300BDP-F

	M\$-DOS Boot up		Windows XP SP2 Burnin 5.3	
Voltage	Current (A)	Power (W)	Current (A)	Power (W)
12V	3.48	41.76	4.04	48.48
5V	5.69	28.45	5.58	27.9
3.3V	0.8	2.64	0.75	2.475
5VSB	0.301	1.505	0.002	0.01

5. Performance Test

5.1 Business Win Stone 2002

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2002	Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	50.8 50.4 50.6 51.1
Business Win stone2002	Intel(R) Celeron(R) Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	37 36.9 36.8 36.2
Business Win stone2002	Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	45 45.2 44.3 45.4
Business Win stone2002	Intel(R) Core(TM)2 Quad Q6600 2.40GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	43.6 42.2 42.6 42.1

5.2 Business Win Stone 2004

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2004	Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	26.7 26.2 25.9 26.2
Business Win stone2004	Intel(R) Celeron(R) Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	22.6 22.3 22.5 22.4
Business Win stone2004	Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	25.9 24 25.3 25.6
Business Win stone2004	Intel(R) Core(TM)2 Quad Q6600 2.4GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	25.3 24.8 24.7 24.7

5.3 Content Creation Winstone 2004

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
<p align="center">Content Creation Winstone 2004</p>	<p align="center">Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB</p>	<p align="center">PASS</p>	<p align="center">41.5 41.6 41.4 41.4</p>
<p align="center">Content Creation Winstone 2004</p>	<p align="center">Intel(R) Celeron(R) Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB</p>	<p align="center">PASS</p>	<p align="center">36.5 36.5 36.3 36.4</p>
<p align="center">Content Creation Winstone 2004</p>	<p align="center">Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB</p>	<p align="center">PASS</p>	<p align="center">45.2 45.2 43.4 45.3</p>
<p align="center">Content Creation Winstone 2004</p>	<p align="center">Intel(R) Core(TM)2 Quad Q6600 2.4GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB</p>	<p align="center">PASS</p>	<p align="center">41.1 41.4 41.6 41.6</p>

Content Creation Winstone 2004	Intel(R) Celeron(R) Processor 440 2GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	32.3 32.3 32.2 32.4
---	--	-------------	------------------------------

5.4 3D MARK(2001、2003、2005)

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel™ Celeron™ Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	4661
3DMARK2003 Scores		PASS	1886
3DMARK2005 Scores		PASS	1005

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	6974
3DMARK2003 Scores		PASS	2325
3DMARK2005 Scores		PASS	1652

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel(R) Core(TM)2 Duo E6750 2.66GHz	PASS	7441
3DMARK2003 Scores	Transcend DDR3 1066 2GB (K4B1G0846D)	PASS	2448
3DMARK2005 Scores	Western Digital WD800JD-00LSA0 80GB	PASS	1747

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel(R) Core(TM)2 Quad Q6600 2.4GHz	PASS	7175
3DMARK2003 Scores	Transcend DDR3 1066 2GB (K4B1G0846D)	PASS	2441
3DMARK2005 Scores	Western Digital WD800JD-00LSA0 80GB	PASS	1689

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel(R) Celeron(R) Processor 440 2GHz	PASS	4605
3DMARK2003 Scores	Transcend DDR3 1066 2GB (K4B1G0846D)	PASS	1888
3DMARK2005 Scores	Western Digital WD800JD-75MSA3 80GB	PASS	1415

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel(R) Core(TM)2 Quad Q9300 2.5GHz	PASS	7336
3DMARK2003 Scores	Kingston DDR3 1333 2GB (J1108BABG-DJ-E)	PASS	2454
3DMARK2005 Scores	Western Digital WD800JD-75MSA3 80GB	PASS	1762

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel(R) Pentium(R) Processor E6500 2.93GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB	PASS	7038
3DMARK2003 Scores		PASS	2441
3DMARK2005 Scores		PASS	1699

5.5 3D MARK2006

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel™ Celeron™ Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	205
2	SM2.0 Scores		PASS	60
3	HDR/SM3.0 Scores		PASS	81
4	CPU Scores		PASS	1693

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB	PASS	1023
2	SM2.0 Scores		PASS	318
3	HDR/SM3.0 Scores		PASS	391
4	CPU Scores		PASS	3366

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	1067
2	SM2.0 Scores		PASS	335
3	HDR/SM3.0 Scores		PASS	411
4	CPU Scores		PASS	2226

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel(R) Core(TM)2 Quad Q6600 2.4GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB	PASS	1049
2	SM2.0 Scores		PASS	326
3	HDR/SM3.0 Scores		PASS	401
4	CPU Scores		PASS	3368

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel(R) Celeron(R) Processor 440 2GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-75MSA3 80GB	PASS	847
2	SM2.0 Scores		PASS	274
3	HDR/SM3.0 Scores		PASS	339
4	CPU Scores		PASS	865

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel(R) Core(TM)2 Quad Q9300 2.5GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB	PASS	870
2	SM2.0 Scores		PASS	276
3	HDR/SM3.0 Scores		PASS	324
4	CPU Scores		PASS	3598

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Scores	Intel(R) Pentium(R) Processor E6500 2.93GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB	PASS	1048
2	SM2.0 Scores		PASS	328
3	HDR/SM3.0 Scores		PASS	404
4	CPU Scores		PASS	2485

5.6 PC MARK2002

Test Environment
Intel™ Celeron™ Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED \$SUITE	Result	Remark
1	CPU test Scores	PASS	8570
2	Memory test Scores	PASS	10894
3	HDD test Scores	PASS	1402

Test Environment
Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED \$SUITE	Result	Remark
1	CPU test Scores	PASS	9445
2	Memory test Scores	PASS	29898
3	HDD test Scores	PASS	1377

Test Environment
Intel™ Celeron™ Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED \$SUITE	Result	Remark
1	CPU test Scores	PASS	8603
2	Memory test Scores	PASS	11129
3	HDD test Scores	PASS	1426

Test Environment
Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED \$SUITE	Result	Remark
1	CPU test Scores	PASS	10515
2	Memory test Scores	PASS	33281
3	HDD test Scores	PASS	1385

Test Environment
Intel(R) Core(TM)2 Quad Q6600 2.4GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED \$SUITE	Result	Remark
1	CPU test Scores	PASS	9500
2	Memory test Scores	PASS	29932
3	HDD test Scores	PASS	1301

Test Environment
Intel(R) Celeron(R) Processor 440 2GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED \$SUITE	Result	Remark
1	CPU test Scores	PASS	7800
2	Memory test Scores	PASS	10933
3	HDD test Scores	PASS	1410

Test Environment
Intel(R) Core(TM)2 Quad Q9300 2.5GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Scores	PASS	9805
2	Memory test Scores	PASS	29918
3	HDD test Scores	PASS	1431

5.7 PC MARK2004

Test Environment
Intel™ Celeron™ Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB

Windows XP PS2

Item	WEIGHTED SUITE	Result	Remark
1	PCMark Scores	PASS	6329
2	CPU test Scores	PASS	N/A
3	Memory test Scores	PASS	5306
4	Graphic test Scores	PASS	1628
5	HDD test Scores	PASS	4328

Test Environment
Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB

Windows XP PS2

Item	WEIGHTED SUITE	Result	Remark
1	PCMark Scores	PASS	N/A
2	CPU test Scores	PASS	N/A
3	Memory test Scores	PASS	8376
4	Graphic test Scores	PASS	1834
5	HDD test Scores	PASS	4486

Test Environment
Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB

Windows XP PS2

Item	WEIGHTED \$UITE	Result	Remark
1	PCMark Scores	PASS	N/A
2	CPU test Scores	PASS	N/A
3	Memory test Scores	PASS	9443
4	Graphic test Scores	PASS	1987
5	HDD test Scores	PASS	4477

Test Environment
Intel(R) Core(TM)2 QuadQ6600 2.4GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB

Windows XP PS2

Item	WEIGHTED \$UITE	Result	Remark
1	PCMark Scores	PASS	N/A
2	CPU test Scores	PASS	N/A
3	Memory test Scores	PASS	8540
4	Graphic test Scores	PASS	1726
5	HDD test Scores	PASS	4513

Test Environment
Intel(R) Celeron(R) Processor 440 2GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-75MSA3 80GB

Windows XP PS2

Item	WEIGHTED \$UITE	Result	Remark
1	PCMark Scores	PASS	4147
2	CPU test Scores	PASS	4468
3	Memory test Scores	PASS	5126
4	Graphic test Scores	PASS	1603
5	HDD test Scores	PASS	N/A

Test Environment
Intel(R) Core(TM)2 Quad Q9300 2.5GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB

Windows XP PS2

Item	WEIGHTED \$UITE	Result	Remark
1	PCMark Scores	PASS	N/A
2	CPU test Scores	PASS	N/A
3	Memory test Scores	PASS	7886
4	Graphic test Scores	PASS	1828
5	HDD test Scores	PASS	4480

5.8 PC MARK2005

Test Environment
Intel™ Celeron™ Processor E1500 2.2GHz A-DATA DDR3 1333 2GB (AD309080BD-151G) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	System test Scores	PASS	4110
2	CPU test Scores	PASS	5614
3	Memory test Scores	PASS	4347
4	Graphic test Scores	PASS	1700
5	HDD test Scores	PASS	4696

Test Environment
Intel(R) Core(TM)2 Duo E6300 1.86GHz A-DATA DDR3 1333 1GB (AD309080BD-151G) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	System test Scores	PASS	4949
2	CPU test Scores	PASS	7739
3	Memory test Scores	PASS	5161
4	Graphic test Scores	PASS	1968
5	HDD test Scores	PASS	4681

Test Environment
Intel(R) Core(TM)2 Duo E6750 2.66GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED \$UITE	Result	Remark
1	System test Scores	PASS	5114
2	CPU test Scores	PASS	6808
3	Memory test Scores	PASS	5807
4	Graphic test Scores	PASS	2064
5	HDD test Scores	PASS	4696

Test Environment
Intel(R) Core(TM)2 Quad Q6600 2.4GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-00LSA0 80GB

Windows XP SP2

Item	WEIGHTED \$UITE	Result	Remark
1	System test Scores	PASS	4966
2	CPU test Scores	PASS	7730
3	Memory test Scores	PASS	5198
4	Graphic test Scores	PASS	183
5	HDD test Scores	PASS	4682

Test Environment
Intel(R) Celeron(R) Processor 440 2GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED \$UITE	Result	Remark
1	System test Scores	PASS	2921
2	CPU test Scores	PASS	3635
3	Memory test Scores	PASS	4117
4	Graphic test Scores	PASS	1690
5	HDD test Scores	PASS	5127

Test Environment
Intel(R) Core(TM)2 Quad Q9300 2.5GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED \$UITE	Result	Remark
1	System test Scores	PASS	4998
2	CPU test Scores	PASS	8049
3	Memory test Scores	PASS	5592
4	Graphic test Scores	PASS	1591
5	HDD test Scores	PASS	4758

Test Environment
Intel(R) Pentium(R) Processor E6500 2.93GHz Kingston DDR3 1333 2GB (J1108BABG-DJ-E) Western Digital WD800JD-75MSA3 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	System test Scores	PASS	5272
2	CPU test Scores	PASS	7507
3	Memory test Scores	PASS	5824
4	Graphic test Scores	PASS	2011
5	HDD test Scores	PASS	4796

5.9 Storage Performance

5.9.1 HDD

Test environment:

OS Windows XP professional SP2

Program (HD Tune)

HDD MODEL	INTERFACE	capacity	Average	Burst Rate	Access time
Western Digital WD800JD-00LSA0	SATA	80 GB	47.2 MB/sec	122.4 MB/sec	13.7 ms
Western Digital WD800JD-75MSA3	SATA	80 GB	47.5 MB/sec	135.5 MB/sec	13.9 ms
Western Digital WD1600AAJS-22B4A0	SATA	160 GB	88.3 MB/sec	147 MB/sec	15.7 ms
HITACHI HDS721616PLA380	SATA	160 GB	59.6 MB/sec	164.1 MB/sec	14 ms
Western Digital WD2500AAJS-00B4A0	SATA	250 GB	78.4 MB/sec	146.2 MB/sec	16 ms
Western Digital WD10EADS-00L5B1	SATA	1000 GB	63.9 MB/sec	149.3 MB/sec	14.2 ms

JetFlash Transcend	USB	8 GB	26.5 MB/sec	26.7 MB/sec	0.5 ms
TDK LoR Trans-It Drive	USB	4 GB	16.6 MB/sec	12.1 MB/sec	0.8 ms
NEXS iFlash	USB	2 GB	10 MB/sec	10.4 MB/sec	2.4 ms
Apacer USB FLASH DRIVE	USB	515 MB	9.1 MB/sec	4.7 MB/sec	1.8 ms

5.9.2 CD-ROM

Test environment:

OS Windows XP professional SP2

Program (NERO)

CD-ROM MODEL	INTERFACE	Average speed	Full Read	Burst Rate	CD
ASUS DVD DRW-1814BLT	SATA	29.95 x	169 ms	45 MB/s	52 X CD-R
PIONEER DVD DVR-212BK	SATA	17.41 x	192 ms	45 MB/s	52 X CD-R
LG DVD GSA-H62L	SATA	35.17 x	208 ms	39 MB/s	52 X CD-R
LG DVD GGW-H20L	SATA	30 x	206 ms	40 MB/s	52 X CD-R
LITEON DVD SOSC-2485KX	USB	17.53 x	176 ms	22 MB/s	52X CD-R
LITEON DVD SOSW-833SX	USB	15.17 x	233 ms	21 MB/s	52X CD-R

5.10 Vibration Test

Motherboard	P4ELA		
Test Equipment	VS-5060L		
Amplitude	Frequency	Time (1min/1Time)	Result
0.75mm	5 → 55 → 5 Hz	10	PASS
1.00mm	5 → 55 → 5 Hz	10	PASS
1.25mm	5 → 55 → 5 Hz	10	PASS
1.5mm	5 → 55 → 5 Hz	10	PASS
1.5mm	5 → 55 → 5 Hz	120	PASS