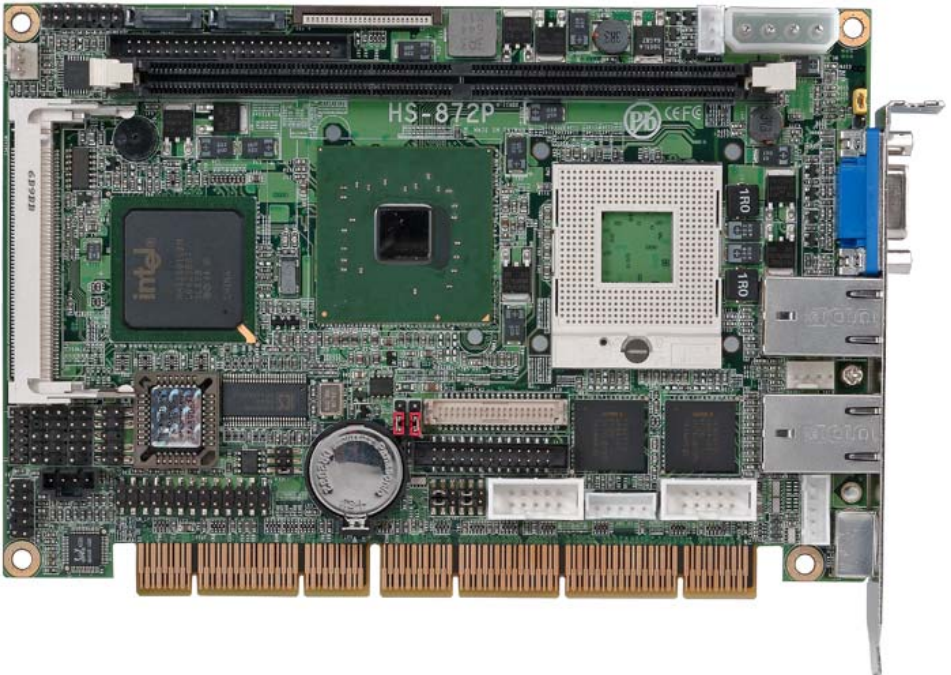


HS-872P

Test Report

Edition 1.1

2007/09/12



Identify:

Test Engineer: Gary

Index

Index	2
1. Function test	4
1.1 Hardware function	4
1.2 BIOS function	6
1.3 Driver	8
2. Compatibility test.....	10
2.1 CPU Test	10
2.2 Memory Test.....	11
2.3 VGA Graphic Test.....	12
2.4 Audio Test.....	14
2.5 HDD Test	16
2.6 CD-ROM Test	17
2.7 USB Test	18
2.8 Serial Port Test	20
2.9 Keyboard 、 Mouse Test	22
2.10 LAN Test.....	24
2.11 Power Supply Test.....	25
2.12 Boot Up Test.....	27
2.13 Os Install	27
2.14 Print Port Test.....	28
3. Environmental test.....	29
3.1 Temperature Test.....	29
4. Reliability Test.....	30
4.1 Power Consumption Test	30
4.2 Thermal measurements at various points on the board.....	36
5. Performance Test.....	37
5.1-1 WinBench 99 Version 1.1.....	37

5.1-2 WinBench 99 Version 1.2.....	39
5.2 Business Win Stone	40
5.3 Content Creation Winstone	41
5.4 3D MARK	42
5.5 PC MARK2002.....	44
5.6 PC MARK2004.....	45
5.7 PC MARK2005.....	46

1. Function test

1.1 Hardware function

Base Function Test

1	Power Button	Pass
2	Reset	Pass
3	Power LED	Pass
4	IDE LED	Pass
5	HDD LED	Pass
6	BUZZER	Pass
7	IDE Primary Master	Pass
8	IDE Primary Slave	Pass
9	IDE Secondary Master	Pass
10	IDE Secondary Slave	Pass
11	COM Port	Pass
12	DIMM	Pass
13	VGA Port	Pass
14	Floppy	Pass
15	Keyboard	Pass
16	Mouse	Pass
17	AUDIO	Pass
18	LAN Port	Pass
19	USB Port	Pass
20	SATA1/2	Pass

21	CPUFAN	Pass
22	SYSFAN	Pass
23	CDIN	Pass
24	CF Card	Pass
25	MINPCI	Pass
26	LVDS	Pass
27	IrDA	Pass
28	HDTV	Pass
29	GPIO	Pass
30	DVI	Pass
31	ISA	Pass
32	Printer Port	Pass

2.0 PITCH (DIP)

1	JRTC	Pass
2	JVLCD	Pass
3	JCRT	Pass
4	JCFSEL 1/2	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	Hard Disk Boot Priority	Pass	
7	Quick Power On Self Test	Pass	
8	On Chip Frame Buffer Size	Pass	
9	Boot Display	Pass	
10	On Chip Primary IDE	Pass	
11	On Chip Serial ATA	Pass	
12	USB Controller	Pass	
13	USB 2.0 Controller	Pass	
14	USB Keyboard Support	Pass	
15	Onboard Serial Port 1	Pass	
16	Onboard Serial Port 2	Pass	
17	Onboard Parallel Port	Pass	
18	AC97 Audio	Pass	
19	PWRON After PWR-Fail	Pass	
20	Watch Dog Timer Select	Pass	
21	Power On By Ring	Pass	
22	Resume by Alarm	Pass	
23	Power On Function	Pass	

24	ACPI Function	Pass	
25	RTC Alarm Resume	Pass	
26	ACPI Suspend Type	Pass	
27	Soft-Off by PWRBTN	Pass	
28	CPU Warning Temperature	Pass	

1.3 Driver

1. Windows XP chi Driver Test

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

2. Windows Server 2003 Driver Test

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

hs3. Windows XP eng Driver Test

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

4. Windows Vista Driver Test

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

5. LINUX SUSE 10.0 Driver Test

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

2. Compatibility test

2.1 CPU Test

CPU	Operating System	Result	Remark
Intel(R) Core Duo Processor T5600 /2M/1.83GHZ	Windows XP SP1	Pass	
	Windows XP SP2	Pass	
	Windows XP Vista	Pass	
	Windows Server 2003	Pass	
	Suse 10.0	Pass	
Intel Yonah Processor T2400 /2M/1.83GHZ	Windows XP SP1	Pass	
	Windows XP SP2	Pass	
	Windows XP Vista	Pass	
	Windows Server 2003	Pass	
	Suse 10.0	Pass	
Intel Celeron 430 /1M/ 1.73 GHZ	Windows XP SP1	Pass	
	Windows XP SP2	Pass	
	Windows XP Vista	Pass	
	Windows Server 2003	Pass	
	Suse 10.0	Pass	

2.2 Memory Test

DDR2 SO-DIMM SDRAM	DDR2 Freq	Capacity Mbytes	Operating System	Result
Kingston KVR533D2N4	DDR2 533	1GB	Win XP SP1 Win XP SP2 Win Vista Win 2003 Suse 10.0	PASS
Kingston KVR800D2N5 (V59C1512804QBF25) (S5288100PEBXA)	DDR2 800	1GB	Win XP SP1 Win XP SP2 Win Vista Win 2003 Suse 10.0	PASS
Kingston KVR533D2N4 Hynix(HY5P12821B)	DDR2 533	1GB	Win XP SP1 Win XP SP2 Win Vista Win 2003 Suse 10.0	PASS

2.3 VGA Graphic Test

1. Windows XP SP1

Item	Description	Result	Remark
1	Resolution/Color Change	Pass	
2	CRT Display Test	Pass	
3	CRT Display Quality Test	Pass	
4	LVDS Display Test	Pass	
5	Extended Display Test	Pass	

2. Windows XP SP2

Item	Description	Result	Remark
1	Resolution/Color Change	Pass	
2	CRT Display Test	Pass	
3	CRT Display Quality Test	Pass	
4	LVDS Display Test	Pass	
5	Extended Display Test	Pass	

3.Windows Server 2003

Item	Description	Result	Remark
1	Resolution/Color Change	Pass	
2	CRT Display Test	Pass	
3	CRT Display Quality Test	Pass	
4	LVDS Display Test	Pass	
5	Extended Display Test	Pass	

4. Windows Vista

Item	Description	Result	Remark
1	Resolution/Color Change	Pass	
2	CRT Display Test	Pass	
3	CRT Display Quality Test	Pass	
4	LVDS Display Test	Pass	
5	Extended Display Test	Pass	

5. Windows Vista 64bit

Item	Description	Result	Remark
1	Resolution/Color Change	Pass	
2	CRT Display Test	Pass	
3	CRT Display Quality Test	Pass	
4	LVDS Display Test	Pass	
5	Extended Display Test	Pass	

2.4 Audio Test

1. Windows XP SP1

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	

2. Windows XP SP2

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	

3. Windows server 2003

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	

4. Windows Vista

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	

5. Windows Vista 64bit

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	

2.5 HDD Test

HDD Type	Operating System	HDD Size Detect	HDD Data Transfer	HDD LED Check
HITACHI 82.3GB HDS728080PLA380 (SATA)	MS-DOS Win 2003	PASS	PASS	PASS
Western Digital WD2500JB-00REA0 250GB	Win XP SP1 Win XP SP2 Win Vista	PASS	PASS	PASS
Seagate ST380011A 80Gbytes	Suse 10.0	PASS	PASS	PASS

2.6 CD-ROM Test

CD-ROM Type	Operating System	CD-ROM Detect	CD-ROM Data Transfer	PLAY DVD
Teac DW-224E USB2.0 DVD/CD-RW Combo	MS-DOS Win 2003 Win XP SP1 Win XP SP2 Win Vista Suse 10.0	PASS	PASS	PASS
ASUS CD-S400/A		PASS	PASS	PASS
4KUS COB-6V5216		PASS	PASS	PASS
A Open DVD 1648/LKY		PASS	PASS	PASS

2.7 USB Test

1. Windows XP SP1

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

2 Windows XP SP2

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

3 Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

4 Suse 10.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

5. Windows Vista

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

6. Windows Vista 64bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

7. MS-DOS

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
4	Hot plugging test	Pass	

2.8 Serial Port Test

1. MS-DOS

Item	Description	Result	Remark
1	RS-232 Mouse Test	Pass	
2	RS-232 Modem Test	Pass	
3	B&B Electronics COM Port RS-232 Test (W/Loop-Back)	Pass	
4	PC CHECK COM Port RS-232 Test (W/Loop-Back)	Pass	

2. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	RS-232 Modem Test	Pass	

3. Windows XP chi

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	RS-232 Modem Test	Pass	

4. Windows XP eng

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	RS-232 Modem Test	Pass	

5. Windows Vista

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	RS-232 Modem Test	Pass	

6. Windows Vista 64bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	RS-232 Modem Test	Pass	

2.9 Keyboard 、 Mouse Test

1. MS-DOS

Item	Description	Result	Remark
1	Keyboard LED Status Test	Pass	
2	Keyboard Typing Test	Pass	

2. Windows XP chi

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

3. Windows XP eng

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

4. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

5. Suse 10.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

6. Windows Vista

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

7. Windows Vista 64bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

2.10 LAN Test

1. Windows XP chi

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

2. Windows XP eng

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. Suse 10.0

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

5. Windows XP Vista

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

6. Windows XP Vista 64bit

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

2.11 Power Supply Test

1. MS-DOS 6.22

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	JAGIER Windmill PRO 315W
3	ATX Power On/Off	Pass	Hec Windmill PRO 315W

2. Windows XP SP1

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	JAGIER Windmill PRO 315W
3	ATX Power On/Off	Pass	Hec Windmill PRO 315W

3 Windows XP SP2

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	JAGIER Windmill PRO 315W
3	ATX Power On/Off	Pass	Hec Windmill PRO 315W

4 Windows Server 2003

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	JAGIER Windmill PRO 315W
3	ATX Power On/Off	Pass	Hec Windmill PRO 315W

5 Suse 10.0

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	JAGIER Windmill PRO 315W
3	ATX Power On/Off	Pass	Hec Windmill PRO 315W

6 Windows XP Vista

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	JAGIER Windmill PRO 315W
3	ATX Power On/Off	Pass	Hec Windmill PRO 315W

2.12 Boot Up Test

Item	Description	Result	Remark
1	Soft boot from HDD	Pass	
2	Soft boot from CD-ROM	Pass	
3	Soft boot from Floppy	Pass	
4	Reboot test with Win XP SP1	Pass	
5	Reboot test with Win XP SP2	Pass	
6	Reboot test with Win 2003	Pass	
7	Reboot test with Win Vista	Pass	

2.13 Os Install

Item	Description	Result	Remark
1	Windows Server 2003	Pass	
2	Windows XP SP1	Pass	
3	Windows XP SP2	Pass	
4	Windows XP Vista	Pass	

2.14 Print Port Test

1. Window XP CHE

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

2. Window XP ENG

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. Window VISTA

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

5. Window VISTA 64bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

3. Environmental test

3.1 Temperature Test

Hardware Device list:

System Board	HS-872P
CPU	Intel Core Duo T2500 2M/ 2GHZ
Memory	Apacer DDR2 533 1GB
HDD	Seagate 80.0GB
Operating OS	Windows XP SP2
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3Dmark 2003

0141Boot Up Test:

Temperature	Result	Remark
-20°C	Pass	Times
70°C	Pass	Times

4. Reliability Test

4.1 Power Consumption Test

1. Test Environment:

Motherboard	HS-872P
CPU	INTEL Core Duo T2300 1.66GHz
Memory	Kingston DDR2 533 1GB(HYNIX HY5PS12821B)
Power Supply	Seasonic SS-330HB (330W)

Voltage	Max Current (A)	Power (W)	Remark
12V	1.26	15.12	Boot UP
5V	3.53	17.65	Boot UP

2. Test Environment:

Motherboard	HS-872P
CPU	Intel Core Duo T2300 1.66GHz
Memory	Transcend DDR2 667 2GB
Power Supply	HEC Windmill PRO 315W
LVDS Penal	AUO M170EG01
HDD	Seagate ST320413A 20GB

Voltage	Max Current (A)	Power (W)	Remark
12V	3.05	36.6	Boot up
5V	4.86	24.3	Boot up

3. Test Environment:

Motherboard	HS-872P
CPU	Intel Core Duo T2300 1.66GHz
Memory	Transcend DDR2 667 2GB
Power Supply	HEC Windmill PRO 315W
LVDS Penal	AUO M170EG01
HDD	Seagate ST320413A 20GB
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	3.34	40.08	
5V	5.61	28.05	

4. Test Environment:

Motherboard	HS-872P
CPU	Intel Core Solo T1300 1.66GHz
Memory	Kingston DDR2 800 512MB
Power Supply	HEC Windmill PRO 315W
LVDS Penal	AUO M170EG01
HDD	Seagate ST320413A 20GB

Voltage	Current (A)	Power (W)	Remark
12V	2.78	33.36	Boot Up
5V	4.11	20.55	Boot Up

5. Test Environment:

Motherboard	HS-872P
CPU	Intel Core Solo T1300 1.66GHz
Memory	Kingston DDR2 800 512MB
Power Supply	HEC Windmill PRO 315W
LVDS Panel	AUO M170EG01
HDD	Seagate ST320413A 20GB
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	3.03	36.36	
5V	5.18	25.9	

6. Test Environment:

Motherboard	HS-872P
CPU	Intel Core Solo T1300 1.66GHz
Memory	Kingston DDR2 800 512MB
Power Supply	HEC Windmill PRO 315W
HDD	Seagate ST320413A 20GB
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	1.37	16.44	
5V	3.97	19.85	

7. Test Environment:

Motherboard	HS-872P
CPU	Intel Core Duo T2300 1.66GHz
Memory	Transcend DDR2 667 2GB
Power Supply	HEC Windmill PRO 315W
HDD	Seagate ST320413A 20GB
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	1.68	20.16	
5V	4.14	20.7	

8. Test Environment:

Motherboard	HS-872P
CPU	Intel(R) Core 2 Duo T7600 /2M/2.33GHZ
Memory	DSL DDR2 400 256MB
Power Supply	Coolive AP-350F 380W

Voltage	Max Current (A)	Power (W)	Remark
12V	2.11	25.32	Boot UP
5V	3.02	15.10	Boot UP

9. Test Environment:

Motherboard	HS-872P
CPU	Intel(R) Core 2 Duo T7600 /2M/2.33GHZ
Memory	DSL DDR2 400 256MB
Power Supply	Coolive AP-350F 380W
LVDS Panel	LG. Philips LM170E01
HDD	Seagate AST340016A 40GB

Voltage	Max Current (A)	Power (W)	Remark
12V	3.68	44.16	
5V	3.53	17.65	

10. Test Environment:

Motherboard	HS-872P
CPU	Intel(R) Core 2 Duo T7600 /2M/2.33GHZ
Memory	DSL DDR2 400 256MB
Power Supply	Coolive AP-350F 380W
HDD	Seagate AST340016A 40GB
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	2.60	31.2	
5V	3.76	18.8	

11. Test Environment:

Motherboard	HS-872P
CPU	Intel(R) Core 2 Duo T7600 /2M/2.33GHZ
Memory	DSL DDR2 400 256MB
Power Supply	Coolive AP-350F 380W
HDD	Seagate AST340016A 40GB WD Digital WD3000JS 300.0GB(SATA)
CD-ROM	SYNNEX COM-5216
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Max Current (A)	Power (W)	Remark
12V	2.84	34.08	
5V	4.29	21.45	

12. Test Environment:

Motherboard	HS-872P
CPU	Intel(R) Core 2 Duo T7600 /2M/2.33GHZ
Memory	DSL DDR2 400 256MB
Power Supply	Coolive AP-350F 380W
LVDS Penal	LG. Philips LM170E01
HDD	Seagate AST340016A 40GB
Operating System	Windows XP SP2
Test Program	3DMark 2003

Voltage	Current (A)	Power (W)	Remark
12V	4.34	52.08	
5V	4.88	24.40	

4.2 Thermal measurements at various points on the board

Test Environment :

CPU	Intel Core Duo Processor L2500 1.83GHz 2MB L2 Cache
Memory	Kingston KVR533D2N4 DDRII533 1GB
HDD	Seagate ST380011A 80GB
CD-ROM	ASUS CD-S400/A
Power	Seventeam ST-300BLV
Operating System	Windows XP Professional SP2
Test Program	3D Mark 2003

Test Result:

CPU	50.0°C
945GM (Northbridge)	45.4°C
ICH7-M (Southbridge)	48.8°C
U4	48.9°C
U6	58.7°C
U7	45.3°C
U8	45.1°C
Q3	51.1°C
Q9	42.3°C
Q10	47.7°C
Q11	47.3°C
Q34	47.4°C
Q35	43.2°C

5. Performance Test

5.1-1 WinBench 99 Version 1.1

Test Environment
Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB

1. Windows Server 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark 99	Pass	260
2	FPU WinMark	Pass	11900
3	Business Disk WinMark 99	Pass	86700 Thousand Bytes/Sec
4	High-End Disk WinMark 99	Pass	30200 Thousand Bytes/Sec
5	Business Graphics WinMark 99	Pass	241
6	High-End Graphics WinMark 99	Pass	1090

2. Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU mark99	Pass	260
2	FPU WinMark	Pass	11800
3	Business Disk WinMark 99	Pass	8750usand Bytes/Sec
4	High-End Disk WinMark 99	Pass	28300sand Bytes/Sec
5	Business Graphics WinMark 99	Pass	352
6	High-End Graphics WinMark 99	Pass	1150

3. Windows XP Vista

Item	WEIGHTED SUITE	Result	Remark
1	CPU mark99	Pass	259
2	FPU WinMark	Pass	11800
3	Business Disk WinMark 99	Pass	8960 Thousand Bytes/Sec
4	High-End Disk WinMark 99	Pass	40000 Thousand Bytes/Sec
5	Business Graphics WinMark 99	Pass	169
6	High-End Graphics WinMark 99	Pass	715

5.1-2 WinBench 99 Version 1.2

Test Environment
Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB

1. Windows Server 2003

Item	WEIGHTED SUITE	Result	Remark
1	Business Disk WinMark 99	Pass	8530 Thousand Bytes/Sec
2	High-End Disk WinMark 99	Pass	31000 Thousand Bytes/Sec

2. Windows XP SP

Item	WEIGHTED SUITE	Result	Remark
1	Business Disk WinMark 99	Pass	8690 Thousand Bytes/Sec
2	High-End Disk WinMark 99	Pass	27900 Thousand Bytes/Sec

3. Windows XP Vista

Item	WEIGHTED SUITE	Result	Remark
1	Business Disk WinMark 99	Pass	7840 Thousand Bytes/Sec
2	High-End Disk WinMark 99	Pass	40200 Thousand Bytes/Sec

5.2 Business Win Stone

Windows Server 2003

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2001	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	85.8
			86.3
			85.3
			86.6
			86.6
Business Win stone2002	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	44.7
			44.7
			44.4
			44.2
			43.6

5.3 Content Creation Winstone

Windows Server 2003

WEIGHTED SUITE	Test Environment	Result	Remark
Content Creation Winstone 2000	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	123.4
			127.6
			127.4
			126.8
			127.2
Content Creation Winstone 2001	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	148.9
			139.2
			120.7
			162.1
			152

5.4 3D MARK

1. Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	7308
3DMARK2001 Scores		Pass	5062
3DMARK2003 Scores		Pass	1119
3DMARK2005 Scores		Pass	433

2.Windows XP SP1

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	6529
3DMARK2001 Scores		Pass	4714
3DMARK2003 Scores		Pass	1087

2. Windows SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	6848
3DMARK2001 Scores		Pass	4635
3DMARK2003 Scores		Pass	1074

3. Windows Vista

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB	Pass	5269
3DMARK2001 Scores		Pass	3187

5.5 PC MARK2002

Test Environment
Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB

Windows Server 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	6839
2	Memory test Source	Pass	15052
3	HDD test Source	Pass	790

Windows XP SP1

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	6845
2	Memory test Source	Pass	15064
3	HDD test Source	Pass	720

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	6839
2	Memory test Source	Pass	15044
3	HDD test Source	Pass	690

Windows XP Vista

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	14327
2	HDD test Source	Pass	1386

5.6 PC MARK2004

Test Environment
Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB

Windows Server 2003

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	3743
2	HDD test Source	Pass	3067

Windows XP SP1

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	3735
2	HDD test Source	Pass	3006
3	Graphic test Source	Pass	854

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	3734
2	HDD test Source	Pass	2995
2	Graphic test Source	Pass	770

5.7 PC MARK2005

Test Environment
Intel Core Duo T2500 2M/ 2GHZ Apacer DDR2 533 1GB Seagate 80.0GB

Windows Server 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	4482
2	Memory test Source	Pass	3097
3	HDD test Source	Pass	2906

Windows XP SP1

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	4656
2	Memory test Source	Pass	3096
3.	HDD test Source	Pass	2890

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	4665
2	Memory test Source	Pass	3076
3.	HDD test Source	Pass	2860

Windows XP Vista

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	4533
2	Memory test Source	Pass	2977