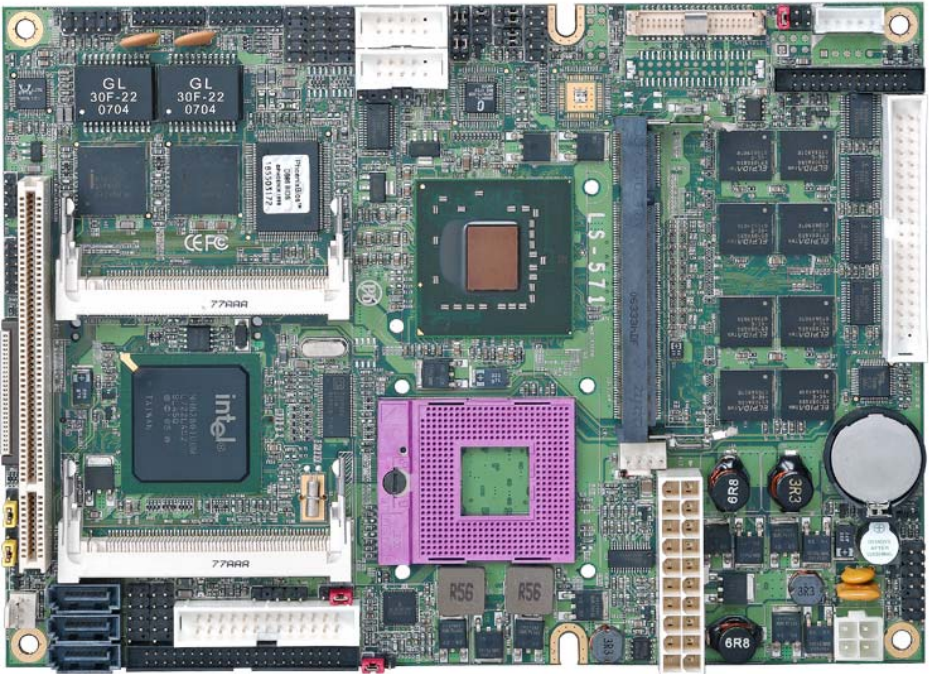


# LS-571

## Test Report

Version: 1.0

2008/02/02



Test Engineer :

Identify:

# Index

Index .....	2
1. Function test .....	4
1.1 Hardware function .....	4
1.2 BIOS function.....	8
1.3 Driver .....	10
2. Compatibility test .....	11
2.1 CPU Test.....	11
2.2 Memory Test.....	12
2.3 VGA Graphic Test .....	14
2.4 Audio Test.....	15
2.5 HDD Test.....	16
2.6 CD-ROM Test .....	19
2.7 USB Test.....	21
2.8 Serial Port Test .....	22
2.9 Keyboard 、 Mouse Test.....	23
2.10 LAN Test .....	25
2.11 Power Supply Test .....	27
2.12 Floppy Drive Test .....	29
2.13 Boot Up Test.....	30
2.14 Os Install .....	30
2.15 Print Port Test .....	31
3. Environmental test.....	32
3.1 Temperature Test .....	32
4. Reliability Test.....	33
4.1 Power Consumption Test.....	33
4.2 Thermal measurements at various points on the board.....	43

5. Performance Test .....	44
5.1-1 WinBench 99 Version 1.1 .....	44
5.1-2 WinBench 99 Version 1.2.....	45
5.2 3D MARK .....	45
5.3 3D MARK2006 .....	47
5.4 PC MARK2002 .....	48
5.5 PC MARK2004 .....	49

# 1. Function test

## 1.1 Hardware function

### Base Function Test

Item	Description	Result	Remark
1	Power Button	Pass	
2	Reset	Pass	
3	Power LED	Pass	
4	HDD LED	Pass	
5	BUZZER	Pass	
6	IDE Primary Master	Pass	
7	IDE Primary Slave	Pass	
8	Serial ATA 1 connector	Pass	
9	Serial ATA 2 connector	Pass	
10	Serial ATA 3 connector	Pass	
11	SO DIMM socket	Pass	
12	Floppy connector	Pass	
13	Mouse /Keyboard connector	Pass	CN_PS2
14	DVI1 connector	Pass	CN_DVI1
15	SMBUS connector		CN_SMBUS
16	Audio connector	Pass	CN_AUDIO
17	CD-ROM audio input connector	Pass	CD_IN
18	COM1 connector	Pass	
19	COM2 connector	Pass	
20	COM3/4/5/6 connector	Pass	
21	USB1 connector	Pass	

22	USB2 connector	Pass	
23	USB3 connector	Pass	
24	USB4 connector	Pass	
25	Giga LAN1 connector	Pass	
26	Giga LAN2 connector	Pass	
27	LPT connector	Pass	
28	Mini-PCI 1 socket	Pass	
29	Mini-PCI 2 socket	Pass	
30	PCI socket	Pass	
31	Compact Flash TYPE-II socket	Pass	
32	IrDA connector	Pass	
33	HDTV connector	Pass	CN_HDTV
34	Digital I/O connector	Pass	CN_DIO
35	LVDS connector	Pass	CN_LVDS
36	AT power supply connector	Pass	DC_IN
37	ATX function connector	Pass	ATX
38	CPU cooler fan connector	Pass	CPUFAN
39	system cooler fan connector	Pass	SYSFAN

### Jumper

1	CMOS Operating/Clear Setting	Pass	JRTC
2	CRT attach select setting	Pass	JCRT
3	front panel switch/indicator connector	Pass	JFRNT
4	COM2 RS232/422/485 mode setting	Pass	JCSEL1

		Pass	JCSEL2
<b>5</b>	<b>LCD Panel Voltage Setting</b>	Pass	JVLCD

· **1.2 BIOS Function By Advanced Chipset Features**

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
1	Virus Warning	Pass	
2	CPU L1& L2 Cache	Pass	
3	Quick Power On Self Test	Pass	
4	First Boot Device	Pass	
5	Second Boot Device	Pass	
6	Third Boot Device	Pass	
7	Boot Other Device	Pass	
8	Swap Floppy Drive	Pass	
9	Boot Up Floppy Seek	Pass	
10	Boot Up NumLock Status	Pass	
11	Typematic Rate Setting	Pass	
12	Typematic Rate (Chars/Sec)	Pass	
13	Typematic Rate (Msec)	Pass	
14	Security Option	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	Boot Other Device	Pass	
9	Boot Up Floppy Seek	Pass	
10	Boot Up Num Lock Status	Pass	
11	VGA Control	Pass	
12	On Chip Frame Buffer Size	Pass	
13	Boot Display	Pass	
14	On Chip Primary IDE	Pass	
15	On Chip Serial ATA	Pass	
16	USB Controller	Pass	
17	USB 2.0 Controller	Pass	
18	USB Keyboard Support	Pass	
19	Azalia Audio	Pass	
20	Onboard LAN1 Control	Pass	
21	POWER ON Function	Pass	
22	Onboard FDC Controller	Pass	
23	PWRON After PWR-Fail	Pass	
24	Watch Dog Timer Select <sub>8</sub>	Pass	
25	ACPI Function	Pass	



<b>26</b>	<b>ACPI Suspend Type</b>	Pass	
<b>27</b>	<b>Soft-Off by PWRBTN</b>	Pass	
<b>28</b>	<b>Wake-Up On LAN.</b>	Pass	
<b>29</b>	<b>Power On by Ring</b>	Pass	
<b>30</b>	<b>Resume by Alarm</b>	Pass	
<b>31</b>	<b>Init Display First</b>	Pass	
<b>32</b>	<b>CPU Warning Temperature</b>	Pass	

## 1.3 Driver

### 1. Windows Vista Driver Test

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

### 2. Windows Vista 64bit Driver Test

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

### 3. Windows XP Professional SP2 Driver Test

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

### 4. Windows XP Professional x64 Edition Version 2003 SP1 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

<b>CPU</b>	<b>Operating System</b>	<b>Result</b>	<b>Remark</b>
Core 2 Duo 7100 / 2M / 1.80 GHz	<b>MS-DOS</b>	Pass	
	<b>Windows Vista</b>	Pass	
	<b>Windows Vista 64bit</b>	Pass	
	<b>Windows Professional XP</b>	Pass	
	<b>Windows Professional XP 64bit</b>	Pass	
Core 2 Duo 7500 / 4M / 2.00 GHz	<b>MS-DOS</b>	Pass	
	<b>Windows Vista</b>	Pass	
	<b>Windows Vista 64bit</b>	Pass	
	<b>Windows Professional XP</b>	Pass	
	<b>Windows Professional XP 64bit</b>	Pass	
Core 2 Duo 7700 / 4M / 2.40 GHz	<b>MS-DOS</b>	Pass	
	<b>Windows Vista</b>	Pass	
	<b>Windows Vista 64bit</b>	Pass	
	<b>Windows Professional XP</b>	Pass	
	<b>Windows Professional XP 64bit</b>	Pass	
Celeron M540 /1M/ 1.86 GHz	<b>MS-DOS</b>	Pass	
	<b>Windows Vista</b>	Pass	
	<b>Windows Vista 64bit</b>	Pass	
	<b>Windows Professional XP</b>	Pass	
	<b>Windows Professional XP 64bit</b>	Pass	

## 2.2 Memory Test

<b>DDRII DRAM</b>	<b>DDRII Freq</b>	<b>Capacity Mbytes</b>	<b>Operating System</b>	<b>Result</b>
ELPIDA (E5108AGBG)	DDRII667	1GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass
			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass
Kingston KVR533D2S4	DDRII533	1GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass
			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass
Adata	DDRII667	2GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass
			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass
Transcend	DDRII667	2GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass

			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass
Kingston(HY5P S12821B)	DDRII533	1GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass
			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass
GREENCOM(E 5108AE-6E-E)	DDRII667	1GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass
			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass
pqi(D9HNL)	DDRII667	2GB	<b>Windows Vista</b>	Pass
			<b>Windows Vista 64bit</b>	Pass
			<b>Windows XP Professional SP2</b>	Pass
			<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass

## 2.3 VGA Graphic Test

### 1. 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	

### 2. 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	

### 3. Windows XP Professional 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	
---	-----------------------	------	--

#### 4. Windows XP Professional x64 Edition Version 2003 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	

## 2.4 Audio Test

### 1. Windows Vista

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	NO Support

### 2. Windows Vista 64bit

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	
4	5.1 channel test	Pass	NO Support

### 3. Windows XP Professional SP2

Item	Description	Result	Remark
------	-------------	--------	--------

1	<b>Sound Effect</b>	Pass	
2	<b>Equalizer</b>	Pass	
3	<b>Microphone</b>	Pass	
4	<b>5.1 channel test</b>	Pass	

#### 4. Windows XP Professional x64 Edition Version 2003 SP1

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

### 2.5 HDD Test

HDD Type	Operating System	HDD Size Detect	HDD Data Transfer	HDD LED Check
Maxtor E1GFHHZE 40GB	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass



	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
Western Digital WD250JB-00REA 0 (250GBytes)	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
Western Digital WD250KS-00MJB 0 (250GBytes) (SATA)	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
Seagate 80GB ST380011A	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
SAMSUNG	<b>MS-DOS</b>	Pass	Pass	Pass

120.0GB HM120JC	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass

## 2.6 CD-ROM Test

CD-ROM Type	Operating System	CD-ROM Detect	CD-ROM Data Transfer	PLAY DVD
Benq CB523C	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
LEMEL LCD-5200S	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
ASUS CD-S400/A	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass

	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
Teac DW-224E USB 2.0 External Slim Line DVD/CD-RW Combo	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass
LITEON SOSC-2485KX USB 2.0 CD-R/ RW /DVD-ROM Combo	<b>MS-DOS</b>	Pass	Pass	Pass
	<b>Windows Vista</b>	Pass	Pass	Pass
	<b>Windows Vista 64bit</b>	Pass	Pass	Pass
	<b>Windows XP Professional SP2</b>	Pass	Pass	Pass
	<b>Windows XP Professional x64 Edition Version 2003 SP1</b>	Pass	Pass	Pass

## 2.7 USB Test

### 1. 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. 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	

### 3. 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	

### 4. Windows XP Professional 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	

#### 5. Windows XP Professional x64 Edition Version 2003 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	

## 2.8 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 Vista

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

## 3. Windows Vista 64bit

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

## 4. Windows XP Professional SP2

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

## 5. Windows XP Professional x64 Edition Version 2003 SP1

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 Vista

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

### 3. Windows Vista 64bit

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

### 4. Windows XP Professional SP2

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

### 5. Windows XP Professional x64 Edition Version 2003 SP1

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 VISTA

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

### 2. Windows VISTA 64bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	

2	Data Transfer Test	Pass	
---	--------------------	------	--

### 3. Windows XP Professional SP2

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

### 4. Windows XP Professional x64 Edition Version 2003 SP1

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-300WAP (300W)
2	ATX Power On/Off	Pass	Aopen FSP300-60ATN (300W)
3	ATX Power On/Off	Pass	JAGIER P4/ATX-350A (350W)
4	ATX Power On/Off	Pass	CWT CWT-300ATX12 (PFC) (300W)

### 2. Windows Vista

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300WAP (300W)
2	ATX Power On/Off	Pass	Aopen FSP300-60ATN (300W)
3	ATX Power On/Off	Pass	JAGIER P4/ATX-350A (350W)
4	ATX Power On/Off	Pass	CWT CWT-300ATX12 (PFC) (300W)

### 3. Windows Vista 64bit

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300WAP (300W)
2	ATX Power On/Off	Pass	Aopen FSP300-60ATN (300W)
3	ATX Power On/Off	Pass	JAGIER P4/ATX-350A (350W)
4	ATX Power On/Off	Pass	CWT CWT-300ATX12 (PFC) (300W)

### 4. Windows XP Professional SP2

Item	Description	Verification	
		Result	Remark

1	ATX Power On/Off	Pass	Seventeam ST-300WAP (300W)
2	ATX Power On/Off	Pass	Aopen FSP300-60ATN (300W)
3	ATX Power On/Off	Pass	JAGIER P4/ATX-350A (350W)
4	ATX Power On/Off	Pass	CWT CWT-300ATX12 (PFC) (300W)

#### 5. Windows XP Professional x64 Edition Version 2003 SP1

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300WAP (300W)
2	ATX Power On/Off	Pass	Aopen FSP300-60ATN (300W)
3	ATX Power On/Off	Pass	JAGIER P4/ATX-350A (350W)
4	ATX Power On/Off	Pass	CWT CWT-300ATX12 (PFC) (300W)

## 2.12 Floppy Drive Test

Model: SAMSUNG SFD321S

### 1. MS-DOS 6.22

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Boot from Floppy	Pass	
3	Floppy Data Transfer	Pass	

### 2. Windows Vista

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Data Transfer	Pass	

### 3. Windows Vista 64bit

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Data Transfer	Pass	

### 4. Windows XP Professional SP2

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Data Transfer	Pass	

### 5. Windows XP Professional x64 Edition Version 2003 SP1

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Data Transfer	Pass	

### 2.13 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	Soft boot from CF	Pass	
5	Reboot test with Win VISTA	Pass	
6	Reboot test with Win VISTA 64bit	Pass	
7	Reboot test with Win XP	Pass	
8	Reboot test with Win XP 64bit	Pass	

### 2.14 Os Install

Item	Description	Result	Remark
1	Windows XP Professional	Pass	
2	Windows XP Professional 64bit	Pass	
3	Windows VISTA	Pass	
4	Windows VISTA 64bit	Pass	

## 2.15 Print Port Test

### 1. Windows Vista

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

### 2. Windows Vista 64bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

### 3. Window XP Professional SP2

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

### 4. Windows XP Professional x64 Edition Version 2003 SP1

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	Pass	

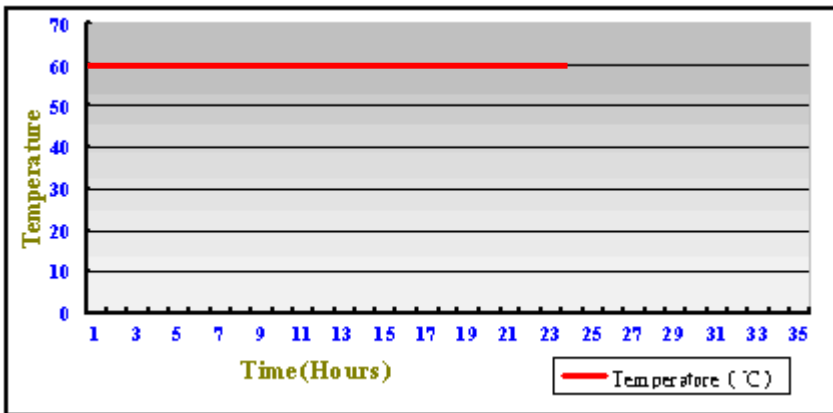
### 3. Environmental test

#### 3.1 Temperature Test

Hardware Device list:

<b>System Board</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo 7100 / 2M / 1.80 GHz
<b>Memory</b>	pqi(D9HNL) DDRII667 2GB
<b>HDD</b>	Western Digital WD2500KS-00MJB0 250GB (SATA)
<b>Operating OS</b>	Windows XP Professional SP2
<b>Test Program</b>	3DMark 2003

#### Test Result:



#### Boot Up Test:

Temperature	Result	Remark
-20°C	Pass	
60°C	Pass	Times



## 4. Reliability Test

### 4.1 Power Consumption Test

#### 1. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	1.72	20.64	Boot Up
<b>-12V</b>	N/A	N/A	Boot Up
<b>5V</b>	1.85	9.25	Boot Up
<b>-5V</b>	N/A	N/A	Boot Up
<b>3.3V</b>	1.83	6.039	Boot Up
<b>5Vsb</b>	0.26	1.3	Boot Up

#### 2. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA

<b>Display</b>	ViewSonic VX715
----------------	-----------------

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
12V	1.65	19.8	Boot Up
-12V	N/A	N/A	Boot Up
5V	2.01	10.05	Boot Up
-5V	N/A	N/A	Boot Up
3.3V	1.84	6.072	Boot Up
5Vsb	0.34	1.7	Boot Up

### 3. Test Environment:

<b>Motherboard</b>	LS-571
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
12V	2.92	35.04	
-12V	N/A	N/A	
5V	3.54	17.7	
-5V	N/A	N/A	

<b>3.3V</b>	1.78	5.874	
<b>5Vsb</b>	N/A	N/A	

#### 4. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	2.62	31.44	
<b>-12V</b>	N/A	N/A	
<b>5V</b>	3.46	17.3	
<b>-5V</b>	N/A	N/A	
<b>3.3V</b>	1.85	6.105	
<b>5Vsb</b>	N/A	N/A	

#### 5. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
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<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
12V	3.61	43.32	Boot Up
-12V	N/A	N/A	Boot Up
5V	2.54	12.7	Boot Up
-5V	N/A	N/A	Boot Up
3.3V	1.9	6.27	Boot Up
5Vsb	0.32	1.6	Boot Up

#### 6. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
12V	3.57	42.84	Boot Up
-12V	N/A	N/A	Boot Up

<b>5V</b>	2.53	12.65	Boot Up
<b>-5V</b>	N/A	N/A	Boot Up
<b>3.3V</b>	1.86	6.138	Boot Up
<b>5Vsb</b>	0.33	1.65	Boot Up

### 7. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.51	54.12	
<b>-12V</b>	N/A	N/A	
<b>5V</b>	4.10	20.5	
<b>-5V</b>	N/A	N/A	
<b>3.3V</b>	1.78	5.874	
<b>5Vsb</b>	N/A	N/A	

### 8 Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	Windmill PRO 315W
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.28	51.36	
<b>-12V</b>	N/A	N/A	
<b>5V</b>	4.2	21	
<b>-5V</b>	N/A	N/A	
<b>3.3V</b>	1.78	5.874	
<b>5Vsb</b>	N/A	N/A	

### 9. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715

Voltage	Current ( A )	Power ( W )	Remark
12V	4.51	54.12	Boot Up

#### 10. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715

Voltage	Current ( A )	Power ( W )	Remark
12V	4.66	55.92	Boot Up

#### 11. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

Voltage	Current ( A )	Power ( W )	Remark
12V	5.65	67.8	

### 12. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	ViewSonic VX715
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

Voltage	Current ( A )	Power ( W )	Remark
12V	5.52	66.24	

### 13. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD



Voltage	Current ( A )	Power ( W )	Remark
12V	5.75	69	Boot Up

#### 14. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD

Voltage	Current ( A )	Power ( W )	Remark
12V	5.67	68.04	Boot Up

#### 15. Test Environment:

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7700 64K/4M/2.40GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
12V	7.52	90.24	

**16. Test Environment:**

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7000 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>AC Adapter</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Display</b>	AU OPTRONICS M170EG01 VD
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
12V	7.37	88.44	

## 4.2 Thermal measurements at various points on the board

### Test Environment :

<b>Motherboard</b>	<b>LS-571</b>
<b>CPU</b>	Core 2 Duo T7100 64K/2M/1.8GHz
<b>Memory</b>	Kingston KVR533D2S4 DDRII533 1GB
<b>Power Supply</b>	LI SHN INTERNATIONAL ENTERPRISE CORP. 12V 6.67A
<b>HDD</b>	Western Digital WD1600AAJS 160GB SATA
<b>Operating System</b>	Windows XP Professional SP2
<b>Test Program</b>	3Dmark 2003

### Test Result:

CPU	40.8°C
NB	68.4°C
SB	55.4°C
U22	52.8°C
U23	50.7°C
U27	52.3°C
U28	50.5°C
U46	50.9°C
D14	52.1°C
Q15	63.6°C
Q17	69.5°C
Q22	51.0°C
Q23	50.9°C
Q25	75.2°C
Q43	49.1°C
LQ1	51.9°C

LQ2

49.6°C

## 5. Performance Test

### 5.1-1 WinBench 99 Version 1.1

#### Test Environment

Intel core 2 Duo T7700 2.4G

A DATA DDR2 667 2GB

SAMSUNG HM120JC 120.0G

#### 2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPU mark99	Pass	335
2	FPU WinMark	Pass	16700
3	Business Disk WinMark 99	Pass	9930 Thousand Bytes/Sec
4	High-End Disk WinMark 99	Pass	35400 Thousand Bytes/Sec
5	Business Graphics WinMark 99	Pass	380
6	High-End Graphics WinMark 99	Pass	395

## 5.1-2 WinBench 99 Version 1.2

Test Environment
Intel core 2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G

### 2. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Business Disk WinMark 99	Pass	9350 Thousand Bytes/Sec
2	High-End Disk WinMark 99	Pass	35900 Thousand Bytes/Sec

## 5.2 3D MARK

### 1. Windows XP

WEIGHTED SUITE	Test Environment	Result	Remark
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<b>3DMARK2001 Scores</b>	Intel core 2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G	Pass	4531
<b>3DMARK2003 Scores</b>		Pass	1354
<b>3DMARK2005 Scores</b>		Pass	635

## 2. Windows Vista

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>3DMARK2000 Scores</b>	Intel core 2 Duo T7100 1.8G Transcend DDR2 667 2GB SAMSUNG HM120JC 120.0G	Pass	6996
<b>3DMARK2001 Scores</b>		Pass	3185

## 3. Windows Vista 64bit

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>3DMARK2000 Scores</b>	Intel core 2 Duo T7100 1.8G Kingston(HY5PS12821B)	Pass	6873

<b>3DMARK2001 Scores</b>	DDR2 533 1GB SAMSUNG HM120JC 120.0G	Pass	3011
<b>3DMARK2003 Scores</b>		Pass	1188

### 5.3 3D MARK2006

#### 1.Windows XP

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	<b>SM2.0 Source</b>	Intel core 2 Duo T7700 2.4G A DATA DDR2 667 1GB SAMSUNG HM120JC 120.0G	Pass	87

#### 2.Windows Vista 32bit

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	<b>3DMARK Source</b>	Intel core 2 Duo T7100 1.8G	Pass	453
2	<b>SM2.0 Source</b>	GREENCOM(E5108AE-6E-E) DDR2 667 1GB	Pass	135
3	<b>HDR/SM3.0 Source</b>	SAMSUNG HM120JC 120.0G	Pass	189
3	<b>CPU Source</b>		Pass	1410

#### 3.Windows Vista 64bit

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	<b>3DMARK Source</b>	Intel core 2 Duo T7100 1.8G	Pass	469
2	<b>SM2.0 Source</b>	GREENCOM(E5108AE-6E-E)	Pass	132
3	<b>HDR/SM3.0 Source</b>	DDR2 667 1GB	Pass	186
3	<b>CPU Source</b>	SAMSUNG HM120JC 120.0G	Pass	1433

## 5.4 PC MARK2002

Test Environment
Intel core 2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G

### 1.Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	9453
2	Memory test Source	Pass	29852
3	HDD test Source	Pass	981

Test Environment
Intel core 2 Duo T7100 1.8G



Transcend DDR2 667 2GB  
SAMSUNG HM120JC 120.0G

### 1.Windows Vista

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	14055
2	HDD test Source	Pass	673

### 2.Windows Vista 64bit

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	13715
2	HDD test Source	Pass	832

## 5.5 PC MARK2004

### Test Environment

Intel core 2 Duo T7100 1.8G  
Transcend DDR2 667 2GB  
SAMSUNG HM120JC 120.0G

### 1.Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	7345
2	Graphic test Source	Pass	1236

### 2.Windows Vista 64bit

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
1	Memory test Source	Pass	3229
2	Graphic test Source	Pass	644