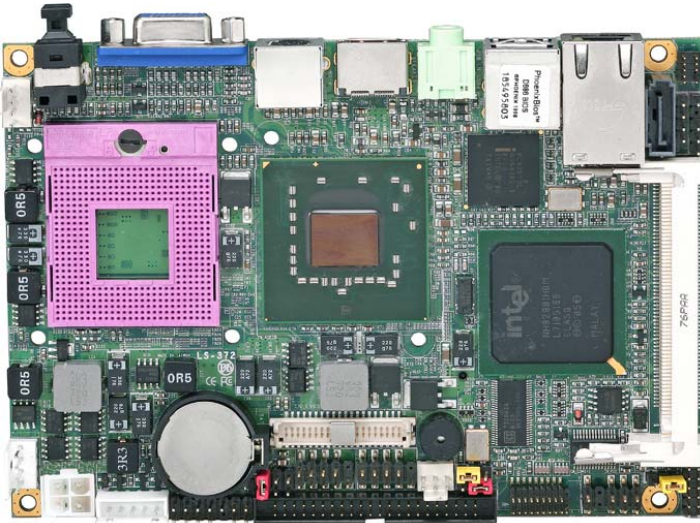


**LS-372**

**Test Report**

**Edition 1.0**

**2007/11/09**



Identify: Borlin

Test Engineer: Les

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# 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 Primary Master	Pass
6	IDE Primary Slave	Pass
7	COM Port	Pass
8	DIMM	Pass
9	VGA Port	Pass
10	Keyboard	Pass
11	Mouse	Pass
12	AUDIO	Pass
13	LAN Port	Pass
14	USB Port	Pass
15	SATA	Pass
16	CPUFAN	Pass
17	SYSFAN	Pass
18	CDIN	Pass
19	CF	Pass
20	MINPCI	Pass

21	LVDS	Pass
22	IrDA	Pass
23	HDTV	Pass
24	GPIO	Pass
25	DVI	Pass
26	SP-DIF	Pass
27	DC_IN	Pass
28	DC_OUT	Pass

## 2.0 PITCH (DIP)

1	JRTC	Pass
2	JVLCD	Pass
3	JAT	Pass
4	JCSEL	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	Hard Disk Boot Priority	Pass	
6	Quick Power On Self Test	Pass	
7	On Chip Frame Buffer Size	Pass	
8	Boot Display	Pass	
9	On Chip Primary IDE	Pass	
10	On Chip Serial ATA	Pass	
11	USB 1.1 Controller	Pass	
12	USB 2.0 Controller	Pass	
13	USB Keyboard Support	Pass	
14	HD Audio	Pass	
15	Onboard LAN Controller	Pass	
16	PWRON After PWR-Fail	Pass	
17	Watch Dog Timer Select	Pass	

18	ACPI Function	Pass	
19	ACPI Suspend Type	Pass	
20	Soft-Off by PWRBTN	Pass	
21	Resume by Alarm	Pass	
22	CPU Warning Temperature	Pass	
23	Power On by Ring	Pass	
24	Onboard Lan Boot ROM	Pass	
25	POWER ON Function	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	Audio Driver	Pass	
3	LAN Driver	Pass	

### 3. 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 32bit Driver Test

Item	Description	Result	Remark
1	Chipset Driver	Pass	
2	VGA Driver	Pass	



3	Audio Driver	Pass	
4	LAN Driver	Pass	

### 5. 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	

## 2. Compatibility test

### 2.1 CPU Test

<b>CPU</b>	<b>Operating System</b>	<b>Result</b>	<b>Remark</b>
<b>Intel(TM) Core 2 Duo T7700 /2M/2.4GHZ</b>	<b>Windows XP chi</b>	Pass	
	<b>Windows XP eng</b>	Pass	
	<b>Windows XP Vista 32bit</b>	Pass	
	<b>Windows XP Vista 64bit</b>	Pass	
	<b>Windows Server 2003</b>	Pass	
	<b>Suse 10.1</b>	Pass	
	<b>Fedora Code 6</b>	Pass	
	<b>Windows XP chi</b>	Pass	
<b>Intel(TM) Core 2 Duo T7300 /2M/2GHZ</b>	<b>Windows XP eng</b>	Pass	
	<b>Windows XP Vista 32bit</b>	Pass	
	<b>Windows XP Vista 64bit</b>	Pass	
	<b>Windows Server 2003</b>	Pass	
	<b>Suse 10.1</b>	Pass	
	<b>Fedora Code 6</b>	Pass	
	<b>Windows XP chi</b>	Pass	
	<b>Windows XP eng</b>	Pass	
<b>Intel(TM) Core 2 Duo T7100 /2M/1.8GHZ</b>	<b>Windows XP Vista 32bit</b>	Pass	
	<b>Windows XP Vista 64bit</b>	Pass	
	<b>Windows Server 2003</b>	Pass	
	<b>Suse 10.1</b>	Pass	
	<b>Fedora Code 6</b>	Pass	

## 2.2 Memory Test

DDR2 SO-DIMM SDRAM	DDR2 Freq	Capacity Mbytes	Operating System	Result
Kingston (HY5PS12821B)	DDR2 533	1GB	Win XP chi Win XP eng Win Vista 32bit Win Vista 64bit Win 2003 Suse 10.1 Fedora Code 6	PASS
GREENCOM (E5108AE-6E-E)	DDR2 533	256MB	Win XP chi Win XP eng Win Vista 32bit Win Vista 64bit Win 2003 Suse 10.1 Fedora Code 6	PASS
GREENCOM (E5108AE-6E-E)	DDR2 677	1GB	Win XP chi Win XP eng Win Vista 32bit Win Vista 64bit Win 2003 Suse 10.1 Fedora Code 6	PASS

Transcend (7GEI2 D9HNL)	DDR2 667	2GB	Win XP chi Win XP eng Win Vista 32bit Win Vista 64bit Win 2003 Suse 10.1 Fedora Code 6	PASS
A DATA (HY5PS1G831C)	DDR2 667	2GB	Win XP chi Win XP eng Win Vista 32bit Win Vista 64bit Win 2003 Suse 10.1 Fedora Code 6	PASS
pqi (7QE22 D9HNL)	DDR2 667	2GB	Win XP chi Win XP eng Win Vista 32bit Win Vista 64bit Win 2003 Suse 10.1 Fedora Code 6	PASS

## 2.3 VGA Graphic Test

### 1. Windows XP chi

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
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 eng**

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
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**

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
1	Resolution/Color Change	Pass	
2	CRT Display Test	Pass	

## **4. Windows Vista 32bit**

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
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 chi

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	

### 2. Windows XP eng

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	

### 3. Windows server 2003

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	

#### 4. Windows Vista 32bit

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	

#### 5. Windows Vista 64bit

Item	Description	Result	Remark
1	Sound Effect	Pass	
2	Equalizer	Pass	
3	Microphone	Pass	

### 2.5 HDD Test

HDD Type	Operating System	HDD Size Detect	HDD Data Transfer	HDD LED Check
<b>WD2500JB-00GVC0</b> <b>250.0GB</b>	MS-DOS	PASS	PASS	PASS
<b>WD3000JS-22PDB0</b> <b>300.0GB</b>	Win 2003 Win Xp eng Win XP chi	PASS	PASS	PASS
<b>Maxtor 4A160J0</b> <b>160GB</b>	Win Vista 32bit Win Vista 64bit	PASS	PASS	PASS

<b>WD1600JS-00MHB0</b> <b>160.0GB</b> <b>(Serial ATA)</b>	Suse 10.1 Fedora Code 6	PASS	PASS	PASS
<b>FUJITSU</b> <b>80.0GB</b> <b>(Serial ATA)</b>		PASS	PASS	PASS
<b>SAMSUNG</b> <b>120.0G</b>		PASS	PASS	PASS
<b>WD2500JB-00REA0</b> <b>250.0GB</b>		PASS	PASS	PASS

## 2.6 CD-ROM Test

<b>CD-ROM Type</b>	<b>Operating System</b>	<b>CD-ROM Detect</b>	<b>CD-ROM Data Transfer</b>	<b>PLAY DVD</b>
<b>ASUS</b> <b>CB-5216A</b>	MS-DOS Win 2003	PASS	PASS	PASS
<b>LITEON</b> <b>SOSC-2485KX</b>		PASS	PASS	PASS



<b>BenQ CD652T</b>	Win Xp eng Win XP chi Win Vista 32bit	PASS	PASS	
<b>LG GSA-H62L</b>	Win Vista 64bit Suse 10.1 Fedora Code 6	PASS	PASS	PASS
<b>PIONEER DVR-212BK</b>		PASS	PASS	PASS
<b>TEAC CD-540E</b>		PASS	PASS	

## 2.7 USB Test

### 1. Windows XP chi

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 eng

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
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**

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

### **4. Windows Vista 32bit**

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
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 64bit**

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

### **6. Suse 10.1**

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. Fedora Code 6

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	
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### 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 32bit

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	

### 7. Suse 10.1

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	
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### 5. Windows Vista 32bit

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

### 6. Windows Vista 64bit

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

### 7. Suse 10.1

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

### 8. Fedora Code 6

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. Windows XP Vista 32bit

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

## 5. Windows XP Vista 64bit

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

## 6. Suse 10.1

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	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

## 2. Windows XP chi

Item	Description	Verification	
		Result	Remark
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

## 3 Windows XP eng

Item	Description	Verification	
		Result	Remark
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

## 4 Windows Server 2003

Item	Description	Verification	
		Result	Remark
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

## 5 Windows XP Vista 32bit

Item	Description	Verification	
		Result	Remark
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

## 5 Windows XP Vista 64bit

Item	Description	Verification
------	-------------	--------------



		<b>Result</b>	<b>Remark</b>
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

### 6 Suse 10.1

<b>Item</b>	<b>Description</b>	<b>Verification</b>	
		<b>Result</b>	<b>Remark</b>
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

### 7 Fedora Code 6

<b>Item</b>	<b>Description</b>	<b>Verification</b>	
		<b>Result</b>	<b>Remark</b>
1	AC ADAPTER	Pass	LI SHIN 0219B1280 80W
2	AC ADAPTER	Pass	Hec Hec-AP075-12V 12V 80W

## 2.12 Boot Up Test

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
1	Soft boot from HDD	Pass	
2	Soft boot from CD-ROM	Pass	
3	Reboot test with Win XP chi	Pass	
4	Reboot test with Win XP eng	Pass	
5	Reboot test with Win 2003	Pass	
6	Reboot test with Win Vista 32bit	Pass	
7	Reboot test with Win Vista 64bit	Pass	
8	Reboot test with Suse 10.1	Pass	
9	Reboot test with Fedora Code 6	Pass	

## 2.13 Os Install

Item	Description	Result	Remark
1	Windows Server 2003	Pass	
2	Windows Server 2003 X64	Pass	
3	Windows XP chi	Pass	
4	Windows XP eng	Pass	
5	Windows XP Vista 32bit	Pass	
6	Windows XP Vista 64bit	Pass	
7	Suse 10.1	Pass	
8	Fedora Code 6	Pass	

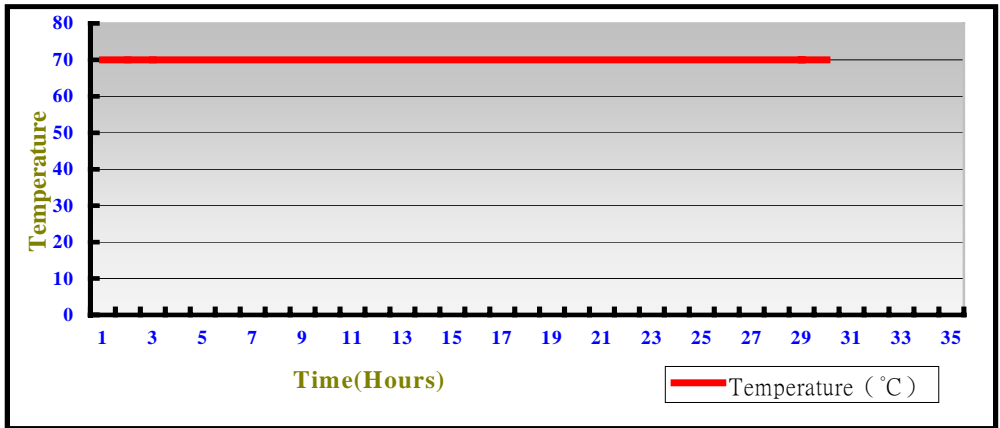
## 3. Environmental test

### 3.1 Temperature Test

#### Hardware Device list:

System Board	LS-372
CPU	Intel(TM) Core 2 Duo T7700 /2M/2.4GHZ
Memory	pqi DDR2 667 2GB
HDD	WD 1600B EVS 160.0GB SATA
Operating System	Windows XP
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3Dmark 2003

## Test Result:



## Boot 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	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7700 2.4G</b>
Memory	<b>Kingston DDR2 533 1GB</b>
Power Supply	<b>Hec Hec-AP075-12V 12V 80W</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	3.6	43.2	Boot Up

#### 2. Test Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7700 2.4G</b>
Memory	<b>Kingston DDR2 533 1GB</b>
HDD	<b>FUJITSU MHV2080BH 80.0G</b>
Power Supply	<b>Hec Hec-AP075-12V 12V 80W</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.69	56.28	Boot Up

### 3.Tst Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7700 2.4G</b>
Memory	<b>Kingston DDR2 533 1GB</b>
HDD	<b>FUJITSU MHV2080BH 80.0G</b>
Power Supply	<b>Hec Hec-AP075-12V 12V 80W</b>
Display	<b>SAMSUNG LTM170EU-L01</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	6.6	79.2	Boot Up

### 4.Tst Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7700 2.4G</b>
Memory	<b>pqi DDR2 667 2GB</b>
Power Supply	<b>Hec Hec-AP075-12V 12V 80W</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.0	48.0	Boot Up

### 5. Test Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7700 2.4G</b>
Memory	<b>pqi DDR2 667 2GB</b>
HDD	<b>SAMSUNG HM120JC 120.0G</b>
Power Supply	<b>Hec Hec-AP075-12V 12V 80W</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.53	54.36	Boot Up

### 6.Tst Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7700 2.4G</b>
Memory	<b>pqi DDR2 667 2GB</b>
HDD	<b>SAMSUNG HM120JC 120.0G</b>
Power Supply	<b>Hec Hec-AP075-12V 12V 80W</b>
Display	<b>SAMSUNG LTM170EU-L01</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	6.58	78.96	Boot Up

## 7. Tst Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7100 1.8G</b>
Memory	<b>pqi DDR2 667 2GB</b>
Power Supply	<b>LI SHIN 0219B1280 80W</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	3.29	39.48	Boot Up

## 8. Test Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7100 1.8G</b>
Memory	<b>pqi DDR2 667 2GB</b>
HDD	<b>FUJITSU MHV2080BH 80.0G</b>
Power Supply	<b>LI SHIN 0219B1280 80W</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.55	54.60	Boot Up

**9. Tst Environment:**

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7100 1.8G</b>
Memory	<b>pqi DDR2 667 2GB</b>
HDD	<b>FUJITSU MHV2080BH 80.0G</b>
Power Supply	<b>LI SHIN 0219B1280 80W</b>
Display	<b>SAMSUNG LTM170EU-L01</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	6.59	79.08	Boot Up

**10. Test Environment:**

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7100 1.8G</b>
Memory	<b>Kingston DDR2 533 1GB</b>
HDD	<b>SAMSUNG HM120JC 120.0G</b>
Power Supply	<b>LI SHIN 0219B1280 80W</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	4.33	51.96	Boot Up



### 11. Tst Environment:

Motherboard	<b>LS-372</b>
CPU	<b>Intel core(TM)2 Duo T7100 1.8G</b>
Memory	<b>Kingston DDR2 533 1GB</b>
HDD	<b>SAMSUNG HM120JC 120.0G</b>
Power Supply	<b>LI SHIN 0219B1280 80W</b>
Display	<b>SAMSUNG LTM170EU-L01</b>
Operating System	<b>Windows XP eng</b>
Test Program	<b>3Dmark 2003</b>

<b>Voltage</b>	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Remark</b>
<b>12V</b>	6.41	76.92	Boot Up

## 4.2 Thermal measurements at various points on the board

### Test Environment :

CPU	Intel core(TM)2 Duo T7100 1.8G
Memory	A DATA DDR2 667 2GB
HDD	SAMSUNG HM120JC 120.0G
Power	LI SHIN AC ADAPTER 80W
Operating System	Windows XP
Test Program	3D Mark 2003

### Test Result:

CPU	50.1°C
965GM (Northbridge)	43.8°C
ICH8M (Southbridge)	50.6°C
U4	42.4°C
LC1	57.8°C
LC3	57.8°C
LC4	67.9°C

## 5. Performance Test

### 5.1-1 WinBench 99 Version 1.1

<b>Test Environment</b>
Intel core(TM)2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G

#### 1. Windows 2003

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark 99	Pass	340
2	FPU WinMark	Pass	16600
3	Business Disk WinMark 99	Pass	10200 Thousand Bytes/Sec
4	High-End Disk WinMark 99	Pass	37200 Thousand Bytes/Sec
5	Business Graphics WinMark 99	Pass	43.5
6	High-End Graphics WinMark 99	Pass	671

#### 2. Windows XP Eng

Item	WEIGHTED SUITE	Result	Remark
1	CPU mark99	Pass	340
2	FPU WinMark	Pass	16700
3	Business Disk WinMark 99	Pass	9990 Thousand Bytes/Sec
4	High-End Disk WinMark 99	Pass	35300 Thousand Bytes/Sec
5	Business Graphics WinMark 99	Pass	374
6	High-End Graphics WinMark 99	Pass	398

## 5.1-2 WinBench 99 Version 1.2

<b>Test Environment</b>
Intel core(TM)2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G

### 1. Windows 2003

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
1	Business Disk WinMark 99	Pass	9640 Thousand Bytes/Sec
2	High-End Disk WinMark 99	Pass	36500 Thousand Bytes/Sec

### 2. Windows XP Eng

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
1	Business Disk WinMark 99	Pass	9250 Thousand Bytes/Sec
2	High-End Disk WinMark 99	Pass	35800 Thousand Bytes/Sec

## 5.2 3D MARK

### 1. Windows XP eng

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	Intel core(TM)2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G	Pass	4541
3DMARK2003 Scores		Pass	1233
3DMARK2005 Scores		Pass	618

### 2. Windows Vista 32bit

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	Intel core(TM)2 Duo T7100 1.8G Transcend DDR2 667 2GB SAMSUNG HM120JC 120.0G	Pass	6984
3DMARK2001 Scores		Pass	3183

### 2. Windows Vista 64bit

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>3DMARK2000 Scores</b>	Intel core(TM)2 Duo T7100 1.8G	Pass	6885
<b>3DMARK2001 Scores</b>	Kingston(HY5PS12821B) DDR2 533 1GB SAMSUNG HM120JC 120.0G	Pass	3013
<b>3DMARK2003 Scores</b>		Pass	1184

### 5.3 3D MARK2006

#### Windows XP eng

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	<b>SM2.0 Source</b>	Intel core(TM)2 Duo T7700 2.4G A DATA DDR2 667 1GB SAMSUNG HM120JC 120.0G	Pass	89

#### Windows Vista 32bit

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	<b>3DMARK Source</b>	Intel core(TM)2 Duo T7100	Pass	459
2	<b>SM2.0 Source</b>	1.8G	Pass	129
3	<b>HDR/SM3.0 Source</b>	GREENCOM(E5108AE-6E-E)	Pass	188
3	<b>CPU Source</b>	DDR2 667 1GB SAMSUNG HM120JC 120.0G	Pass	1421

**Windows Vista 64bit**

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	<b>3DMARK Source</b>	Intel core(TM)2 Duo T7100	Pass	454
2	<b>SM2.0 Source</b>	1.8G	Pass	130
3	<b>HDR/SM3.0 Source</b>	GREENCOM(E5108AE-6E-E)	Pass	185
3	<b>CPU Source</b>	DDR2 667 1GB SAMSUNG HM120JC 120.0G	Pass	1427

## 5.4 PC MARK2002

<b>Test Environment</b>
Intel core(TM)2 Duo T7700 2.4G A DATA DDR2 667 2GB SAMSUNG HM120JC 120.0G

### Windows server 2003

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
1	CPU test Source	Pass	9489
2	Memory test Source	Pass	29746
3	HDD test Source	Pass	1033

### Windows XP eng

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
1	CPU test Source	Pass	9462
2	Memory test Source	Pass	29842
3	HDD test Source	Pass	982

<b>Test Environment</b>
Intel core(TM)2 Duo T7100 1.8G Transcend DDR2 667 2GB SAMSUNG HM120JC 120.0G

### Windows Vista 32bit



Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	14036
2	HDD test Source	Pass	616

### Windows Vista 64bit

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	13702
2	HDD test Source	Pass	816

## 5.5 PC MARK2004

Test Environment
<p>Intel core(TM)2 Duo T7100 1.8G</p> <p>Transcend DDR2 667 2GB</p> <p>SAMSUNG HM120JC 120.0G</p>

### Windows XP eng

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	7384
2	Graphic test Source	Pass	1227

### Windows Vista 64bit

Item	WEIGHTED SUITE	Result	Remark
1	Memory test Source	Pass	3147
2	Graphic test Source	Pass	634

