

# Product Test Report



<b>Product Name</b>	<b>MS-C75</b>
<b>Product Version</b>	<b>A</b>
<b>Issued Date</b>	<b>2013.06.18</b>
<b>Report Edition</b>	<b>1.0</b>
<b>BIOS Version</b>	<b>1.1</b>
<b>Testing Engineer</b>	<b>RICK</b>
<b>Check Engineer</b>	<b>GARY</b>

**Revision History**

<b>Date</b>	<b>Revision No.</b>	<b>Page</b>	<b>Descriptions</b>
<b>2013.06.18</b>	<b>Ver. 1.0</b>	<b>75</b>	<b>Initial Release.</b>

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# 1. Function test

## 1.1 Hardware 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	DDR3 1 / 2	PASS
7	USB 2.0 1 / 2 / 3 / 4 / 5 / 6	PASS
8	USB 3.0 1 / 2 / 3 / 4	PASS
9	COM 1 / 2 / 3 / 4 / 5 / 6	PASS
10	VGA Port	PASS
11	PS2	PASS
12	LAN_1 / 2	PASS
13	AUDIO	PASS
14	CD_IN	PASS
15	CN_AUDIO	PASS
16	PRINTER	PASS
17	DIO	PASS
18	IrDA	PASS
19	DVI	PASS
20	LVDS	PASS
21	CPUFAN	PASS
22	SYSFAN	PASS

<b>23</b>	<b>SPDIF</b>	<b>PASS</b>
<b>24</b>	<b>PCI 1 / 2</b>	<b>PASS</b>
<b>25</b>	<b>MINIPCI</b>	<b>PASS</b>
<b>26</b>	<b>PCIE 16x</b>	<b>PASS</b>
<b>27</b>	<b>PCIE 4x</b>	<b>PASS</b>
<b>28</b>	<b>MINI CARD</b>	<b>PASS</b>

### **Jumper**

<b>Item</b>	<b>Description</b>	<b>Result</b>
<b>1</b>	<b>JRTC</b>	<b>PASS</b>
<b>2</b>	<b>JCSEL1</b>	<b>PASS</b>
<b>3</b>	<b>JCSEL2</b>	<b>PASS</b>
<b>4</b>	<b>JVLCD</b>	<b>PASS</b>
<b>5</b>	<b>JAT</b>	<b>PASS</b>

## 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	NumLock	PASS	
6	Select Language	PASS	
7	Quick Boot	PASS	
8	Diagnostic Splash Screen	PASS	
9	Diagnostic Summary Screen	PASS	
10	Console Redirection	PASS	
11	Active Processor Cores	PASS	
12	SATA Device	PASS	
13	Interface Combination	PASS	
14	Intel (R) HT Technology	PASS	
15	DVMT Total Gfx Mem	PASS	
16	IGD-Boot Type	PASS	
17	IGD-LCD Panel type	PASS	
18	Panel Color Depth	PASS	
19	USB Per-Port Disabled Control	PASS	
20	SB Azalia Config	PASS	
21	LAN OPROM Selection	PASS	
22	Serial Port	PASS	
23	IR Func.	PASS	
24	Paraller Port	PASS	
25	Watch Dog Timer Select	PASS	

<b>26</b>	<b>Power On By RTC Alarm</b>	PASS	
<b>27</b>	<b>Set Supervisor Password</b>	PASS	
<b>28</b>	<b>Set User Password</b>	PASS	
<b>29</b>	<b>HDD Password Select</b>	PASS	



## 1.3 Driver

### CD Edition : IPCi5-1.0

Notice: Intel does not release VGA driver for Windows server 2000/2003/2008

#### 1. Windows XP SP2 32-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	VGA Driver	PASS	6.14.10.5421
3	Audio Driver	PASS	5.10.0.6083
4	LAN Driver (82574L)	PASS	11.14.48.0
5	LAN Driver (82579LM)	PASS	11.15.12.0

#### 2. Windows XP SP2 64-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	VGA Driver	PASS	6.14.10.5421
3	Audio Driver (Need UAA bus driver)	PASS	5.10.0.6083
4	LAN Driver (82574L)	PASS	11.14.48.0
5	LAN Driver (82579LM)	PASS	11.15.12.0

#### 3. Windows Server 2003 32-bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	Audio Driver	PASS	5.10.0.6083
3	LAN Driver (82574L)	PASS	11.14.48.0
4	LAN Driver (82579LM)	PASS	11.15.12.0

#### 4. Windows Server 2003 64-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	Audio Driver	PASS	5.10.0.6083
3	LAN Driver (82574L)	PASS	11.14.48.0
4	LAN Driver (82579LM)	PASS	11.15.12.0

#### 5. Windows Vista 32-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	VGA Driver	PASS	8.15.10.2696
3	Audio Driver	PASS	6.0.1.6662
4	LAN Driver (82574L)	PASS	11.14.48.0
5	LAN Driver (82579LM)	PASS	11.15.12.0

#### 6. Windows Vista 64-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	VGA Driver	PASS	8.15.10.2761
3	Audio Driver	PASS	6.0.1.6662
4	LAN Driver (82574L)	PASS	11.14.48.0
5	LAN Driver (82579LM)	PASS	11.15.12.0

## 7. Windows Server 2008 32-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	Audio Driver	PASS	6.0.1.6662
3	LAN Driver (82574L)	PASS	11.14.48.0
4	LAN Driver (82579LM)	PASS	11.15.12.0

## 8. Windows Server 2008 64-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	Audio Driver	PASS	6.0.1.6662
3	LAN Driver (82574L)	PASS	11.14.48.0
4	LAN Driver (82579LM)	PASS	11.15.12.0

## 9. Windows 7 32-bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	VGA Driver	PASS	9.17.10.2875
3	Audio Driver	PASS	6.0.1.6662
4	LAN Driver (82574L)	PASS	11.14.48.0
5	LAN Driver (82579LM)	PASS	11.15.12.0

## 10. Windows 7 64-bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.3.0.1019
2	VGA Driver	PASS	9.17.10.2875
3	Audio Driver	PASS	6.0.1.6662
4	LAN Driver (82574L)	PASS	11.14.48.0
5	LAN Driver (82579LM)	PASS	11.15.12.0

## 2. Compatibility test

### 2.1 CPU Test

Test environment:

OS Windows XP professional SP2

Test program : PC MARK 2005

Spec	Clock Speed	Family	Processor	DMI	Smart Cache	Result
<a href="#"><u>SR0NP</u></a>	2.30 GHz	Core	i7-3610QE	5 GT/s	6 MB	PASS
<a href="#"><u>SR02T</u></a>	2.10 GHz	Core	i7-2710QE	5 GT/s	6 MB	PASS
<a href="#"><u>SR0XA</u></a>	2.70 GHz	Core	i5-3440M	5 GT/s	3 MB	PASS
<a href="#"><u>SR0MZ</u></a>	2.50 GHz	Core	i5-3210M	5 GT/s	3 MB	PASS
<a href="#"><u>SR02U</u></a>	2.50 GHz	Core	i5-2510E	5 GT/s	3 MB	PASS
<a href="#"><u>SH0WM</u></a>	2.40 GHz	Core	i3-3120ME	5 GT/s	3 MB	PASS
<a href="#"><u>SR02V</u></a>	2.20 GHz	Core	i3-2330E	5 GT/s	3 MB	PASS

## 2.2 Operation System Test

Item	Description	Result	Remark
1	Windows 7 64-bit	PASS	
2	Windows 7 32-bit	PASS	
3	Windows Server 2008 64-bit	PASS	
4	Windows Server 2008 32-bit	PASS	
5	Windows Vista 64-bit	PASS	
6	Windows Vista 32-bit	PASS	
7	Windows XP SP2 64-bit	PASS	
8	Windows XP SP2 32-bit	PASS	
9	Windows Server 2003 64-bit	PASS	
10	Windows Server 2003 32-bit	PASS	

## 2.3 Memory Test

Test environment:

OS Windows XP professional SP2

Test program : PC MARK 2005

Manufacturer	Chip	Frequency	Capacity Mbytes	Result
Kingston	J4208BASE-DJ-F	DDR3 1333	8 GB	PASS
Kingston	Kingston D2568JENCPCGD9U	DDR3 1333	4 GB	PASS
A-DATA	Hynix H5TQ1G83AFR	DDR3 1066	2 GB	PASS
Transcend	SEC K4B1G0846D	DDR3 1066	2 GB	PASS
Acpi	hinix H5TQ2GB3EFR	DDR3 1600	2 GB	PASS
Acpi	hinix H5TQ2GB3EFR	DDR3 1600	4 GB	PASS
Acpi	hinix H5TQ2GB3EFR	DDR3 1600	8 GB	PASS

## 2.4 VGA Graphic Quality Test

Test environment:

OS Windows XP professional SP2 32/64-bit

Driver version : 6.14.10.5421

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*800	16 / 32bit	PASS	
1280*960	16 / 32bit	PASS	
1280*1024	16 / 32bit	PASS	
1360*768	16 / 32bit	PASS	
1366*768	16 / 32bit	PASS	
1400*1050	16 / 32bit	PASS	
1440*900	16 / 32bit	PASS	
1600*900	16 / 32bit	PASS	
1600*1200	16 / 32bit	PASS	
1680*1050	16 / 32bit	PASS	
1792*1344	16 / 32bit	PASS	
1856*1392	16 / 32bit	PASS	
1920*1080	16 / 32bit	PASS	
1920*1200	16 / 32bit	PASS	



## 2.5 Audio

Test environment:

OS Windows XP professional SP2 32-bit

Driver version : 5.10.0.6083

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

OS Windows XP professional SP2 64-bit

Driver version : 5.10.0.6083

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

OS Windows Server 2003 32-bit

Driver version : 5.10.0.6083

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

## OS Windows Server 2003 64-bit

Driver version : 5.10.0.6083

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

## OS Windows Vista 32 bit

Driver version : 6.0.1.6662

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

## OS Windows Vista 64 bit

Driver version : 6.0.1.6662

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

## OS Windows Server 2008 32-bit

Driver version : 6.0.1.6662

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

## OS Windows Server 2008 64-bit

Driver version : 6.0.1.6662

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

## OS Windows 7 32-bit

Driver version : 6.0.1.6662

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

## OS Windows 7 64-bit

Driver version : 6.0.1.6662

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	LINE-IN	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 WD2500BPVT-22JJ5T0	SATA	250 GB	PASS	PASS
Western Digital WD3200BPVT-00JJ5T0	SATA	320 GB	PASS	PASS
Western Digital WD3200AAKS-00B3A0	SATA	320 GB	PASS	PASS
Western Digital WD5000AAKS-00V1A0	SATA	500 GB	PASS	PASS
Western Digital WD10EARS-00Y5B1	SATA	1 TB	PASS	PASS
Western Digital WD10EALX-009BA0	SATA	1 TB	PASS	PASS
Intel SSDSC2CT060A3	SSD	60 GB	PASS	PASS
Acpi MSS43-M	mSATA	32 GB	PASS	PASS

Notice: mSATA only support to MS-C75TXDS.

## 2.7 DVD-ROM Test

Test environment:

OS Windows XP professional SP2

Model	Interface	Detect	Data Transfer	Play DVD
ASUS DRW-24D1ST	SATA	PASS	PASS	PASS
PIONEER DVR-219L	SATA	PASS	PASS	PASS
LITE-ON iHES312	SATA	PASS	PASS	PASS
LITE-ON eTAU108	USB	PASS	PASS	PASS
BUFFALO DVSM-PC58U2V	USB	PASS	PASS	PASS

## 2.8 USB device Test

### 1. MS-DOS

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 XP SP2 32/64-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	

### 3. Windows Server 2003 32/64-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	

#### 4. Windows Vista 32/64-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	

#### 5. Windows Server 2008 32/64-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 7 32/64-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	



## 2.9 Serial Port Test

### 1. MS-DOS

Item	Description	Result	Remark
1	RS-422 & RS-485	PASS	
2	CHKIT	PASS	

### 2. Windows XP SP2 32-bit

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

### 3. Windows XP SP2 64-bit

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

### 4. Windows Server 2003 32-bit

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

### 5. Windows Server 2003 64-bit

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

### 6. Windows Vista 32-bit

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

### 7. Windows Vista 64-bit

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

### 8. Windows Server 2008 32-bit

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

### 9. Windows Server 2008 64-bit

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

## 10. Windows 7 32-bit

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

## 11. Windows 7 64-bit

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

## 2.10 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 XP SP2 32/64-bit

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

### 3. Windows Server 2003 32/64-bit

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

### 4. Windows Vista 32/64-bit

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

### 5. Windows Server 2008 32/64-bit

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

### 6. Windows 7 32/64-bit

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

## 2.11 Print Port Test

### 1. MS-DOS

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

### 2. Windows Server 2003 32/64-bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

### 3. Windows XP SP2 32/64-bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

### 4. Windows Vista 32/64-bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

### 5. Windows Server 2008 32/64-bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

### 6. Windows 7 32/64-bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

## 2.12 LAN Test

Data Transfer Test environment:

-CAT 6 UTP 100M

-8 HR. continuous

1. Windows XP SP2 32/64-bit

32/64-bit driver version : 11.15.12.0

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

2. Windows Server 2003 32/64-bit

32/64-bit driver version : 11.15.12.0

Item	Description	Result	Remark
1	Device Manager Check	PASS	

3. Windows Vista 32/64-bit

32/64-bit driver version : 11.15.12.0

Item	Description	Result	Remark
1	Device Manager Check	PASS	

4. Windows Server 2008 32/64-bit

32/64-bit driver version : 11.15.12.0

Item	Description	Result	Remark
1	Device Manager Check	PASS	

## 5. Windows Server 7 32/64-bit

32/64-bit driver version : 11.15.12.0

Item	Description	Result	Remark
1	Device Manager Check	PASS	



## 2.13 Power Supply Test

Item	TYPE	Description	Result	Remark
1	ATX Power	Seasonic SS-500ET 500W	PASS	
2	ATX Power	AcBel PC7008 380W	PASS	
3	ATX Power	AcBel ATX-350P-DNSS 350W	PASS	
4	ATX Power	CHANNEL WELL TECHNOLOGY CO.,LTD. CWT-300ATX12 300W	PASS	
5	ATX Power	COOLER MASTER RS-390-PMSR-A3 390W	PASS	

## 2.14 Mini-PCI Card

Motherboard	PCI Express mini card	Result	Remark
<b>MS-C75TXD</b> <b>MS-C75TXDS</b>	<b>MP-954</b>	PASS	
	<b>MP-840</b>	PASS	Only H.264
	<b>MP-323</b>	PASS	
	<b>MP-541D2</b>	PASS	
	<b>MP-878D</b>	PASS	
	<b>MP-878D2</b>	PASS	
	<b>MP-60102</b>	PASS	
	<b>MP-6100E</b>	PASS	
	<b>MP-6421</b>	PASS	
	<b>MP-6802T</b>	PASS	
	<b>MP-6816D8</b>	PASS	
	<b>MP-Z9S</b>	PASS	

## 2.15 PCI Express mini card

Motherboard	PCI Express mini card	Result
MS-C75TXD	MPX-954	PASS
	MPX-954E	PASS
	MPX-827	PASS
	MPX-574D	PASS
	MPX-574D2	NO SUPPLY
	MPX-643	PASS
	MPX-750	PASS
	MPX-885	PASS
	MPX-TP4R	PASS
	MPX-2515	PASS
	MPX-3132	PASS
	MPX-5201	PASS
	MPX-6864	PASS
	MPX-7202	PASS
	MPX-9125	PASS
	MPX-SDVOD	PASS
	MPX-24794G2	PASS
MPX-25858	PASS	

**Attention: MPX-3132 needs to into BIOS setting**

**=> Advanced => South Bridge Configuration**

**=> SB PCI Express Config**

**=> PCI Express Root Port 4**

**=> PCIe Speed [Gen1]**

**Then reboot first to press F5, and load driver to usb floppy from**

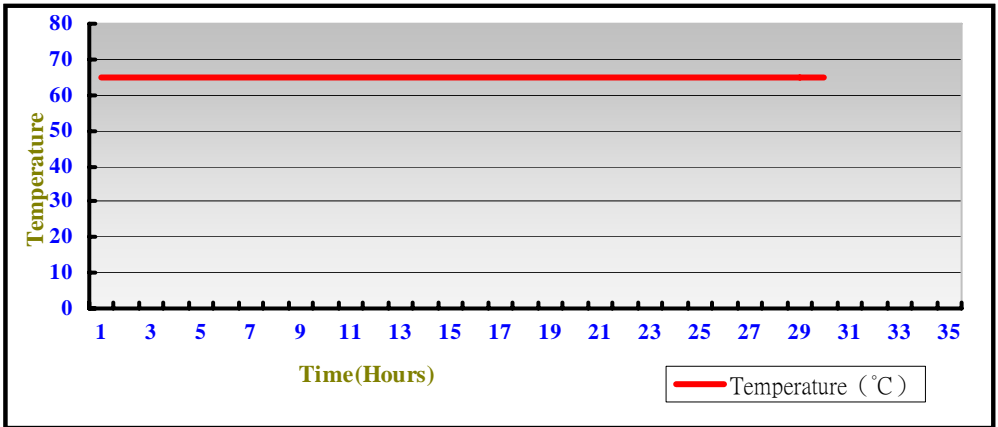
**<http://www.siliconimage.com/support/>**

Motherboard	PCI Express mini card	Remark
<b>MS-C75TXDS</b>	<b>MPX-954</b>	NO SUPPLY
	<b>MPX-954E</b>	NO SUPPLY
	<b>MPX-827</b>	PASS
	<b>MPX-574D</b>	NO SUPPLY
	<b>MPX-574D2</b>	NO SUPPLY
	<b>MPX-643</b>	NO SUPPLY
	<b>MPX-750</b>	NO SUPPLY
	<b>MPX-885</b>	NO SUPPLY
	<b>MPX-TP4R</b>	PASS
	<b>MPX-2515</b>	PASS
	<b>MPX-3132</b>	NO SUPPLY
	<b>MPX-5201</b>	NO SUPPLY
	<b>MPX-6864</b>	NO SUPPLY
	<b>MPX-7202</b>	NO SUPPLY
	<b>MPX-9125</b>	NO SUPPLY
	<b>MPX-24794G2</b>	PASS
	<b>MPX-25858</b>	NO SUPPLY
	<b>MPX-SDVOD</b>	NO SUPPLY
<b>mSATA</b>	PASS	

### 3. Environmental test

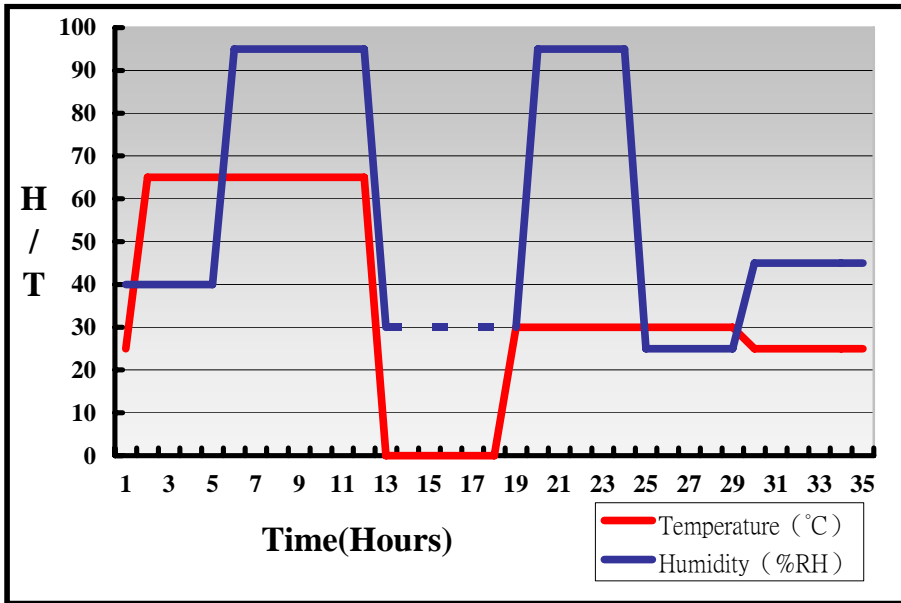
#### 3.1 Temperature Test

System Board	MS-C75
CPU	Intel(R) Core(TM) i5-2510E 2.50GHz
Memory	Acpi DDR3 1600 2GB (hunix H5TCAG83EFR)*2
HDD	Western Digital WD10EALX-009BA0 1TB
Operating OS	Windows XP
Test Equipment	GIANT FORCE (GTH-150-60-CP-AR)
Test Program	3DMark 2003



## Hardware Device list:

System Board	MS-C75
CPU	Intel(R) Core(TM) i5-2510E 2.50GHz
Memory	Acpi DDR3 1600 2GB (H5TQ2GB3EFR)*2
HDD	Western Digital WD10EALX-009BA0 1TB
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:

<b>System Board</b>	<b>MS-C75</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i5-2510E 2.50GHz</b>
<b>Memory</b>	<b>Acpi DDR3 1600 2GB (hunix H5TCAG83EFR)*2</b>
<b>HDD</b>	<b>Western Digital WD10EALX-009BA0 1TB</b>

<b>Temperature</b>	<b>Result</b>	<b>Remark</b>
<b>85°C</b>	<b>PASS</b>	<b>50 Times</b>
<b>-25°C</b>	<b>PASS</b>	<b>50 Times</b>

## 3.2 Thermal measurements at various points on the board

### Test Environment :

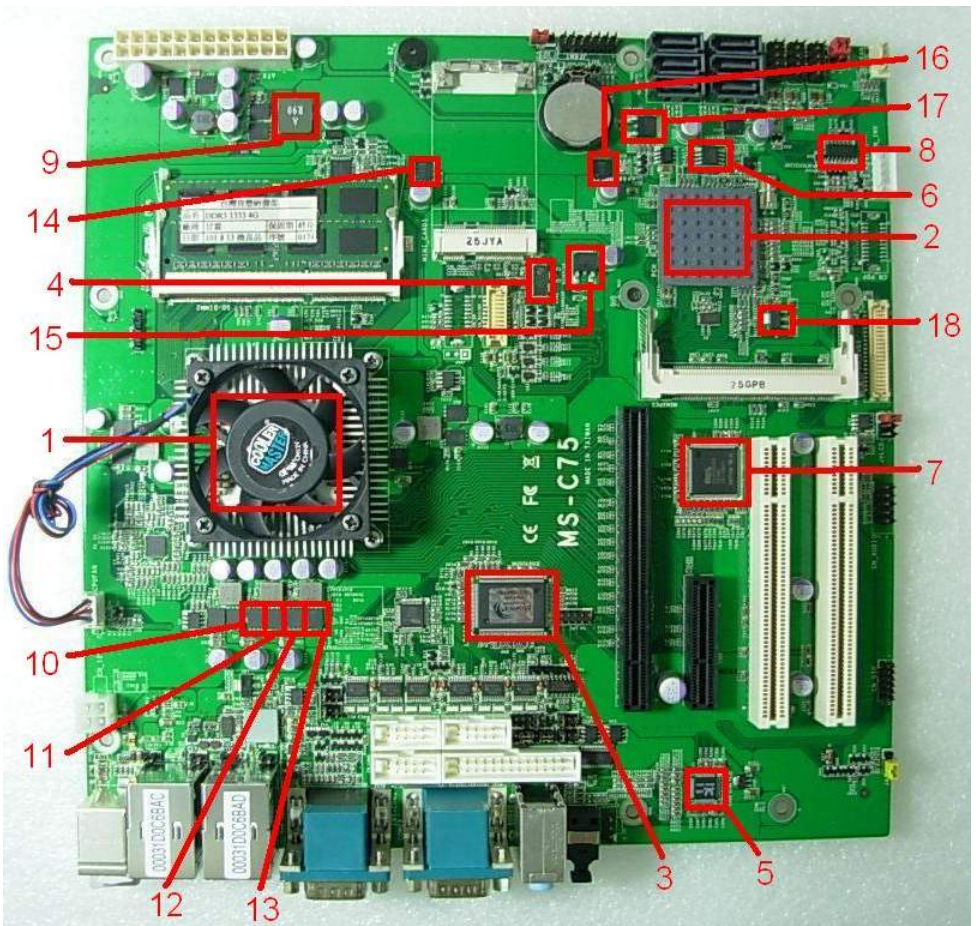
<b>CPU</b>	Intel(R) Core(TM) i3-3120ME 2.40GHz
<b>Memory</b>	Kingston DDR3 1333 4GB (D2568JENC PGD9U)
<b>HDD</b>	Western Digital WD3200AAKS-00B3A0 320GB
<b>Power</b>	CHANNEL WELL TECHNOLOGY CO.,LTD. CWT-300ATX12
<b>Operating System</b>	Windows XP
<b>Test Program</b>	Burnin 6.0

### Test Result:

Item	Environmental temperature	27.1°C
1	CPU	37°C
2	PCH (QM77)	50°C
3	LPCIO (ICH83627DHG-P+OBLPMB-1)	31.1°C
4	U26 (ICTS2PCIE412)	36.4°C
5	U31 (ICHALC888)	44.1°C
6	U33 (ICW25Q64CVSSIG)	40.1°C
7	U34 (ICTSI383)	36.8°C
8	U36 (ITS74HC14)	37.4°C
9	L5 (LLC0.9UH/0445)	38°C
10	Q6 (TMSIRFH7914PBF)	35°C
11	Q9 (TMSIRFH7914PBF)	37.4°C
12	Q10 (TMSIRFH7914PBF)	36.2°C



13	Q11 (TMSIRFH7914PBF)	36.2°C
14	Q19 (TMSIRFH7914PBF)	35.2°C
15	Q31 (TRE1085)	45°C
16	Q32 (TMSIRFH7914PBF)	55.9°C
17	Q36 (TRE1085)	41.7°C
18	Q41 (TREL1117LG)	41°C



## 4. Reliability Test

### 4.1 Power Consumption Test

#### 1. Test Environment:

<b>Motherboard</b>	<b>MS-C75TXD_A</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i7-3610QE 2.30GHz</b>
<b>Memory</b>	<b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b>
<b>HDD</b>	<b>Western Digital WD3200AAKS-00B3A0 320GB</b>

#### Power Supply : AcBel PC7008

<b>Voltage</b>	<b>MS-DOS Boot up</b>		<b>Windows XP SP2 64-bit 3DMARK 2003 +PRIME95</b>	
	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Current ( A )</b>	<b>Power ( W )</b>
<b>12V</b>	2.41	14.41	5.6	67.2
<b>5V</b>	1.75	8.75	3.15	15.75
<b>3.3V</b>	1.91	6.303	1.83	6.039
<b>5VSB</b>	1.26	6.3	0.005	0.025

### 1.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO M170EG01 17”LCD
---------------	---------------------

Power Supply : AcBel PC7008

Voltage	MS-DOS Boot up		Windows XP SP2 64-bit 3DMARK 2003 +PRIME95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	3.3	39.6	7.6	91.2
5V	2.38	11.9	3.83	19.15
3.3V	1.9	6.27	1.92	6.336
5VSB	1.149	5.745	0	0

## 2.Test Environment:

<b>Motherboard</b>	<b>MS-C75TXD_A</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i7-3610QE 2.30GHz</b>
<b>Memory</b>	<b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b>

### Power Supply : AcBel PC7008

<b>Voltage</b>	<b>MS-DOS Boot up</b>		<b>Windows XP SP2 64-bit 3DMARK 2003 +PRIME95</b>	
	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Current ( A )</b>	<b>Power ( W )</b>
<b>12V</b>	2.01	24.12	5.32	63.84
<b>5V</b>	1.35	6.35	2.68	13.4
<b>3.3V</b>	1.74	5.742	1.82	6.006
<b>5VSB</b>	1.26	6.3	0.005	0.025

## 2.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO M170EG01 17”LCD
---------------	---------------------

Power Supply : AcBel PC7008

Voltage	MS-DOS Boot up		Windows XP SP2 64-bit 3DMARK 2003 +PRIME95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
<b>12V</b>	2.75	33	6.96	83.52
<b>5V</b>	1.97	9.85	3.4	17
<b>3.3V</b>	1.91	6.303	1.92	6.336
<b>5VSB</b>	1.149	5.745	0	0

### 3.Test Environment:

<b>Motherboard</b>	<b>MS-C75TXD_A</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i3-3120ME 2.40GHz</b>
<b>Memory</b>	<b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b>
<b>HDD</b>	<b>Western Digital WD3200AAKS-00B3A0 320GB</b>

#### Power Supply : AcBel PC7008

<b>Voltage</b>	<b>MS-DOS Boot up</b>		<b>Windows XP SP2 64-bit 3DMARK 2003 +PRIME95</b>	
	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Current ( A )</b>	<b>Power ( W )</b>
<b>12V</b>	1.7	20.4	2.46	29.52
<b>5V</b>	1.75	8.75	3.12	15.6
<b>3.3V</b>	1.78	5.874	1.68	5.544
<b>5VSB</b>	1.276	6.38	0.004	0.02

### 3.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO M170EG01 17”LCD
---------------	---------------------

Power Supply : AcBel PC7008

Voltage	MS-DOS Boot up		Windows XP SP2 64-bit 3DMARK 2003 +PRIME95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	3.15	37.8	4.04	48.48
5V	2.38	11.9	3.77	18.85
3.3V	1.8	5.94	1.72	5.676
5VSB	1.256	6.28	0.002	0.01

#### 4. Test Environment:

<b>Motherboard</b>	<b>MS-C75TXD_A</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i3-3120ME 2.40GHz</b>
<b>Memory</b>	<b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b>

#### Power Supply : AcBel PC7008

<b>Voltage</b>	<b>MS-DOS Boot up</b>		<b>Windows XP SP2 64-bit 3DMARK 2003 +PRIME95</b>	
	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Current ( A )</b>	<b>Power ( W )</b>
<b>12V</b>	1.04	12.48	2.24	26.88
<b>5V</b>	1.37	6.85	2.69	13.45
<b>3.3V</b>	1.81	5.973	1.7	5.61
<b>5VSB</b>	1.276	6.38	0.004	0.02



#### 4.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO M170EG01 17”LCD
---------------	---------------------

Power Supply : AcBel PC7008

Voltage	MS-DOS Boot up		Windows XP SP2 64-bit 3DMARK 2003 +PRIME95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	2.39	28.68	3.83	45.96
5V	2	10	3.35	16.75
3.3V	1.75	5.775	1.73	7.709
5VSB	1.256	6.28	0.002	0.01

## 5.Test Environment:

<b>Motherboard</b>	<b>MS-C75TXD_A</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i5-3210M 2.50GHz</b>
<b>Memory</b>	<b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b>
<b>HDD</b>	<b>Western Digital WD10EARS-00Y5B1 1TB</b>

### Power Supply : AcBel PC7008

<b>Voltage</b>	<b>MS-DOS Boot up</b>		<b>Windows XP SP2 64-bit 3DMARK 2003 +PRIME95</b>	
	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Current ( A )</b>	<b>Power ( W )</b>
<b>12V</b>	1.31	1.572	3.58	42.96
<b>5V</b>	1.72	8.6	3.14	15.7
<b>3.3V</b>	1.76	5.808	1.67	5.511
<b>5VSB</b>	1.247	6.235	0	0

### 5.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO M170EG01 17”LCD
---------------	---------------------

Power Supply : AcBel PC7008

Voltage	MS-DOS Boot up		Windows XP SP2 64-bit 3DMARK 2003 +PRIME95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
<b>12V</b>	2.78	33.36	5.1	61.2
<b>5V</b>	2.38	11.9	3.68	18.4
<b>3.3V</b>	1.82	6.006	1.65	5.445
<b>5VSB</b>	1.25	6.25	0.002	0.01

## 6.Test Environment:

<b>Motherboard</b>	<b>MS-C75TXD_A</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i5-3210M 2.50GHz</b>
<b>Memory</b>	<b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b>

### Power Supply : AcBel PC7008

<b>Voltage</b>	<b>MS-DOS Boot up</b>		<b>Windows XP SP2 64-bit 3DMARK 2003 +PRIME95</b>	
	<b>Current ( A )</b>	<b>Power ( W )</b>	<b>Current ( A )</b>	<b>Power ( W )</b>
<b>12V</b>	1.84	22.08	3.38	40.56
<b>5V</b>	1.29	6.45	2.65	13.25
<b>3.3V</b>	1.69	5.577	1.65	5.445
<b>5VSB</b>	1.247	6.235	0	0

## 6.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO M170EG01 17”LCD
---------------	---------------------

Power Supply : AcBel PC7008

Voltage	MS-DOS Boot up		Windows XP SP2 64-bit 3DMARK 2003 +PRIME95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
<b>12V</b>	2.37	28.44	4.88	58.56
<b>5V</b>	1.91	9.55	3.28	16.4
<b>3.3V</b>	1.75	5.775	1.7	5.61
<b>5VSB</b>	1.25	6.25	0.002	0.01

## 5. Performance Test

### 5.1 Business Win Stone 2002

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
<b>Business Win stone2002</b>	<b>Intel(R) Core(TM) i5-2510E 2.50GHz Acpi DDR3 1600 2GB (H5TQ2GB3EFR)*2 Western Digital WD10EALX-009BA0 1TB</b>	<b>PASS</b>	<b>51.4 51.6 51.4 50.3</b>
<b>Business Win stone2002</b>	<b>Intel(R) Core(TM) i3-2330E 2.20GHz Acpi DDR3 1600 4GB (H5TQ2GB3EFR) Western Digital WD3200AAKS-00B3A0 320GB</b>	<b>PASS</b>	<b>47.6 47 46.9 46.4</b>

## 5.2 Business Win Stone 2004

### Windows XP SP2

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>Business Win stone2004</b>	<b>Intel(R) Core(TM) i3-2330E 2.20GHz Acpi DDR3 1600 4GB (H5TQ2GB3EFR) Western Digital WD3200AAKS-00B3A0 320GB</b>	<b>PASS</b>	<b>25.3 25.3 24.7 25.1</b>
<b>Business Win stone2004</b>	<b>Intel(R) Core(TM) i3-3120ME 2.40GHz Acpi DDR3 1600 4GB (H5TQ2GB3EFR) Western Digital WD3200AAKS-00B3A0 320GB</b>	<b>PASS</b>	<b>26 25.7 27.2 27</b>

## 5.3 Content Creation Winstone 2004

Windows XP SP2

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>Content Creation Winstone 2004</b>	<b>Intel(R) Core(TM) i5-2510E 2.50GHz Acpi DDR3 1600 2GB (H5TQ2GB3EFR)*2 Western Digital WD10EALX-009BA0 1TB</b>	<b>PASS</b>	<b>60.7 60.1 60.7 60.4</b>
<b>Content Creation Winstone 2004</b>	<b>Intel(R) Core(TM) i3-2330E 2.20GHz Acpi DDR3 1600 4GB (H5TQ2GB3EFR) Western Digital WD3200AAKS-00B3A0 320GB</b>	<b>PASS</b>	<b>47.7 47.4 47.5 47.5</b>



## 5.4 3D MARK(2001、2003、2005)

### Windows XP SP2 32-bit

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Score	Intel(R) Core(TM) i5-3210M 2.5GHz ADATA 1066 2GB (H5TQ1G83AFR) Western Digital WD3200AAKS-00B3A0 320GB	PASS	11492
3DMARK2003 Score		PASS	6438
3DMARK2005 Score		PASS	4227

### Windows XP SP2 32-bit

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Score	Intel(R) Core(TM) i7-3610QE 2.3GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A0 320GB	PASS	14258
3DMARK2003 Score		PASS	7679
3DMARK2005 Score		PASS	5036

**Windows XP SP2 32-bit**

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>3DMARK2001 Score</b>	<b>Intel(R) Core(TM) i7-2710QE 2.10GHz</b>	PASS	16419
<b>3DMARK2003 Score</b>	<b>Kingston DDR3 1333 4GB (D2568JENC PGD9U)</b>	PASS	8380
<b>3DMARK2005 Score</b>	<b>Western Digital WD3200AAKS-00B3A0 320GB</b>	PASS	5835

**Windows XP SP2 64-bit**

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>3DMARK2001 Score</b>	<b>Intel(R) Core(TM) i5-3440M 2.70GHz</b>	PASS	30971
<b>3DMARK2003 Score</b>	<b>Acpi DDR3 1600 8GB (H5TQ2GB3EFR)*2</b>	PASS	10688
<b>3DMARK2005 Score</b>	<b>Western Digital WD3200AAKS-00B3A0 320GB</b>	PASS	7822

**Windows XP SP2 64-bit**

<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>3DMARK2001 Score</b>	<b>Intel(R) Core(TM) i3-3120ME 2.40GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD3200AAKS-00B3A0 320GB</b>	PASS	16534
<b>3DMARK2003 Score</b>		PASS	8075
<b>3DMARK2005 Score</b>		PASS	5797

## 5.5 3D MARK2006

### Windows XP SP2 32-bit

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	<b>Intel(R) Core(TM) i5-3210M 2.5GHz</b> <b>ADATA 1066 2GB</b> <b>(H5TQ1G83AFR)</b> <b>Western Digital</b> <b>WD3200AAKS-00B3A0 320GB</b>	PASS	2975
2	SM2.0 Score		PASS	916
3	HDR/SM3.0 Score		PASS	1246
4	CPU Score		PASS	2778

### Windows XP SP2 32-bit

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	<b>Intel(R) Core(TM) i7-3610QE</b> <b>2.3GHz</b> <b>Transcend DDR3 1066 2GB</b> <b>(K4B1G0846D)</b> <b>Western Digital</b> <b>WD3200AAKS-00B3A0 320GB</b>	PASS	3683
2	SM2.0 Score		PASS	1030
3	HDR/SM3.0 Score		PASS	1571
4	CPU Score		PASS	5889

**Windows XP SP2 32-bit**

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	3DMARK Score	Intel(R) Core(TM) i7-2710QE 2.10GHz Kingston DDR3 1333 4GB (D2568JENC PGD9U) Western Digital WD3200AAKS-00B3A0 320GB	PASS	3662
2	SM2.0 Score		PASS	1094
3	HDR/SM3.0 Score		PASS	1508
4	CPU Score		PASS	5101

**Windows XP SP2 64-bit**

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	3DMARK Score	Intel(R) Core(TM) i5-3440M 2.70GHz Acpi DDR3 1600 8GB (H5TQ2GB3EFR)*2 Western Digital WD3200AAKS-00B3A0 320GB	PASS	5428
2	SM2.0 Score		PASS	1716
3	HDR/SM3.0 Score		PASS	2342
4	CPU Score		PASS	3595

**Windows XP SP2 64-bit**

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>3DMARK Score</b>	<b>Intel(R) Core(TM) i3-3120ME 2.40GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD3200AAKS-00B3A0 320GB</b>	<b>PASS</b>	<b>3773</b>
<b>2</b>	<b>SM2.0 Score</b>		<b>PASS</b>	<b>1172</b>
<b>3</b>	<b>HDR/SM3.0 Score</b>		<b>PASS</b>	<b>1623</b>
<b>4</b>	<b>CPU Score</b>		<b>PASS</b>	<b>2757</b>

## 5.6 PC MARK2002

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-3210M 2.5GHz ADATA 1066 2GB (H5TQ1G83AFR) Western Digital WD3200AAKS-00B3A0 320GB</b>

Windows XP SP2 32-bit

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>CPU Score</b>	PASS	13160
<b>2</b>	<b>Memory Score</b>	PASS	44548
<b>3</b>	<b>HDD Score</b>	PASS	2431

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-3610QE 2.3GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A0 320GB</b>

Windows XP SP2 32-bit

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>CPU Score</b>	PASS	14016
<b>2</b>	<b>Memory Score</b>	PASS	55261
<b>3</b>	<b>HDD Score</b>	PASS	2513

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-2710QE 2.10GHz</b> <b>Kingston DDR3 1333 4GB (D2568JENCPGD9U)</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 32-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>CPU Score</b>	PASS	12175
<b>2</b>	<b>Memory Score</b>	PASS	47732
<b>3</b>	<b>HDD Score</b>	PASS	2438

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-3440M 2.70GHz</b> <b>Acpi DDR3 1600 8GB (H5TQ2GB3EFR)*2</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>CPU Score</b>	PASS	14405
<b>2</b>	<b>Memory Score</b>	PASS	51962
<b>3</b>	<b>HDD Score</b>	PASS	2818



<b>Test Environment</b>
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<b>Intel(R) Core(TM) i3-3120ME 2.40GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD3200AAKS-00B3A0 320GB</b>
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**Windows XP SP2 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>CPU Score</b>	PASS	10246
<b>2</b>	<b>Memory Score</b>	PASS	38035
<b>3</b>	<b>HDD Score</b>	PASS	2772

## 5.7 PC MARK2004

<b>Test Environment</b>
Intel(R) Core(TM) i5-3210M 2.5GHz ADATA 1066 2GB (H5TQ1G83AFR) Western Digital WD3200AAKS-00B3A0 320GB

Windows XP PS2 32-bit

Item	Weighted Suite	Result	Remark
1	PCMark Score	PASS	N/A
2	CPU Score	PASS	N/A
3	Memory Score	PASS	9219
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	6340

<b>Test Environment</b>
Intel(R) Core(TM) i7-3610QE 2.3GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A0 320GB

Windows XP PS2 32-bit

Item	Weighted Suite	Result	Remark
1	PCMark Score	PASS	N/A
2	CPU Score	PASS	N/A
3	Memory Score	PASS	13866
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	6298

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-2710QE 2.10GHz</b> <b>Kingston DDR3 1333 4GB (D2568JENC PGD9U)</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP PS2 32-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	N/A
<b>2</b>	<b>CPU Score</b>	PASS	N/A
<b>3</b>	<b>Memory Score</b>	PASS	11791
<b>4</b>	<b>Graphic Score</b>	PASS	N/A
<b>5</b>	<b>HDD Score</b>	PASS	6384

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-3440M 2.70GHz</b> <b>Acpi DDR3 1600 8GB (H5TQ2GB3EFR)*2</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP PS2 64-bit**

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	N/A
<b>2</b>	<b>CPU Score</b>	PASS	N/A
<b>3</b>	<b>Memory Score</b>	PASS	11380
<b>4</b>	<b>Graphic Score</b>	PASS	7178
<b>5</b>	<b>HDD Score</b>	PASS	6212

**Test Environment**

**Intel(R) Core(TM) i3-3120ME 2.40GHz  
Kingston DDR3 1600 8GB (J420BBBG-GN-F)\*2  
Western Digital WD3200AAKS-00B3A0 320GB**

**Windows XP PS2 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	N/A
<b>2</b>	<b>CPU Score</b>	PASS	N/A
<b>3</b>	<b>Memory Score</b>	PASS	10646
<b>4</b>	<b>Graphic Score</b>	PASS	5410
<b>5</b>	<b>HDD Score</b>	PASS	5181

## 5.8 PC MARK2005

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-3210M 2.5GHz ADATA 1066 2GB (H5TQ1G83AFR) Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 32-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	N/A
<b>2</b>	<b>CPU Score</b>	PASS	8724
<b>3</b>	<b>Memory Score</b>	PASS	8260
<b>4</b>	<b>Graphic Score</b>	PASS	3560
<b>5</b>	<b>HDD Score</b>	PASS	6807

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-3610QE 2.3GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 32-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	N/A
<b>2</b>	<b>CPU Score</b>	PASS	12042
<b>3</b>	<b>Memory Score</b>	PASS	9517
<b>4</b>	<b>Graphic Score</b>	PASS	4211
<b>5</b>	<b>HDD Score</b>	PASS	6918

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-2710QE 2.10GHz</b> <b>Kingston DDR3 1333 4GB (D2568JENC PGD9U)</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 32-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	N/A
<b>2</b>	<b>CPU Score</b>	PASS	9918
<b>3</b>	<b>Memory Score</b>	PASS	8782
<b>4</b>	<b>Graphic Score</b>	PASS	4105
<b>5</b>	<b>HDD Score</b>	PASS	6685

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-3440M 2.70GHz</b> <b>Acpi DDR3 1600 8GB (H5TQ2GB3EFR)*2</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	8283
<b>2</b>	<b>CPU Score</b>	PASS	10616
<b>3</b>	<b>Memory Score</b>	PASS	11542
<b>4</b>	<b>Graphic Score</b>	PASS	5644
<b>5</b>	<b>HDD Score</b>	PASS	7139

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-3440M 2.70GHz</b> <b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	8349
<b>2</b>	<b>CPU Score</b>	PASS	10600
<b>3</b>	<b>Memory Score</b>	PASS	11565
<b>4</b>	<b>Graphic Score</b>	PASS	6077
<b>5</b>	<b>HDD Score</b>	PASS	7177

<b>Test Environment</b>
<b>Intel(R) Core(TM) i3-3120ME 2.40GHz</b> <b>Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	6602
<b>2</b>	<b>CPU Score</b>	PASS	7716
<b>3</b>	<b>Memory Score</b>	PASS	8715
<b>4</b>	<b>Graphic Score</b>	PASS	4742
<b>5</b>	<b>HDD Score</b>	PASS	7060

<b>Test Environment</b>
<b>Intel(R) Core(TM) i3-2330E 2.20GHz</b> <b>Acpi DDR3 1600 2GB (H5TQ2GB3EFR)</b> <b>Acpi DDR3 1600 4GB (H5TQ2GB3EFR)</b> <b>Western Digital WD3200AAKS-00B3A0 320GB</b>

**Windows XP SP2 32-bit**

<b>Item</b>	<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	5669
<b>2</b>	<b>CPU Score</b>	PASS	6695
<b>3</b>	<b>Memory Score</b>	PASS	7593
<b>4</b>	<b>Graphic Score</b>	PASS	3817
<b>5</b>	<b>HDD Score</b>	PASS	7172

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-2510E 2.50GHz</b> <b>Acpi DDR3 1600 2GB (H5TQ2GB3EFR)*2</b> <b>Western Digital WD10EALX-009BA0 1TB</b>

**Windows XP SP2 32-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>PCMark Score</b>	PASS	7389
<b>2</b>	<b>CPU Score</b>	PASS	9104
<b>3</b>	<b>Memory Score</b>	PASS	9935
<b>4</b>	<b>Graphic Score</b>	PASS	4242
<b>5</b>	<b>HDD Score</b>	PASS	8254



## 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 WD2500BPVT-22JJ5T0	SATA	250 GB	12.4 MB/sec	2.6 MB/sec	33.4 ms
Western Digital WD3200BPVT-00JJ5T0	SATA	320 GB	63.2 MB/sec	73.6 MB/se	18.3 ms
Western Digital WD3200AAKS-00B3A0	SATA	320 GB	93.3 MB/sec	100.9 MB/sec	15.8 ms
Western Digital WD5000AAKS-00V1A0	SATA	500 GB	87.9 MB/sec	118.4 MB/sec	15.5 ms
Western Digital WD10EALX-009BA0	SATA	1 TB	97.1 MB/sec	181 MB/sec	12.7 ms
Western Digital WD10EARS-00Y5B1	SATA	1 TB	73.1 MB/sec	101 MB/sec	16.6 ms
ADATA Flash Drive C906	USB	8 GB	16.9 MB/sec	15 MB/sec	0.8 ms
TDK LoR Trans-It Drive	USB	4 GB	17.9 MB/sec	12 MB/sec	0.9 ms
Intel SSDSC2CT060A3	SSD	60 GB	266.4 MB/sec	75.4 MB/sec	0.2 ms
Acpi MSS43-M	mSATA	32 GB	116.8 MB/sec	174.7 MB/sec	0.2 ms

## 5.9.2 DVD-ROM

Test environment:

OS Windows XP professional SP2

Program (NERO)

DVD-ROM Model	Interface	Average Speed	Full Read	Burst Rate	DVD
ASUS DRW-24D1ST	SATA	9.83 x	161 ms	45 MB/s	16 X DVD+R
PIONEER DVR-219L	SATA	10.29 x	206 ms	51 MB/s	16 X DVD+R
LITE-ON iHES312	SATA	10.1 x	151 ms	47 MB/s	16 X DVD+R
LITE-ON eTAU108	USB	5.16 x	205 ms	18 MB/s	16 X DVD+R
BUFFALO DVSM-PC58U2V	USB	5.11 x	212 ms	20 MB/s	16 X DVD+R

## 5.10 Vibration Test

Motherboard	MS-C75TXD_A			
Test Equipment	VS-5060L			
Amplitude	Degree	Frequency	Time (1min/1Time)	Result
0.75mm	40	5 → 55 → 5 Hz	10	PASS
1.00mm	55	5 → 55 → 5 Hz	10	PASS
1.25mm	70	5 → 55 → 5 Hz	10	PASS
1.5mm	90	5 → 55 → 5 Hz	10	PASS
1.5mm	90	5 → 55 → 5 Hz	120	PASS