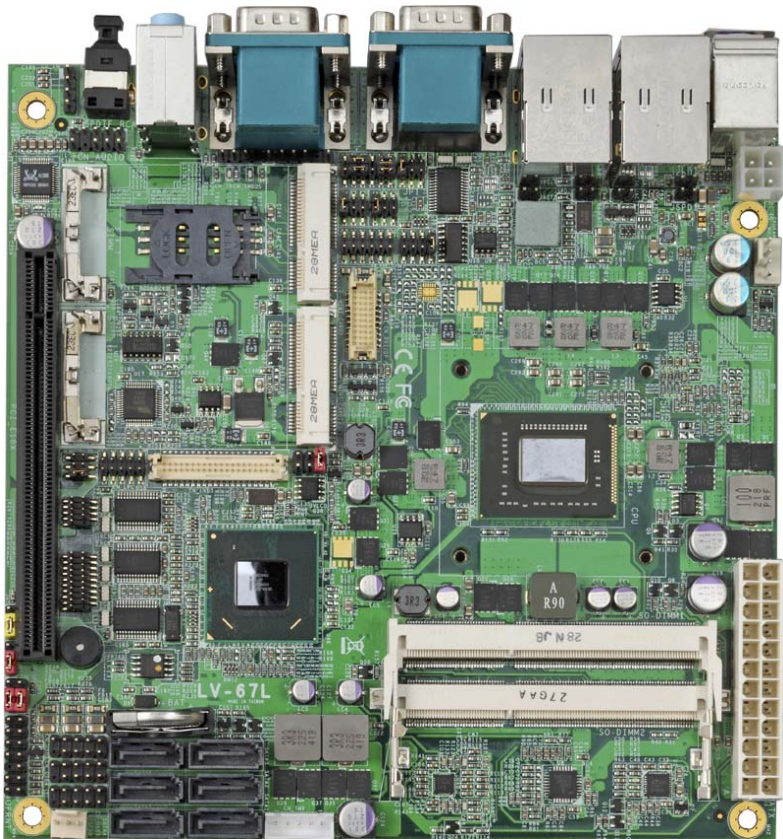


Product Test Report



| | |
|-------------------------|-------------------|
| Product Name | LV-67L |
| Product Version | A |
| Issued Date | 2013.04.01 |
| Report Edition | 1.0 |
| BIOS Version | 1.0 |
| Testing Engineer | RICK |
| Check Engineer | JEFF |

REVISION HISTORY

| DATE | REVISION NO. | PAGE | DESCRIPTONS |
|-------------------|---------------------|-------------|------------------------|
| 2013.04.01 | Ver. 1.0 | 74 | Initial Release |

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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 | USB 1/2/3/4/5/6/7/8/9/10 | PASS |
| 7 | DDRIII 1/2 | PASS |
| 8 | COM 1/2/3/4/5/6 | PASS |
| 9 | VGA Port | PASS |
| 10 | PS2 | PASS |
| 11 | AUDIO | PASS |
| 12 | CN_AUDIO | PASS |
| 13 | CD_IN | PASS |
| 14 | CN_DIO | PASS |
| 15 | CPUFAN | PASS |
| 16 | SYSFAN | PASS |
| 17 | Mini Card 1/2 | PASS |
| 18 | CN_DVI | PASS |
| 19 | CN_LVDS | PASS |
| 20 | CN_INV | PASS |
| 21 | LAN 1/2 | PASS |
| 22 | IrDA | PASS |

| | | |
|----|--------------------------|------|
| 23 | ATX | PASS |
| 24 | DC_IN | PASS |
| 25 | SPDIF | PASS |
| 26 | PCIE 16x (Only LV-67LBU) | PASS |

Jumper

| Item | Description | Result |
|------|-------------|--------|
| 1 | JRTC | PASS |
| 2 | JCSEL1 | PASS |
| 3 | JCSEL2 | PASS |
| 4 | JVLCD | PASS |
| 5 | JAT | 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 | NumLock | PASS | |
| 6 | Quick Boot | PASS | |
| 7 | Diagnostic Splash Screen | PASS | |
| 8 | Diagnostic Summary Screen | PASS | |
| 9 | Console Redirection | PASS | |
| 10 | Active Processor Cores | PASS | |
| 11 | SATA Device | PASS | |
| 12 | Interface Combination | PASS | NO RAID |
| 13 | Max TOLUD | PASS | Only 32-bit OS |
| 14 | DVMT Total Gfx Mem | PASS | |
| 15 | Boot Type (CRT / DVI / LVDS) | PASS | |
| 16 | LCD Panel Type (1280x1024) | PASS | |
| 17 | Panel Color Depth (24Bit) | PASS | |
| 18 | USB Per-Port Disable Control | PASS | |
| 19 | Azalia | PASS | |
| 20 | PCH Internal LAN | PASS | Only 82579LM |
| 21 | LAN OPROM Selection | PASS | |
| 22 | Wake on PCH LAN | PASS | Only 82579LM |
| 23 | Serial Port | PASS | |
| 24 | IR Func. | PASS | |
| 25 | Watch Dog Timer | PASS | |

| | | | |
|-----------|--------------------------------|------|--|
| 26 | CPU Warning Temp | PASS | |
| 27 | CPU Warning Temp | PASS | |
| 28 | Power On By RTC Alarm | PASS | |
| 29 | Set Supervisor Password | PASS | |
| 30 | Set User password | PASS | |
| 31 | Set HDD password | PASS | |

1.3 Driver

CD Edition : IPCi4-1.1

1 Windows XP SP2 32-bit driver test

| Item | Description | Result | Version |
|------|----------------------|--------|--------------|
| 1 | Chipset Driver | PASS | 9.2.0.1025 |
| 2 | VGA Driver | PASS | 6.14.10.5337 |
| 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 | 9.2.0.1025 |
| 2 | VGA Driver | PASS | 6.14.10.5337 |
| 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 | 9.2.0.1025 |
| 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 | 9.2.0.1025 |
| 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 | 9.2.0.1030 |
| 2 | VGA Driver | PASS | 8.15.10.2321 |
| 3 | Audio Driver | PASS | 6.0.1.6083 |
| 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 | 9.2.0.1030 |
| 2 | VGA Driver | PASS | 8.15.10.2321 |
| 3 | Audio Driver | PASS | 6.0.1.6083 |
| 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 | 9.2.0.1030 |
| 2 | Audio Driver | PASS | 6.0.1.6083 |
| 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 | 9.2.0.1030 |
| 2 | Audio Driver | PASS | 6.0.1.6083 |
| 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 | 9.2.0.1030 |
| 2 | VGA Driver | PASS | 8.15.10.2321 |
| 3 | Audio Driver | PASS | 6.0.1.6083 |
| 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 | 9.2.0.1030 |
| 2 | VGA Driver | PASS | 8.15.10.2321 |
| 3 | Audio Driver | PASS | 6.0.1.6083 |
| 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 Code | CPU Speed | Family | Processor | DMI | Smart Cache | Result |
|-----------------------|-----------|---------|-----------|-------|-------------|--------|
| SR0NB | 1 GHz | Celeron | 807UE | ----- | 1 MB | PASS |
| SR0BU | 1.1 GHz | Celeron | 847E | ----- | 2 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 |
|--------------|----------------------------|-----------|--------------------|--------|
| ADATA | SEC K4B1G0846D | DDR3 1066 | 1 GB | PASS |
| Transcend | SEC K4B1G0846D | DDR3 1066 | 1 GB | PASS |
| Transcend | SEC K4B1G0846D | DDR3 1066 | 2 GB | PASS |
| ADATA | Hynix H5TQ1G83AFP | DDR3 1066 | 2 GB | PASS |
| INNODISK | Hynix H5TQ2G83CFR | DDR3 1333 | 4 GB | PASS |
| Kingston | Kingston D2568JPTCPGD9U | DDR3 1333 | 4 GB | PASS |
| ADATA | ELPIDA J2108BCSE-GN-F | DDR3 1600 | 4 GB | PASS |
| Kingston | ELPIDA J420BBBG-GN-F | DDR3 1600 | 8 GB | PASS |

2.4 VGA Graphic Quality Test

Test environment:

OS Windows XP professional SP2 32/64-bit

Driver version : 6.14.10.5337

| 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 : 6.0.1.6083

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

OS Windows Vista 64 bit

Driver version : 6.0.1.6083

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

OS Windows Server 2008 32-bit

Driver version : 6.0.1.6083

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

OS Windows Server 2008 64-bit

Driver version : 6.0.1.6083

| 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 : 6.0.1.6083

| 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 : 6.0.1.6083

| 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 WD3200AAKS-00B3A0 | SATA | 320 GB | PASS | PASS |
| Western Digital WD3200BEKT-22F3T0 | SATA | 320 GB | PASS | PASS |
| Western Digital WD10EARS-00Y5B1 | SATA | 1 TB | PASS | PASS |
| Western Digital WD10EALX-009BA0 | SATA | 1 TB | PASS | PASS |
| Memo Right MRSAJ6C064GC125C00 | SATA (SSD) | 64 GB | PASS | PASS |

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 |
| LITE-ON eTAU108 | USB | PASS | PASS | PASS |
| BUFFALO DVSM-PC58U2V | USB | PASS | PASS | PASS |

2.8 USB device Test

1. 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 | |

2. 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 | |

3. 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 | |

4. 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 | |

5. 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 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 | |
| 2 | Data Transfer Test | PASS | 32-bit |

3. Windows Vista 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 | |

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 | |

2.12 Power Supply Test

| Item | TYPE | Description | Result | Remark |
|-------------|------------------|-------------------------------------|---------------|---------------|
| 1 | Adapter | LI SHIN 0219B1280 80W | PASS | |
| 2 | Adapter | LI SHIN 0227B19120 120W | PASS | |
| 3 | Adapter | FSP120-AAA 120W | PASS | |
| 3 | ATX Power | AcBel ATX-350P-DNSS 350W | PASS | |
| 4 | ATX Power | Enhance ENH-0630A 300W | PASS | |
| 5 | ATX Power | Seasonic SS-300HB 330W | PASS | |
| 6 | ATX Power | Antec EA-650 650W | PASS | |

2.13 PCI Express mini card

| Motherboard | PCI Express mini card | Remark |
|----------------------|-----------------------|------------------|
| LV-67LNB LV-67LBU | MPX-954 | PASS |
| | MPX-954E | PASS |
| | MPX-827 | PASS |
| | MPX-574D | PASS |
| | MPX-574D2 | PASS |
| | MPX-643 | PASS |
| | MPX-750 | PASS |
| | MPX-885 | PASS |
| | MPX-3132 | PASS |
| | MPX-5201 | PASS |
| | MPX-6864 | PASS |
| | MPX-7202 | PASS |
| | MPX-9125 | PASS |
| | MPX-TP4R | PASS |
| | MPX-SDVOD | ONLY MINI CARD 1 |

Attention: MPX-3132 needs to into BIOS setting

=> Advanced => South Bridge Configuration

=> SB PCI Express Config

=> PCI Express Root Port 3 & 5

=> PCIe Speed [Gen1]

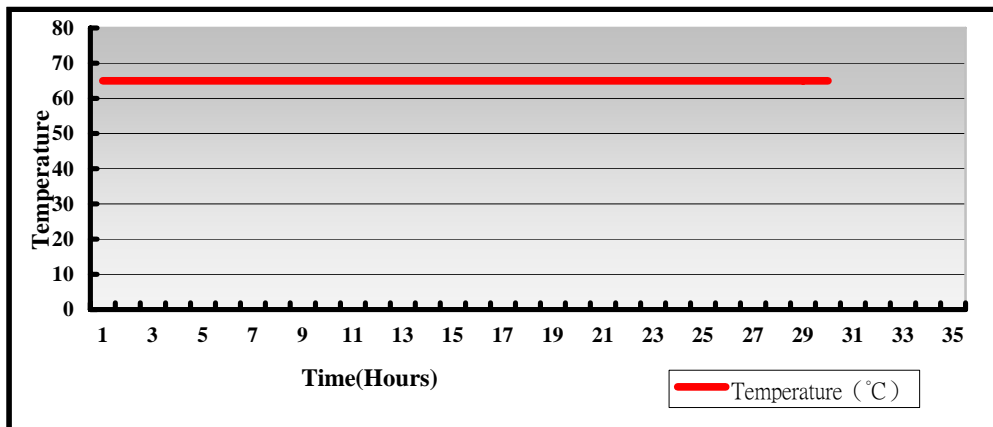
Then reboot first to press F5, and load driver to usb floppy from

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

3. Environmental test

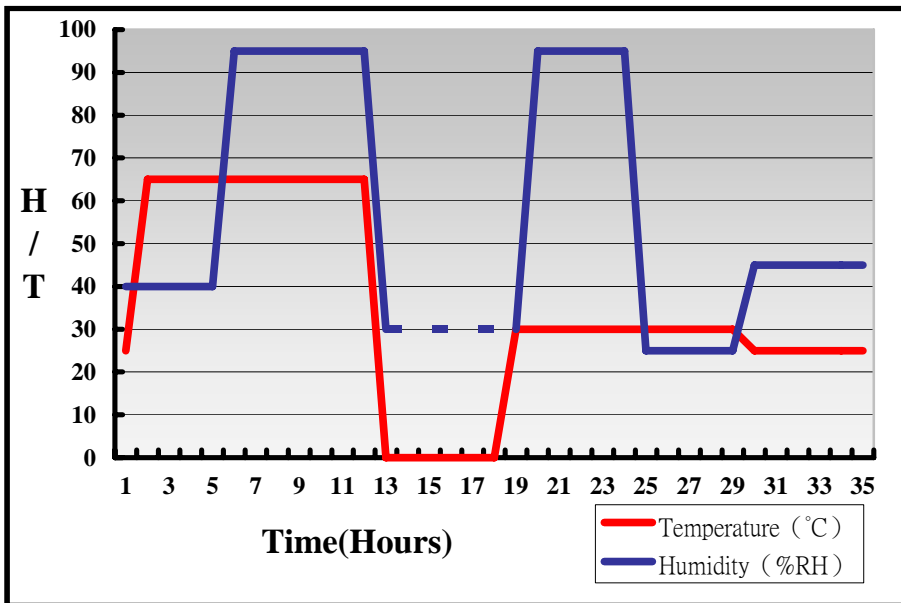
3.1 Temperature Test

| | |
|----------------|--|
| System Board | LV-67LNB_A |
| CPU | Intel (R) Celeron (R) CPU 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F) |
| HDD | Western Digital WD10EARS-00Y5B1 1TB |
| Operating OS | Windows XP |
| Test Equipment | GIANT FORCE (GTH-150-60-CP-AR) |
| Test Program | 3DMark 2003 |



Hardware Device list:

| | |
|----------------|--|
| System Board | LV-67LNB_A |
| CPU | Intel (R) Celeron (R) CPU 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F) |
| HDD | Western Digital WD10EARS-00Y5B1 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:

| | |
|---------------------|---|
| System Board | LV-67LBU_A |
| CPU | Intel(R) Celeron(TM) 847E 1.1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F) |
| HDD | Western Digital WD10EALX-009BA0 1TB |

| Temperature | Result | Remark |
|--------------------|---------------|-----------------|
| 85°C | PASS | 50 Times |
| -35°C | PASS | 50 Times |

3.2 Thermal measurements at various points on the board

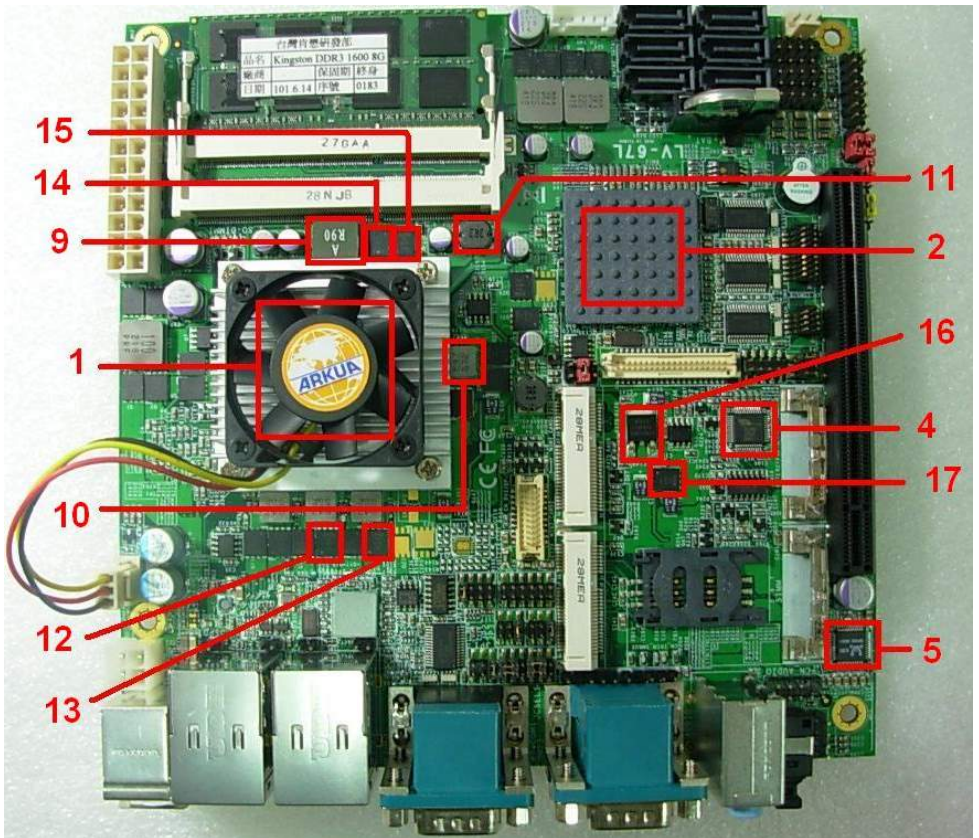
Test Environment :

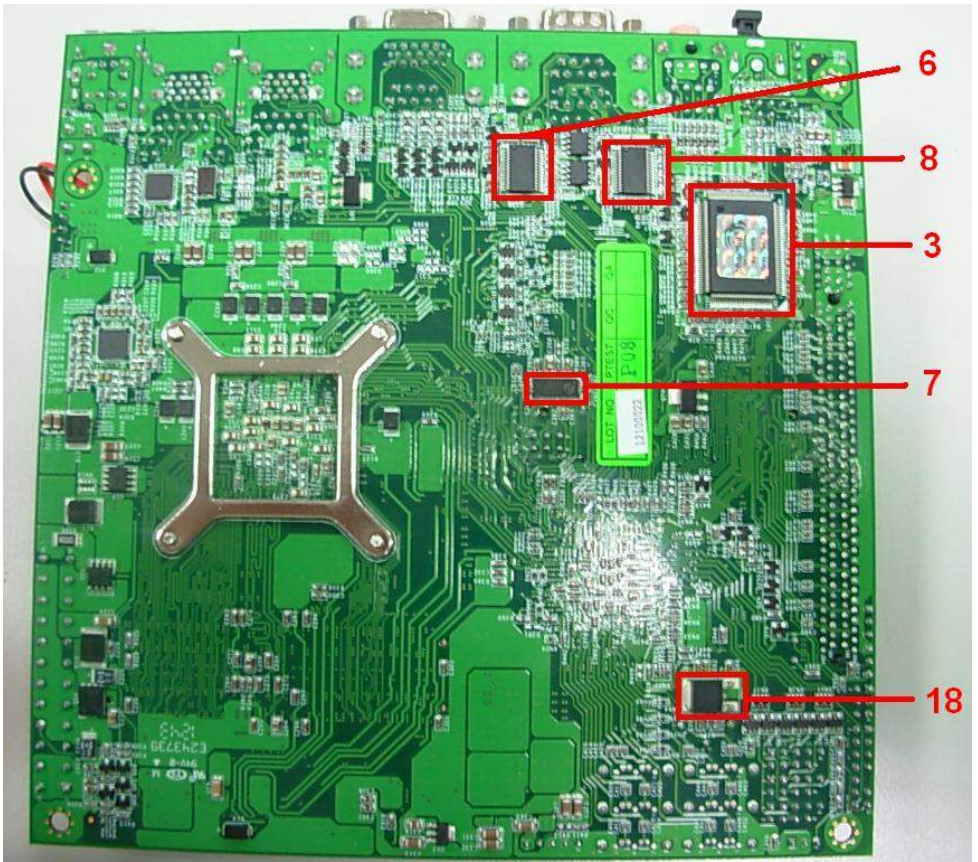
| | |
|-------------------------|---|
| CPU | Intel(R) Celeron(TM) 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F) |
| HDD | Western Digital 10EALX-009BA0 1TB |
| Power | Seasonic SS-330HB |
| Operating System | Windows XP 64-bit |
| Test Program | BurnIn 6.0 |

Test Result:

| Item | Environmental temperature | 24.8°C |
|-------------|----------------------------------|---------------|
| 1 | CPU | 41°C |
| 2 | PCH (HM65) | 45.6°C |
| 3 | LPCIO (ICH83627DHG-P) | 34.8°C |
| 4 | U17 (ICHF81216D) | 35.3°C |
| 5 | U21 (ICHALC888) | 47.4°C |
| 6 | U34 (ICADM213ECA-T) | 34.8°C |
| 7 | U35 (ICTS2PCIE412) | 37.2°C |
| 8 | U39 (ICADM213ECA-T) | 35.5°C |
| 9 | L5 (LLC0.9UH/0445) | 39.2°C |
| 10 | L8 (LLC0.47UH/063T) | 36.1°C |
| 11 | L9 (LLC3.3UH/0705C) | 34.4°C |
| 12 | Q16 (TMSIRFH7914TRPBF) | 35.8°C |

| | | |
|----|------------------------|--------|
| 13 | Q19 (TMSIRFH7914TRPBF) | 36.1°C |
| 14 | Q20 (TMSIRFH7914TRPBF) | 35.1°C |
| 15 | Q22 (TMSIRFH7914TRPBF) | 34.5°C |
| 16 | Q41 (TRE1084) | 43.9°C |
| 17 | Q44 (TMSIRFH7914TRPBF) | 34.8°C |
| 18 | Q51 (TRE1084) | 36°C |





4. Reliability Test

4.1 Power Consumption Test

1. Test Environment:

| | |
|--------------------|--|
| Motherboard | LV-67LNB_A |
| CPU | Intel(R) Celeron(R) 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 |
| HDD | Western Digital WD10EARS-00Y5B1 1TB |

Power Supply : AcBel ATX-350P-DNSS

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|-------------|-------------------|-------------|--------------------------------------|-------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 0.88 | 1.056 | 1.19 | 14.28 |
| 5V | 1.59 | 7.95 | 2.18 | 10.9 |
| 3.3V | 1.56 | 5.148 | 1.42 | 4.686 |
| 5VSB | 1.082 | 5.41 | 0.009 | 0.045 |

1.a.Test Environment:

The same as above but with LCD panel

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

Power Supply : AcBel ATX-350P-DNSS

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|---------|-------------------|-------------|--------------------------------------|-------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 2.44 | 29.28 | 2.72 | 32.64 |
| 5V | 2.22 | 11.1 | 2.97 | 14.85 |
| 3.3V | 1.56 | 5.148 | 1.57 | 5.181 |
| 5VSB | 1.065 | 5.325 | 0.008 | 0.04 |

2.Test Environment:

| | |
|--------------------|--|
| Motherboard | LV-67LNB_A |
| CPU | Intel(R) Celeron(R) 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 |

Power Supply : AcBel ATX-350P-DNSS

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|-------------|-------------------|---------------|--------------------------------------|-------------|
| | Current (A) | Current (A) | Power (W) | Power (W) |
| 12V | 0.61 | 0.8 | 9.6 | 7.32 |
| 5V | 1.44 | 1.8 | 9 | 7.2 |
| 3.3V | 1.53 | 1.42 | 4.686 | 5.049 |
| 5VSB | 1.048 | 0.009 | 0.045 | 5.24 |

3. Test Environment:

| | |
|--------------------|--|
| Motherboard | LV-67LNB_A |
| CPU | Intel(R) Celeron(R) 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F) |

Adapter : LI SHIN 0219B1280

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|----------------|---------------------------|--------------------|--|--------------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 2.04 | 24.48 | 2.41 | 28.92 |

3.a. Test Environment:

The same as above but with LCD panel

| | |
|----------------------|---------------------|
| Display Panel | AUO M170EG01 17"LCD |
|----------------------|---------------------|

Adapter : LI SHIN 0219B1280

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|----------------|---------------------------|--------------------|--|--------------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 3.92 | 47.04 | 4.39 | 52.68 |

4. Test Environment:

| | |
|-------------|--|
| Motherboard | LV-67LNB_A |
| CPU | Intel(R) Celeron(R) 807UE 1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F) |

Adapter : LI SHIN 0227B19120

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|---------|-------------------|-------------|--------------------------------------|-------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 19V | 1.29 | 24.51 | 1.57 | 29.83 |

4.a. Test Environment:

The same as above but with LCD panel

| | |
|---------------|---------------------|
| Display Panel | AUO M170EG01 17"LCD |
|---------------|---------------------|

Adapter: LI SHIN 0227B19120

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|---------|-------------------|-------------|--------------------------------------|-------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 19V | 2.5 | 47.5 | 2.75 | 52.25 |

5.Test Environment:

| | |
|-------------|---|
| Motherboard | LV-67LBU_A |
| CPU | Intel(R) Celeron(TM) 847E 1.1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBBG-GN-F)*2 |
| HDD | Western Digital WD10EALX-009BA0 1TB |

Power Supply : Seasonic SS-330HB

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|---------|-------------------|-------------|--------------------------------------|-------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 2.42 | 29.04 | 1.5 | 18 |
| 5V | 1.94 | 9.7 | 2.67 | 13.35 |
| 3.3V | 1.51 | 4.983 | 1.49 | 4.917 |
| 5VSB | 1.045 | 5.225 | 0.01 | 0.05 |

5.a.Test Environment:

The same as above but with LCD panel

| | |
|---------------|---------------------|
| Display Panel | AUO M170EG01 17"LCD |
|---------------|---------------------|

Power Supply : Seasonic SS-330HB

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|---------|-------------------|-------------|--------------------------------------|-------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 3.87 | 46.44 | 3.08 | 36.96 |
| 5V | 2.03 | 10.15 | 2.74 | 13.7 |
| 3.3V | 2.44 | 8.052 | 2.49 | 8.217 |
| 5VSB | 1.029 | 5.145 | 0.013 | 0.065 |

6.Test Environment:

| | |
|--------------------|--|
| Motherboard | LV-67LBU_A |
| CPU | Intel(R) Celeron(TM) 847E 1.1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 |

Power Supply : Seasonic SS-330HB

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|-------------|-------------------|---------------|--------------------------------------|-------------|
| | Current (A) | Current (A) | Power (W) | Power (W) |
| 12V | 0.64 | 7.68 | 1.21 | 14.52 |
| 5V | 1.54 | 7.7 | 2.14 | 10.7 |
| 3.3V | 1.49 | 4.917 | 1.45 | 4.785 |
| 5VSB | 1.045 | 5.225 | 0.01 | 0.05 |

7. Test Environment:

| | |
|--------------------|--|
| Motherboard | LV-67LBU_A |
| CPU | Intel(R) Celeron(TM) 847E 1.1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 |

Adapter : LI SHIN 0219B1280

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|----------------|---------------------------|--------------------|--|--------------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 3.61 | 43.32 | 2.9 | 34.8 |

7.a. Test Environment:

The same as above but with LCD panel

| | |
|----------------------|---------------------|
| Display Panel | AUO M170EG01 17"LCD |
|----------------------|---------------------|

Adapter : LI SHIN 0219B1280

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|----------------|---------------------------|--------------------|--|--------------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 12V | 5.49 | 65.88 | 5.1 | 61.2 |

8. Test Environment:

| | |
|--------------------|--|
| Motherboard | LV-67LBU_A |
| CPU | Intel(R) Celeron(TM) 847E 1.1GHz |
| Memory | Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 |

Adapter : FSP120-AAA

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|----------------|---------------------------|--------------------|--|--------------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 19V | 2.31 | 43.89 | 1.88 | 35.72 |

8.a. Test Environment:

The same as above but with LCD panel

| | |
|----------------------|---------------------|
| Display Panel | AUO M170EG01 17"LCD |
|----------------------|---------------------|

Adapter: FSP120-AAA

| Voltage | MS-DOS Boot up | | Windows XP SP2 64-bit 3DMARK 2003 | |
|----------------|---------------------------|--------------------|--|--------------------|
| | Current (A) | Power (W) | Current (A) | Power (W) |
| 19V | 3.54 | 67.26 | 3.34 | 63.46 |

5. Performance Test

5.1 Business Win Stone 2002

Windows XP SP2

| WEIGHTED SUITE | Test Environment | Result | Remark |
|--|---|-------------|--|
| <p>Business Win stone2002</p> | <p>Intel(R) Celeron(TM) 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB</p> | <p>PASS</p> | <p>31.6 31.3 30.4 31.5</p> |
| <p>Business Win stone2002</p> | <p>Intel(R) Celeron(TM) 847E 1.1GHz INNODISK DDR3 1333 4GB*2 (H5TQ2G83CFR) Western Digital WD10EALX-009BA0 1TB</p> | <p>PASS</p> | <p>32.8 31.9 33.3 32.1</p> |

5.2 Business Win Stone 2004

Windows XP SP2

| Weighted Suite | Test Environment | Result | Remark |
|-----------------------------------|--|--------|------------------------------|
| Business Win stone2004 | Intel(R) Celeron(TM) 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB | PASS | 17.1 17.3 17.3 16.9 |
| Business Win stone2004 | Intel(R) Celeron(TM) 847E 1.1GHz INNODISK DDR3 1333 4GB*2 (H5TQ2G83CFR) Western Digital WD10EALX-009BA0 1TB | PASS | 32.8 31.9 33.3 32.1 |

5.3 Content Creation Winstone 2004

Windows XP SP2

| Weighted Suite | Test Environment | Result | Remark |
|---|--|-------------|--|
| Content Creation Winstone 2004 | Intel(R) Celeron(TM) 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB | PASS | 24.2 23.6 24.2 24.3 |
| Content Creation Winstone 2004 | Intel(R) Celeron(TM) 847E 1.1GHz INNODISK DDR3 1333 4GB*2 (H5TQ2G83CFR) Western Digital WD10EALX-009BA0 1TB | PASS | 32.8 31.9 33.3 32.1 |

5.4 3D MARK(2001、2003、2005)

Windows XP SP2 32-bit

| Weighted Suite | Test Environment | Result | Remark |
|------------------|--|--------|--------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EARS-00Y5B1 1TB | PASS | 6223 |
| 3DMARK2003 Score | | PASS | 4225 |
| 3DMARK2005 Score | | PASS | 2389 |

Windows XP SP2 64-bit

| Weighted Suite | Test Environment | Result | Remark |
|------------------|--|--------|--------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 807UE 1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F) Western Digital WD10EARS-00Y5B1 1TB | PASS | 6421 |
| 3DMARK2003 Score | | PASS | 4468 |
| 3DMARK2005 Score | | PASS | 2459 |

Windows XP SP2 32-bit

| Weighted Suite | Test Environment | Result | Remark |
|-------------------------|--|---------------|---------------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 1GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A 320GB | PASS | 6237 |
| 3DMARK2003 Score | | PASS | 4271 |
| 3DMARK2005 Score | | PASS | 2476 |

Windows XP SP2 32-bit

| Weighted Suite | Test Environment | Result | Remark |
|-------------------------|---|---------------|---------------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 2GB (H57Q1G83AFP) Western Digital WD3200AAKS-00B3A 320GB | PASS | 6219 |
| 3DMARK2003 Score | | PASS | 4237 |
| 3DMARK2005 Score | | PASS | 2466 |

Windows XP SP2 64-bit

| Weighted Suite | Test Environment | Result | Remark |
|------------------|--|--------|--------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1600 8GB (J420BBBBG-GN-F)*2 Western Digital WD10EALX-009BA0 1TB | PASS | 8008 |
| 3DMARK2003 Score | | PASS | 5163 |
| 3DMARK2005 Score | | PASS | 3236 |

Windows XP SP2 32-bit

| Weighted Suite | Test Environment | Result | Remark |
|------------------|---|--------|--------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 847E 1.1GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB | PASS | 7258 |
| 3DMARK2003 Score | | PASS | 4709 |
| 3DMARK2005 Score | | PASS | 2968 |

Windows XP SP2 32-bit

| Weighted Suite | Test Environment | Result | Remark |
|-------------------------|--|---------------|---------------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1333 4GB (D2568JPTCPGD9U) Western Digital WD10EALX-009BA0 1TB | PASS | 7919 |
| 3DMARK2003 Score | | PASS | 4989 |
| 3DMARK2005 Score | | PASS | 3292 |

Windows XP SP2 64-bit

| Weighted Suite | Test Environment | Result | Remark |
|-------------------------|---|---------------|---------------|
| 3DMARK2001 Score | Intel (R) Celeron (R) CPU 807UE 1GHz ADATA DDR3 1066 2GB (H5TQ1G83AFP) ADATA DDR3 1600 4GB (J2108BCSE-GN-F) Western Digital WD3200BPVT-00JJ5T0 320GB | PASS | 6132 |
| 3DMARK2003 Score | | PASS | 4159 |
| 3DMARK2005 Score | | PASS | 2354 |

5.5 3D MARK2006

Windows XP SP2 32-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|------|-----------------|--|--------|--------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EARS-00Y5B1 1TB | PASS | 1444 |
| 2 | SM2.0 Score | | PASS | 555 |
| 3 | HDR/SM3.0 Score | | PASS | 622 |
| 4 | CPU Score | | PASS | 524 |

Windows XP SP2 64-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|------|-----------------|--|--------|--------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 807UE 1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F) Western Digital WD10EARS-00Y5B1 1TB | PASS | 1603 |
| 2 | SM2.0 Score | | PASS | 582 |
| 3 | HDR/SM3.0 Score | | PASS | 758 |
| 4 | CPU Score | | PASS | 517 |

Windows XP SP2 32-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|-------------|-----------------------|--|---------------|---------------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 1GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A 320GB | PASS | 1428 |
| 2 | SM2.0 Score | | PASS | 499 |
| 3 | HDR/SM3.0 Score | | PASS | 661 |
| 4 | CPU Score | | PASS | 526 |

Windows XP SP2 32-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|-------------|-----------------------|---|---------------|---------------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 2GB (H57Q1G83AFP) Western Digital WD3200AAKS-00B3A 320GB | PASS | 1433 |
| 2 | SM2.0 Score | | PASS | 503 |
| 3 | HDR/SM3.0 Score | | PASS | 662 |
| 4 | CPU Score | | PASS | 526 |

Windows XP SP2 64-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|-------------|-----------------------|---|---------------|---------------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD10EALX-009BA0 1TB | PASS | 210 |
| 2 | SM2.0 Score | | PASS | 62 |
| 3 | HDR/SM3.0 Score | | PASS | 83 |
| 4 | CPU Score | | PASS | 1107 |

Windows XP SP2 32-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|-------------|-----------------------|---|---------------|---------------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 847E 1.1GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB | PASS | 1884 |
| 2 | SM2.0 Score | | PASS | 702 |
| 3 | HDR/SM3.0 Score | | PASS | 727 |
| 4 | CPU Score | | PASS | 1099 |

Windows XP SP2 32-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|-------------|-----------------------|--|---------------|---------------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1333 4GB (D2568JPTCPGD9U) Western Digital WD10EALX-009BA0 1TB | PASS | 2068 |
| 2 | SM2.0 Score | | PASS | 690 |
| 3 | HDR/SM3.0 Score | | PASS | 892 |
| 4 | CPU Score | | PASS | 1119 |

Windows XP SP2 64-bit

| Item | Weighted Suite | Test Environment | Result | Remark |
|-------------|-----------------------|---|---------------|---------------|
| 1 | 3DMARK Score | Intel (R) Celeron (R) CPU 807UE 1GHz ADATA DDR3 1066 2GB (H5TQ1G83AFP) ADATA DDR3 1600 4GB (J2108BCSE-GN-F) Western Digital WD3200BPVT-00JJ5T0 320GB | PASS | 1412 |
| 2 | SM2.0 Score | | PASS | 550 |
| 3 | HDR/SM3.0 Score | | PASS | 602 |
| 4 | CPU Score | | PASS | 509 |

5.6 PC MARK2002

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EARS-00Y5B1 1TB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|------|----------------|--------|--------|
| 1 | CPU Score | PASS | 4064 |
| 2 | Memory Score | PASS | 11399 |
| 3 | HDD Score | PASS | 1827 |

| |
|--|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz Kingston DDR3 1600 8GB (J420BBBBG-GN-F) Western Digital WD10EARS-00Y5B1 1TB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|------|----------------|--------|--------|
| 1 | CPU Score | PASS | 4082 |
| 2 | Memory Score | PASS | 11900 |
| 3 | HDD Score | PASS | 2082 |

| |
|--|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 1GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A 320GB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU Score | PASS | 4021 |
| 2 | Memory Score | PASS | 11369 |
| 3 | HDD Score | PASS | 2623 |

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 2GB (H57Q1G83AFP) Western Digital WD3200AAKS-00B3A 320GB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU Score | PASS | 4037 |
| 2 | Memory Score | PASS | 11401 |
| 3 | HDD Score | PASS | 2596 |

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD10EALX-009BA0 1TB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU Score | PASS | 4515 |
| 2 | Memory Score | PASS | 16349 |
| 3 | HDD Score | PASS | 3034 |

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU Score | PASS | 4481 |
| 2 | Memory Score | PASS | 15431 |
| 3 | HDD Score | PASS | 2297 |

| |
|--|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1333 4GB (D2568JPTCPGD9U) Western Digital WD10EALX-009BA0 1TB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU Score | PASS | 4483 |
| 2 | Memory Score | PASS | 16321 |
| 3 | HDD Score | PASS | 2369 |

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz ADATA DDR3 1066 2GB (H5TQ1G83AFP) ADATA DDR3 1600 4GB (J2108BCSE-GN-F) Western Digital WD3200BPVT-00JJ5T0 320GB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU Score | PASS | 4083 |
| 2 | Memory Score | PASS | 11443 |
| 3 | HDD Score | PASS | 1734 |

5.7 PC MARK2004

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EARS-00Y5B1 1TB |

Windows XP PS2 32-bit

| Item | Weighted Suite | Result | Remark |
|------|----------------|--------|--------|
| 1 | PCMark Score | PASS | 2535 |
| 2 | CPU Score | PASS | 2489 |
| 3 | Memory Score | PASS | 3719 |
| 4 | Graphic Score | PASS | 2273 |
| 5 | HDD Score | PASS | 4072 |

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F) Western Digital WD10EARS-00Y5B1 1TB |

Windows XP PS2 64-bit

| Item | Weighted Suite | Result | Remark |
|------|----------------|--------|--------|
| 1 | PCMark Score | PASS | 2583 |
| 2 | CPU Score | PASS | 2493 |
| 3 | Memory Score | PASS | 3834 |
| 4 | Graphic Score | PASS | 2367 |
| 5 | HDD Score | PASS | 4240 |

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| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 1GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A 320GB |

Windows XP PS2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 2536 |
| 2 | CPU Score | PASS | 2490 |
| 3 | Memory Score | PASS | 3719 |
| 4 | Graphic Score | PASS | 2391 |
| 5 | HDD Score | PASS | 6283 |

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| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 2GB (H57Q1G83AFP) Western Digital WD3200AAKS-00B3A 320GB |

Windows XP PS2 32-bit

| Item | WEIGHTED SUITE | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 2506 |
| 2 | CPU Score | PASS | 2489 |
| 3 | Memory Score | PASS | 3750 |
| 4 | Graphic Score | PASS | 2287 |
| 5 | HDD Score | PASS | 5953 |

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD10EALX-009BA0 1TB |

Windows XP PS2 64-bit

| Item | WEIGHTED SUITE | Result | Remark |
|------|----------------|--------|--------|
| 1 | PCMark Score | PASS | 2843 |
| 2 | CPU Score | PASS | 2786 |
| 3 | Memory Score | PASS | 4835 |
| 4 | Graphic Score | PASS | 2465 |
| 5 | HDD Score | PASS | 7807 |

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB |

Windows XP PS2 32-bit

| Item | WEIGHTED SUITE | Result | Remark |
|------|----------------|--------|--------|
| 1 | PCMark Score | PASS | 4091 |
| 2 | CPU Score | PASS | 4118 |
| 3 | Memory Score | PASS | 4441 |
| 4 | Graphic Score | PASS | 2341 |
| 5 | HDD Score | PASS | 7251 |

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| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1333 4GB (D2568JPTCPGD9U) Western Digital WD10EALX-009BA0 1TB |

Windows XP PS2 32-bit

| Item | WEIGHTED SUITE | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 4207 |
| 2 | CPU Score | PASS | 4111 |
| 3 | Memory Score | PASS | 4715 |
| 4 | Graphic Score | PASS | 2449 |
| 5 | HDD Score | PASS | 5631 |

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| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz ADATA DDR3 1066 2GB (H5TQ1G83AFP) ADATA DDR3 1600 4GB (J2108BCSE-GN-F) Western Digital WD3200BPVT-00JJ5T0 320GB |

Windows XP PS2 64-bit

| Item | WEIGHTED SUITE | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 2478 |
| 2 | CPU Score | PASS | 2481 |
| 3 | Memory Score | PASS | 4943 |
| 4 | Graphic Score | PASS | 2203 |
| 5 | HDD Score | PASS | 3292 |

5.8 PC MARK2005

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz Transcend DDR3 1066 1GB (K4B1G0846D) Western Digital WD10EARS-00Y5B1 1TB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|------|----------------|--------|--------|
| 1 | PCMark Score | PASS | 2182 |
| 2 | CPU Score | PASS | 1958 |
| 3 | Memory Score | PASS | 3532 |
| 4 | Graphic Score | PASS | 1836 |
| 5 | HDD Score | PASS | 6521 |

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F) Western Digital WD10EARS-00Y5B1 1TB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|------|----------------|--------|--------|
| 1 | PCMark Score | PASS | 2110 |
| 2 | CPU Score | PASS | 1987 |
| 3 | Memory Score | PASS | 3570 |
| 4 | Graphic Score | PASS | 1938 |
| 5 | HDD Score | PASS | 4883 |

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| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz A-DATA DDR3 1066 1GB (K4B1G0846D) Western Digital WD3200AAKS-00B3A 320GB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 2329 |
| 2 | CPU Score | PASS | 1989 |
| 3 | Memory Score | PASS | 3579 |
| 4 | Graphic Score | PASS | 1939 |
| 5 | HDD Score | PASS | 7091 |

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz INNODISK DDR3 1333 4GB (H5TQ2G83CFR) Western Digital WD3200AAKS-00B3A 320GB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | N/A |
| 2 | CPU Score | PASS | 1985 |
| 3 | Memory Score | PASS | 3553 |
| 4 | Graphic Score | PASS | 2063 |
| 5 | HDD Score | PASS | 6420 |

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1600 8GB (J420BBBG-GN-F)*2 Western Digital WD10EALX-009BA0 1TB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 2606 |
| 2 | CPU Score | PASS | 2206 |
| 3 | Memory Score | PASS | 4057 |
| 4 | Graphic Score | PASS | 2189 |
| 5 | HDD Score | PASS | 8220 |

| |
|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Transcend DDR3 1066 2GB (K4B1G0846D) Western Digital WD10EALX-009BA0 1TB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | N/A |
| 2 | CPU Score | PASS | 3104 |
| 3 | Memory Score | PASS | 4051 |
| 4 | Graphic Score | PASS | 2100 |
| 5 | HDD Score | PASS | 8176 |

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| Test Environment |
| Intel (R) Celeron (R) CPU 847E 1.1GHz Kingston DDR3 1333 4GB (D2568JPTCPGD9U) Western Digital WD10EALX-009BA0 1TB |

Windows XP SP2 32-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 3279 |
| 2 | CPU Score | PASS | 3103 |
| 3 | Memory Score | PASS | 4074 |
| 4 | Graphic Score | PASS | 2016 |
| 5 | HDD Score | PASS | 6088 |

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|---|
| Test Environment |
| Intel (R) Celeron (R) CPU 807UE 1GHz ADATA DDR3 1066 2GB (H5TQ1G83AFP) ADATA DDR3 1600 4GB (J2108BCSE-GN-F) Western Digital WD3200BPVT-00JJ5T0 320GB |

Windows XP SP2 64-bit

| Item | Weighted Suite | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | PCMark Score | PASS | 2049 |
| 2 | CPU Score | PASS | 1970 |
| 3 | Memory Score | PASS | 3510 |
| 4 | Graphic Score | PASS | 1975 |
| 5 | HDD Score | PASS | 4077 |

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 WD3200BEKT-22F3T0 | SATA | 320 GB | 66.5 MB/sec | 98.5 MB/sec | 14.4 ms |
| Western Digital WD3200AAKS-00B3A0 | SATA | 320 GB | 93.8 MB/sec | 115.1 MB/sec | 15.9 ms |
| Western Digital WD10EARS-00Y5B1 | SATA | 1 TB | 77 MB/sec | 119.8 MB/sec | 15.7 ms |
| Western Digital WD10EALX-009BA0 | SATA | 1 TB | 102.6 MB/sec | 122.1 MB/sec | 13.3 ms |
| Memo Right MRSAJ6C064GC125C00 | SATA (SSD) | 64 GB | 156.3 MB/sec | 58.7 MB/sec | 0.2 ms |
| ADATA Flash Drive C906 | USB | 8 GB | 17.9 MB/sec | 17.9 MB/sec | 0.9 ms |
| TDK LoR Trans-It Drive | USB | 4 GB | 16.9 MB/sec | 16.6 MB/sec | 0.8 ms |
| Kingston DT HyperX 3.0 | USB | 64 GB | 28.4 MB/sec | 19.1 MB/sec | 1.1 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 | 10.91 x | 172 ms | 64 MB/s | 16 X DVD+R |
| LITE-ON eTAU108 | USB | 4.63 x | 174 ms | 22 MB/s | 16 X DVD+R |
| BUFFALO DVSM-PC58U2V | USB | 5.06 x | 221 ms | 20 MB/s | 16 X DVD+R |

5.10 Vibration Test

| Motherboard | LS-67LBU_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 |