

ES-270

Test Report

Edition 1.1

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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 | Floppy | Pass |
| 8 | DIMM | Pass |
| 9 | VGA Port | Pass |
| 10 | Keyboard | Pass |
| 11 | Mouse | Pass |
| 12 | AUDIO Port | Pass |
| 13 | LAN Port | Pass |
| 14 | USB Port | Pass |
| 15 | Printer Port | Pass |
| 16 | COM Port | Pass |
| 17 | SYSFAN | Pass |
| 18 | IRDA | Pass |
| 19 | GPIO | Pass |
| 20 | PCI | Pass |

2.0 PITCH (DIP)

| | | |
|---|---------|------|
| 1 | JRTC | Pass |
| 2 | JVLCD | Pass |
| 3 | JCSEL 1 | Pass |
| 4 | JCSEL 2 | Pass |

1.2 BIOS function

| Item | Description | Result | Remark |
|------|----------------------------------|--------|--------|
| 1 | Press 'Del' to run Setup Utility | Pass | |
| 2 | Ctrl-Alt-Del – Soft-Reboot | Pass | |
| 3 | Save & Exit Setup | Pass | |
| 4 | Date & Time Setting | Pass | |
| 5 | Drive A | Pass | |
| 6 | Hard Disk Boot Priority | Pass | |
| 7 | Quick Power On Self Test | Pass | |
| 8 | Boot Device Setting | Pass | |
| 9 | Boot Up Floppy Seek | Pass | |
| 10 | Boot Up Num Lock Status | Pass | |
| 11 | On Chip Frame Buffer Size | Pass | |
| 12 | Boot Display | Pass | |
| 13 | On Chip Primary IDE | Pass | |
| 14 | On Chip Serial ATA | Pass | |
| 15 | USB Controller | Pass | |
| 16 | USB 2.0 Controller | Pass | |
| 17 | USB Keyboard Support | Pass | |
| 18 | AC97 Audio | Pass | |
| 19 | Onboard FDC Controller | Pass | |
| 20 | PWRON After PWR-Fail | Pass | |
| 21 | Watch Dog Timer Select | Pass | |

| | | | |
|----|-------------------------|------|--|
| 22 | ACPI Function | Pass | |
| 23 | ACPI Suspend Type | Pass | |
| 24 | Soft-Off by PWRBTN | Pass | |
| 25 | Resume by Alarm | Pass | |
| 26 | Shutdown Temperature | Pass | |
| 27 | CPU Warning Temperature | Pass | |
| 28 | Power On by Ring | Pass | |

1.3 Driver

1. Windows XP Driver Test

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

1. 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 | |

2. Windows Server 2003 Driver Test

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

2. Compatibility test

2.1 CPU Test

| CPU | Operating System | Result | Remark |
|--|----------------------------|--------|--------|
| Genuine Intel(R) T2400 /2M/1.83 GHZ | Windows XP | Pass | |
| | Windows Server 2003 | Pass | |
| Intel Celeron 410 /1M/ 1.46 GHZ | Windows XP | Pass | |
| | Fedora | Pass | |
| Genuine Intel(R) T2500 /2M/2 GHZ | Windows XP | Pass | |
| | Suse 10.0 | Pass | |

2.2 Memory Test

| DDR2 SO-DIMM SDRAM | DDR2 Freq | Capacity Mbytes | Operating System | Result |
|-------------------------------|----------------------|----------------------------|-----------------------------|---------------|
| Kingston (HY5PS12821B) | DDR2 533 | 1GB | WinXP Win2003 | PASS |
| GGREENCOM (E5108AE-6E-E) | DDR2 667 | 1GB | WinXP Win2003 | PASS |
| AMOS (AD2536408-5) | DDR2 533 | 512MB | WinXP Win2003 | PASS |

2.3 VGA Graphic Test

1. Windows XP

| 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. Suse 10.0

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

| | | | |
|---|-----------------------|------|--|
| 5 | Extended Display Test | Pass | |
|---|-----------------------|------|--|

3.Windows Server 2003

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

2.4 Audio Test

1. Windows XP

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

2. Suse 10.0

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

3.Windows Server 2003

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

2.5 HDD Test

| HDD Type | Operating System | HDD Size Detect | HDD Data Transfer | HDD LED Check |
|--|---|-----------------|-------------------|---------------|
| Seagate Brracuda ATAIV 40GB | MS-DOS Fedora Suse 10.0 Win 2003 Win XP | PASS | PASS | PASS |
| WD3000JS-22PDB0 300.0GB | | PASS | PASS | PASS |
| Maxtor DiamondMax Plus 8 40GB | | PASS | PASS | PASS |
| WD2500JB-00REA0 250.0GB | | PASS | PASS | PASS |

2.6 CD-ROM Test

| CD-ROM Type | Operating System | CD-ROM Detect | CD-ROM Data Transfer | PLAY DVD |
|---------------------|---------------------|---------------|----------------------|----------|
| 4KUS COB-6V5216 | Win2003 | PASS | PASS | PASS |
| BenQ CB523C | Win XP Suse 10.0 | PASS | PASS | PASS |
| SYNNEX LCD-5200S | Fedora | PASS | PASS | |

2.7 USB Test

1. Windows XP

| 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 Server 2003

| Item | Description | Result | Remark |
|------|----------------------------|--------|--------|
| 1 | Device Manager Check | Pass | |
| 2 | External USB Keyboard Test | Pass | |

| | | | |
|---|-------------------------|------|--|
| 3 | External USB Mouse Test | Pass | |
| 4 | Hot plugging test | Pass | |

3. Suse 10.0

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

4. Fedora

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

2.8 Serial Port Test

1. MS-DOS

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

2. Windows Server 2003

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

3. Windows XP

| 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

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

3. Windows Server 2003

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

4. Suse 10.0

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

5. Fedora

| 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

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

2. Windows XP ENG

| Item | Description | Result | Remark |
|------|----------------------|--------|--------|
| 1 | Device Manager Check | Pass | |

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

3. Windows Server 2003

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

4. Suse 10.0

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

2.11 Power Supply Test

1. MS-DOS 6.22

| Item | Description | Verification | |
|------|------------------|--------------|------------------------|
| | | Result | Remark |
| 1 | ATX Power On/Off | Pass | CWT-300ATX12(PFC) 300W |
| 2 | ATX Power On/Off | Pass | ST-300WAP 300W |

2. Windows XP

| Item | Description | Verification | |
|------|------------------|--------------|------------------------|
| | | Result | Remark |
| 1 | ATX Power On/Off | Pass | CWT-300ATX12(PFC) 300W |
| 2 | ATX Power On/Off | Pass | ST-300WAP 300W |

3. Windows Server 2003

| Item | Description | Verification | |
|------|------------------|--------------|------------------------|
| | | Result | Remark |
| 1 | ATX Power On/Off | Pass | CWT-300ATX12(PFC) 300W |
| 2 | ATX Power On/Off | Pass | ST-300WAP 300W |

4. Suse 10.0

| Item | Description | Verification | |
|------|------------------|--------------|------------------------|
| | | Result | Remark |
| 1 | ATX Power On/Off | Pass | CWT-300ATX12(PFC) 300W |
| 2 | ATX Power On/Off | Pass | ST-300WAP 300W |

5. Fedora

| Item | Description | Verification | |
|------|------------------|--------------|------------------------|
| | | Result | Remark |
| 1 | ATX Power On/Off | Pass | CWT-300ATX12(PFC) 300W |
| 2 | ATX Power On/Off | Pass | ST-300WAP 300W |

2.12 Floppy Drive Test

Model: TEAC FD-05HG

1. MS-DOS 6.22

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

2. Windows XP

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

3. Suse 10.0

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

4. Fedora

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

2.13 Boot Up Test

| Item | Description | Result | Remark |
|------|-------------------------|--------|--------|
| 1 | Soft boot from HDD | Pass | |
| 2 | Soft boot from CD-ROM | Pass | |
| 3 | Soft boot from Floppy | Pass | |
| 4 | Reboot test with Win XP | Pass | |

2.14 Os Install

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

| | | | |
|---|---------------------|------|--|
| 1 | Windows Server 2003 | Pass | |
| 2 | Windows XP SP2 | Pass | |
| 3 | Windows XP ENG | Pass | |
| 4 | Linux "Suse 10.0" | Pass | |

2.15 Print Port Test

1. Window XP

| Item | Description | Result | Remark |
|------|--------------------|--------|--------|
| 1 | ECP/EPP PRINT TEST | Pass | |

2. Window 2003

| Item | Description | Result | Remark |
|------|--------------------|--------|--------|
| 1 | ECP/EPP PRINT TEST | Pass | |

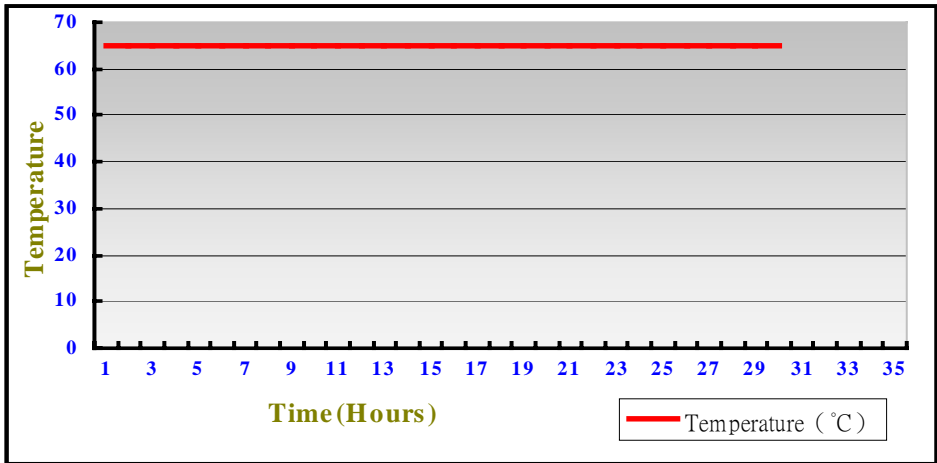
3. Environmental test

3.1 Temperature Test

Hardware Device list:

| | |
|----------------|---------------------------------------|
| System Board | ES-270 |
| CPU | Genuine Intel(R) T2500 /2M/ 2.0 GHZ |
| Memory | GGREENCOM(E5108AE-6E-E) DDR2 667 |
| HDD | WD2500JB-00REA0 250.0GB |
| Operating OS | Windows XP |
| Test Equipment | THERMOTRON 2800 Programmer/Controller |
| Test Program | 3Dmark 2006 |

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 | ES-270 |
| CPU | Intel Celeron 410 /1M/ 1.46 GHZ |
| Memory | Kingston DDR2 533 1GB |
| Power Supply | ST-300WAP 300W |

| Voltage | Current (A) | Power (W) | Remark |
|----------------|----------------------|--------------------|---------------|
| 12V | 0.38 | 4.56 | Boot Up |
| 5V | 3.92 | 19.6 | Boot Up |
| 5Vsb | 0.28 | 1.4 | Boot Up |

2. Test Environment:

| | |
|--------------|---|
| Motherboard | ES-270 |
| CPU | Genuine Intel T2400 /2M/1.83 GHZ |
| Memory | Kingston DDR2 533 1GB |
| Power Supply | ST-300WAP 300W |

| Voltage | Current (A) | Power (W) | Remark |
|----------------|----------------------|--------------------|---------------|
| 12V | 0.4 | 4.8 | Boot Up |
| 5V | 4.56 | 22.8 | Boot Up |
| 5Vsb | 0.3 | 1.5 | Boot Up |

3. Test Environment:

| | |
|------------------|--|
| Motherboard | ES-270 |
| CPU | Genuine Intel T2400 /2M/1.83 GHZ |
| Memory | Kingston DDR2 533 1GB (HY5PS12821B) AMOS DDR2 533 512MB (AD2536408-5) |
| HDD | WD2500JB-00REA0 250.0GB |
| CD-ROM | BenQ CB523C |
| Power Supply | ST-300WAP 300W |
| Operating System | Windows XP |
| Test Program | 3Dmark 2003 |

| Voltage | Current (A) | Power (W) | Remark |
|----------------|----------------------|--------------------|---------------|
| 12V | 0.43 | 5.16 | Boot Up |
| 5V | 6.32 | 31.6 | Boot Up |
| 5Vsb | 0.3 | 1.5 | Boot Up |

4. Test Environment:

| | |
|------------------|--|
| Motherboard | ES-270 |
| CPU | Genuine Intel T2400 /2M/1.83 GHZ |
| Memory | Kingston DDR2 533 1GB (HY5PS12821B) AMOS DDR2 533 512MB (AD2536408-5) |
| HDD | WD2500JB-00REA0 250.0GB |
| CDROM | BenQ CB523C |
| Display | LG.Philips LM170E01 |
| Operating System | Windows XP |
| Test Program | 3Dmark 2003 |

| Voltage | Current (A) | Power (W) | Remark |
|----------------|----------------------|--------------------|---------------|
| 12V | 1.87 | 22.44 | Boot Up |
| 5V | 6.85 | 34.25 | Boot Up |
| 5Vsb | 0.33 | 1.65 | Boot Up |

5. Test Environment:

| | |
|------------------|---------------------------------------|
| Motherboard | ES-270 |
| CPU | Intel T7600 2.33/4M/667 |
| Memory | AMOS DDR2 533 1G (AD2536408-5) |
| HDD | Seagate Barracuda ATA IV 40GB |
| Operating System | Windows XP |
| Test Program | 3Dmark 2003 |

| Voltage | Current (A) | Power (W) | Remark |
|----------------|----------------------|--------------------|---------------|
| 12V | 0.87 | 10.44 | Boot Up |
| 5V | 8.26 | 41.3 | Boot Up |
| 5Vsb | 0.26 | 1.3 | Boot Up |

6. Test Environment:

| | |
|-------------------------|---------------------------------------|
| Motherboard | ES-270 |
| CPU | Intel T7600 2.33/4M/667 |
| Memory | AMOS DDR2 533 1G (AD2536408-5) |
| HDD | Seagate Barracuda ATA IV 40GB |
| Display | LG.Philips LM170E01 |
| Operating System | Windows XP |
| Test Program | 3Dmark 2003 |

| Voltage | Current (A) | Power (W) | Remark |
|----------------|----------------------|--------------------|---------------|
| 12V | 2.38 | 28.56 | Boot Up |
| 5V | 8.06 | 40.3 | Boot Up |
| 5Vsb | 0.24 | 1.2 | Boot Up |

4.2 Thermal measurements at various points on the board

Test Environment :

| | |
|------------------|-------------------------------------|
| CPU | Intel Celeron 410 /2M/ 2 GHZ |
| Memory | 200PIN DDR2 667 1GB |
| HDD | WD2500JB-00REA0 250.0GB |
| CD-ROM | SYNNEX LCD-5200S |
| Power | CWT-300ATX12(PFC) 300W |
| Operating System | Windows XP |
| Test Program | 3D Mark 2003 |

Test Result:

| | |
|----------------------|--------|
| CPU | 66.6°C |
| 945GM (Northbridge) | 59.2°C |
| ICH7-M (Southbridge) | 45.4°C |
| U1 | 66.8°C |
| U2 | 62.7°C |

5. Performance Test

5.1-1 WinBench 99 Version 1.1

| Test Environment |
|--|
| Genuine Intel(R) T2500/2M/2.0 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB Kingston(HY5PS12821B) DDR2 533 1GB Maxtor DiamondMax Plus 8 40GB |

1. Windows 2003

| Item | WEIGHTED SUITE | Result | Remark |
|------|------------------------------|--------|--------------------------|
| 1 | CPUmark 99 | Pass | 232 |
| 2 | FPU WinMark | Pass | 10400 |
| 3 | Business Disk WinMark 99 | Pass | 7600 Thousand Bytes/Sec |
| 4 | High-End Disk WinMark 99 | Pass | 35100 Thousand Bytes/Sec |
| 5 | Business Graphics WinMark 99 | Pass | 249 |
| 6 | High-End Graphics WinMark 99 | Pass | 1100 |

2. Windows XP Eng

| Item | WEIGHTED SUITE | Result | Remark |
|------|------------------------------|--------|--------------------------|
| 1 | CPU mark99 | Pass | 221 |
| 2 | FPU WinMark | Pass | 8390 |
| 3 | Business Disk WinMark 99 | Pass | 11300 Thousand Bytes/Sec |
| 4 | High-End Disk WinMark 99 | Pass | 45300 Thousand Bytes/Sec |
| 5 | Business Graphics WinMark 99 | Pass | 360 |
| 6 | High-End Graphics WinMark 99 | Pass | 1060 |

5.1-2 WinBench 99 Version 1.2

| Test Environment |
|---|
| <p>Genuine Intel(R) T2500/2M/2.0 GHZ</p> <p>GGREENCOM(E5108AE-6E-E) DDR2 667 1GB</p> <p>Kingston(HY5PS12821B) DDR2 533 1GB</p> <p>Maxtor DiamondMax Plus 8 40GB</p> |

1. Windows 2003

| Item | WEIGHTED SUITE | Result | Remark |
|------|--------------------------|--------|--------------------------|
| 1 | Business Disk WinMark 99 | Pass | 7860 Thousand Bytes/Sec |
| 2 | High-End Disk WinMark 99 | Pass | 29700 Thousand Bytes/Sec |

2. Windows XP Eng

| Item | WEIGHTED SUITE | Result | Remark |
|------|--------------------------|--------|--------------------------|
| 1 | Business Disk WinMark 99 | Pass | 4500 Thousand Bytes/Sec |
| 2 | High-End Disk WinMark 99 | Pass | 25300 Thousand Bytes/Sec |

5.3 Business Win Stone

1. Windows 2003

| WEIGHTED SUITE | Test Environment | Result | Remark |
|--|-------------------------------|--------|--------|
| <p>Business</p> <p>Win stone2001</p> | Intel Celeron 410 /2M/ 2 GHZ | Pass | 56.3 |
| | AMOS(AD2536408-5) DDR2 533 | | 55.4 |
| | 512MB | | 55.5 |
| | Maxtor DiamondMax Plus 8 40GB | | 56 |

| | | | |
|-----------------------------------|--|------|--------------------------------------|
| | SYNNEX LCD-5200S | | 57 |
| Business Win stone2002 | Intel Celeron 410 /2M/ 2 GHZ AMOS(AD2536408-5) DDR2 533 512MB Maxtor DiamondMax Plus 8 40GB SYNNEX LCD-5200S | Pass | 33.8 32.3 35.7 37.1 37.2 |
| Business Win stone2004 | Intel Celeron 410 /2M/ 2 GHZ AMOS(AD2536408-5) DDR2 533 512MB Maxtor DiamondMax Plus 8 40GB SYNNEX LCD-5200S | Pass | 15.4 22.9 22.7 24.8 22.5 |

2. Windows XP Eng

| WEIGHTED SUITE | Test Environment | Result | Remark |
|-----------------------------------|--|---------------|----------------------|
| Business Win stone2002 | Genuine Intel(R) T2500/2M/2.0 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB | Pass | 28.7 29.1 33.3 |

| | | | |
|-----------------------------------|---|------|------------------------------------|
| | WD2500JB-00REA0 250.0GB | | 41.4 29.8 |
| Business Win stone2004 | Genuine Intel(R) T2500/2M/2.0 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD2500JB-00REA0 250.0GB | Pass | 19.8 18.3 16 16.8 18.1 |

5.4 Content Creation Winstone

Windows XP Eng

| WEIGHTED SUITE | Test Environment | Result | Remark |
|---|---|---------------|---|
| Content Creation Winstone 2000 | Genuine Intel(R) T2500/2M/2.0 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD2500JB-00REA0 250.0GB | Pass | 106.3 106.2 108.1 107 105.7 |
| Content Creation | Genuine Intel(R) T2500/2M/2.0 GHZ GGREENCOM(E5108AE-6E-E) | Pass | 119.6 118.8 |

| | | | |
|---|-----------------------------------|------|-------|
| Winstone 2001 | DDR2 667 1GB | | 118.5 |
| | WD2500JB-00REA0 250.0GB | | 118.2 |
| | | | 118.6 |
| Content Creation Winstone 2003 | Genuine Intel(R) T2500/2M/2.0 GHZ | Pass | 41.5 |
| | GGREENCOM(E5108AE-6E-E) | | 40.5 |
| | DDR2 667 1GB | | 44.6 |
| | WD2500JB-00REA0 250.0GB | | 43.5 |
| | | | 42.7 |
| Content Creation Winstone 2004 | Genuine Intel(R) T2500/2M/2.0 GHZ | Pass | 19.9 |
| | GGREENCOM(E5108AE-6E-E) | | 20.2 |
| | DDR2 667 1GB | | 20.9 |
| | WD2500JB-00REA0 250.0GB | | 22 |
| | | | 24.5 |

5.5 3D MARK

1. Windows XP

| WEIGHTED SUITE | Test Environment | Result | Remark |
|--------------------------|--|---------------|---------------|
| 3DMARK2000 Scores | Genuine Intel(R) T2500/2M/2.0 GHZ | Pass | 6139 |
| 3DMARK2001 Scores | Kingston(HY5PS12821B) DDR2 533 1GB | Pass | 4207 |
| 3DMARK2003 Scores | GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD2500JB-00REA0 250.0GB SYNNEX LCD-5200S | Pass | 745 |

2. Windows XP

| WEIGHTED SUITE | Test Environment | Result | Remark |
|--------------------------|--|---------------|---------------|
| 3DMARK2000 Scores | Genuine Intel(R) T2500/2M/2.0 GHZ | Pass | 6070 |
| 3DMARK2001 Scores | AMOS(AD2536408-5) DDR2 533 512MB | Pass | 4034 |
| 3DMARK2003 Scores | WD3000JS-22PDB0 300.0GB SYNNEX LCD-5200S) | Pass | 724 |

5.6 3D MARK2006

Windows XP

| Item | WEIGHTED SUITE | Test Environment | Result | Remark |
|-------------|-----------------------|-------------------------|---------------|---------------|
| 1 | 3DMARK Source | Genuine Intel(R) | Pass | 159 |
| 2 | SM2.0 Source | T2500/2M/2.0 GHZ | Pass | 73 |

| | | | | |
|---|-------------------|--|------|-----|
| 3 | CPU Source | GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD3000JS-22PDB0 300.0GB 4KUS COB-6V5216 | Pass | 678 |
|---|-------------------|--|------|-----|

5.7 PC MARK2002

| |
|--|
| Test Environment |
| Intel Celeron 410 /1M/ 1.46 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD2500JB-00REA0 250.0GB |

Windows XP

| Item | WEIGHTED SUITE | Result | Remark |
|------|--------------------|--------|--------|
| 1 | CPU test Source | Pass | 4962 |
| 2 | Memory test Source | Pass | 7391 |
| 3 | HDD test Source | Pass | 1385 |

5.8 PC MARK2004

| |
|--|
| Test Environment |
| Intel Celeron 410 /1M/ 1.46 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD2500JB-00REA0 250.0GB |

Windows XP

| Item | WEIGHTED SUITE | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | Memory test Source | Pass | 2776 |
| 2 | Graphic test Source | Pass | 660 |
| 3 | HDD test Source | Pass | 4568 |

5.9 PC MARK2005

| Test Environment |
|---|
| <p>Intel Celeron 410 /1M/ 1.46 GHZ GGREENCOM(E5108AE-6E-E) DDR2 667 1GB WD2500JB-00REA0 250.0GB</p> |

Windows XP

| Item | WEIGHTED SUITE | Result | Remark |
|-------------|-----------------------|---------------|---------------|
| 1 | CPU test Source | Pass | 1860 |
| 2 | Memory test Source | Pass | 2324 |
| 3. | HDD test Source | Pass | 4602 |