

QE 【WorkStation】

P5 Verification Test Plan

Release No : 07P010017

| | |
|--|--|
| Product Model | AOP-8080XT |
| Description | |
| Test Configuration | <input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> System : AOP-8080XT <input checked="" type="checkbox"/> PCB : GENE-8310 A1.1 <input checked="" type="checkbox"/> BIOS : AOP-8080XT BIOS Rev 1.0 (8/10/2007) <input checked="" type="checkbox"/> Riser Card : N/A <input checked="" type="checkbox"/> Inverter : 華元 QF82V4.90S <input checked="" type="checkbox"/> Daughter Board : N/A <input checked="" type="checkbox"/> I/O Board : N/A <input checked="" type="checkbox"/> LCD : AU G084SN05_V0 / 800x600x18bit / 8.4" / Color TFT LVDS <input checked="" type="checkbox"/> Touch Panel : AMT 4-Wire, Analog Resistive <input checked="" type="checkbox"/> USB Touch Module : Egalax ETP-4500UG-B <input checked="" type="checkbox"/> M/B Chipset : <input checked="" type="checkbox"/> North Bridge : Intel 852GM <input checked="" type="checkbox"/> South Bridge : ICH4 <input checked="" type="checkbox"/> VGA Chipset : Intel 852GM integrated VGA <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 6CH AC97 CODEC <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82562ET 10/100Mb Chip, RJ-45 x 1 <input checked="" type="checkbox"/> I/O Chipset : IT8712IX 2 COM port support <input checked="" type="checkbox"/> TV Chipset : Chrontel CH7009B (M/B has this function, but AOP-8080XT does not provide it) <input checked="" type="checkbox"/> Remark : AOP-8080XT QE NPDP P5 Report |
| Test Result Summary | |
| <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____ _____ | |

2007/11/30

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Issue date

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Test Engineer

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There are 3 test results in this document; they are described as follows:

Pass: Function worked perfectly

Fail: Function failed and must be modified in the next version

N/A: Outside of specification or no test equipment

Platform Information:

| Item | Device Information | Test Item |
|-----------------------------|--|-------------------------|
| System | AOP-8080XT | |
| PCB Model / Version | GENE-8310 A1.1 | |
| BIOS / Version | AOP-8080XT BIOS Rev 1.0 (8/10/2007) | |
| CPU Type | Onboard Celeron M 600MHz CPU with heat sink Onboard Celeron M 1.3GHz CPU with fan | |
| Memory Type | DSL PC2700 512MB SODIMM SDRAM (ELPIDA D5116AFTA-6B-E) | |
| SATA | N/A | |
| Primary IDE Master | FUJITSU MHW2040AT 2.5" IDE HDD | |
| Primary IDE Slave | N/A | |
| CRT | ViewSonic E70 | |
| LCD | AU G084SN05_V0 / 800x600x18bit / 8.4" / Color TFT LVDS | |
| Compact Flash | Transcend Type-I 2GB CF for Industrial | |
| Riser Card | N/A | |
| Inverter | 華元 QF82V4.90S | |
| Daughter Board | N/A | |
| I/O Board | N/A | |
| USB Touch Module : | Egalax ETP-4500UG-B | |
| Touch Panel | AMT 4-Wire, Analog Resistive | |
| Operating System | [] Linux-RedHat 9.0 or [] Fedora Core 4.0 | N/A |
| | Windows Server 2003 English Version / Standard Edition 5.2.3790 | N/A |
| | Windows Server 2003 English Version /Standard x64 Edition | N/A |
| | Windows XP Professional English Version V2002 Service Pack 2 | 1,4,5,6,7,8,9,10,11 |
| | Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2 | 9 |
| | Windows XP Professional Japanese Version V2002 Service Pack 2 | 9 |
| | Windows XP Professional English Version /Standard x64 Edition | N/A |
| | Windows 2000 Professional English Version V5.00.2195 Service Pack4 | N/A |
| | Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4 | N/A |
| | Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4 | N/A |
| | Windows Server 2000 English Version | N/A |
| | Windows 98SE English Version V4.10.2222A | N/A |
| MS-DOS 6.22 English Version | 1,2,4,6,8,9,10 | |
| Power Supply | AC Adapter: SINPRO Switching power Supply SPU50-1 / 5V , 50W Max | 1,2,3,4,5,6,7,8,9,10,11 |

Test Result for Certification

1. Dynamic / Boot_UP Burn-In Test

Onboard Celeron M 1.3GHz CPU with fan

| Test Method | Test Condition | Result | | |
|----------------------------|---------------------------------------|--------|------|-----|
| | | Pass | Fail | N/A |
| PassMark Burn In test V5.0 | -5°C ~ 45°C | X | | |
| High Temp. Storage Test | 70°C / 48Hours (Non-operation) | X | | |
| Low Temp. Storage Test | -20°C / 48Hours (Non-operation) | X | | |
| Humidity Test | 40°C /95%RH / 48Hours (Non-operation) | X | | |
| Cold Start Test | -5°C / 5 hours or 50 times of On/Off | X | | |

Onboard Celeron M 600MHz CPU with heat sink

| Test Method | Test Condition | Result | | |
|----------------------------|---------------------------------------|--------|------|-----|
| | | Pass | Fail | N/A |
| PassMark Burn In test V5.0 | -5°C ~ 55°C | X | | |
| High Temp. Storage Test | 70°C / 48Hours (Non-operation) | X | | |
| Low Temp. Storage Test | -20°C / 48Hours (Non-operation) | X | | |
| Humidity Test | 40°C /95%RH / 48Hours (Non-operation) | X | | |
| Cold Start Test | -5°C / 5 hours or 50 times of On/Off | X | | |

2. Power On and Reset Test

| Test Method | Result | | |
|--|--------|------|-----|
| | Pass | Fail | N/A |
| Power On / Off Test in Dos Mode (100V) | X | | |
| Power On / Off Test in Dos Mode (210V) | X | | |
| KB Reset in Dos Mode (110V) | X | | |
| Hardware Reset in Dos Mode (110V) | | | X |

3. OSD Control Function Test

| Test Method | Result | | |
|------------------------------|--------|------|-----|
| | Pass | Fail | N/A |
| OSD Control Test | | | X |
| OSD – On Screen Display Test | | | X |
| OSD Light Test | | | X |

4. I/O Peripheral Function Test

| I/O Peripheral Function Test –I/O Function | Result | | |
|---|--------|------|-----|
| | Pass | Fail | N/A |
| Floppy Connector / Driver A: | | | X |
| Primary IDE Master | X | | |
| Primary IDE Slave (Function passed, but AOP-8080XT does not connect any device) | X | | |

| | | | |
|---|---|--|---|
| Secondary IDE Master (Reserved for CF) | X | | |
| Secondary IDE Slave | | | X |
| Third IDE Master | | | X |
| Third IDE Slave | | | X |
| RAID 0 Function Test | | | X |
| RAID 1 Function Test | | | X |
| SATA1 / Serial ATA Connector 1 | | | X |
| SATA2 / Serial ATA Connector 2 | | | X |
| SATA3 / Serial ATA Connector 3 | | | X |
| SATA4 / Serial ATA Connector 4 | | | X |
| Compact Flash – Type I | X | | |
| Compact Flash – Type II | | | X |
| DOC (Disk On Chip) | | | X |
| DOM (Disk On Module) – 40 Pin | | | X |
| DOM (Disk On Module) – 44 Pin | X | | |
| COM 1-232 (CN18) | X | | |
| COM 2-232 (CN6) | X | | |
| COM 2-422 | X | | |
| COM 2-485 | | | X |
| COM 2-Ring /+5V | X | | |
| COM 3-232 | | | X |
| COM 4-232 | | | X |
| COM 5-232 | | | X |
| COM 6-232 | | | X |
| PS/2 Mouse & Keyboard (Internal) | | | X |
| PS/2 Mouse & Keyboard (External) (CN17) | X | | |
| Audio Connector (Only support Line-out function) (CN12) | X | | |
| Audio 5.1 Channel / S/P DIF | | | X |
| LPT 1 (M/B has this function, but AOP-8080XT does not provide it) (CN7) | | | X |
| LPT 2 | | | X |
| SIR / 115.2 Kbps (M/B has this function, but AOP-8080XT does not provide it) (CN15) | | | X |
| FIR / 4M bps | | | X |
| USB 1 Ports | X | | |
| USB 2 Ports | X | | |
| USB 3 Ports | X | | |
| USB 4 Ports | | | X |
| USB 2.0 1 Ports | X | | |
| USB 2.0 2 Ports | X | | |
| USB 2.0 3 Ports | X | | |
| USB 2.0 4 Ports | | | X |
| DVI Function (CN11, M/B has this function, but AOP-8080XT does not provide it) | | | X |
| DIO Connector (CN4, M/B has this function, but AOP-8080XT does not provide it) | | | X |
| Card Bus | | | X |
| PC/104 | | | X |
| PC/104-Plus | | | X |
| PCI-104 | | | X |

| | | | |
|--|---------------|-------------|------------|
| CD-In Connector | | | X |
| TFT TTL LCD | | | X |
| TFT LVDS LCD (CN8, Default LCD panel) | X | | |
| TV-out / S Terminal (CN10, M/B has this function, but AOP-8080XT does not provide it) | | | X |
| TV-out / AV Terminal (CN10, M/B has this function, but AOP-8080XT does not provide it) | | | X |
| Touch Screen – 4 Wire | X | | |
| Touch Screen – 5 Wire | | | X |
| DIMM Slots | X | | |
| Watchdog IRQ n | | | X |
| Watchdog Software Control | X | | |
| CPU FAN Connector | | | X |
| System FAN Connector (CN16) | X | | |
| Front Panel | Result | | |
| | Pass | Fail | N/A |
| Power On Button (M/B has this function, but AOP-8080XT does not provide it) | | | X |
| IDE LED (M/B has this function, but AOP-8080XT does not provide it) | | | X |
| External Buzzer | X | | |
| On Board Buzzer | X | | |
| Power LED (On LCD front side) | X | | |
| Reset Switch | X | | |
| Keyboard Lock | | | X |
| Jumpers Function | Result | | |
| | Pass | Fail | N/A |
| ATX simulates AT | | | X |
| Audio Out Selection (W/O & W/ Amplifier) | | | X |
| LCD Voltage Selection (JP2) | X | | |
| COM2-Ring/5V Selection (JP5) | X | | |
| COM2 RS-232/422/485 Selection | | | X |
| Clear CMOS (JP1) | X | | |
| Touch Screen Operating Mode Selection | | | X |
| Clock Shift of TFT LCD | | | X |
| Power Connector & Function | Result | | |
| | Pass | Fail | N/A |
| AC Adapter (SINPRO Switching power Supply SPU50-1 / 5V , 50W Max) | X | | |
| Big 4P Power Connector (CN9, Use for 5V only) | X | | |
| External 5VSB/PWRGD Connector (CN14, M/B has this function, but AOP-8080XT does not provide it) | | | X |
| LAN Connector & Function | Result | | |
| | Pass | Fail | N/A |
| LAN Link / Speed LED | LAN1 | X | |
| | LAN2 | | X |
| LAN Active LED | LAN1 | X | |
| | LAN2 | | X |
| LAN 10/100 Ethernet | X | | |
| LAN 1G Ethernet | | | X |
| PCI Connector & Function | Result | | |

| | Pass | Fail | N/A |
|----------------|------|------|-----|
| Mini PCI Slots | X | | |
| PCI Slots | | | X |
| PCI Express | | | X |

5. Power Consumption Test (Run Prime95 Program)

Platform Information

| | |
|----------------------------------|--|
| System | AOP-8080XT |
| PCB Model / Version | GENE-8310 A1.1 |
| BIOS | AOP-8080XT BIOS Rev 1.0 (8/10/2007) |
| Operating System | Windows XP Professional English Version V2002 Service Pack 2 |
| CPU | Onboard Celeron M 600MHz CPU with heat sink Onboard Celeron M 1.3GHz CPU with fan |
| Memory | DSL PC2700 512MB SODIMM SDRAM (ELPIDA D5116AFTA-6B-E) |
| SATA HDD | N/A |
| Primary IDE Master | FUJITSU MHW2040AT 2.5" IDE HDD |
| Primary IDE Slave | N/A |
| CRT | ViewSonic E70 |
| LCD | AU G084SN05_V0 / 800x600x18bit / 8.4" / Color TFT LVDS |
| Inverter | 華元 QF82V4.90S |
| Compact Flash | N/A |
| Backplane | N/A |
| Riser Card | N/A |
| Touch Panel | AMT 4-Wire, Analog Resistive |
| USB Touch Module | Egalax ETP-4500UG-B |
| Chipset Software | Intel® Chipset Software Installation Utility 6.0.1.1002 |
| Graphics Media | Intel® 82852/82855 GM/GME Graphics Controller 6.14.10.4020 |
| LAN Driver | Intel® PRO/100 VE Network Connection 7.1.12.0 2/10/2004 |
| Audio Driver | Realtek AC'97 Audio 5.10.0.5630 7/1/2004 |
| Touchscreen Driver (occupy USB4) | USB Touchscreen controller (Universal) 4.3.7.3203 8/3/2006 |
| AC Adapter | SINPRO Switching power Supply SPU50-1 / 5V , 50W Max |

Test Equipment:

| | |
|-----------|--|
| Equipment | GW instek Programmable Power Supply PSH-3630 (DC Power Supply) |
|-----------|--|

- Test Point:
1. Power on machine and boot into Windows environment
 2. Run test software: Prime95 to make system heavy loading in order to measure its maximum current
 3. Use GW instek Programmable Power Supply PSH-3630 to measure total current of system

| Test Environment | AC Adapter : | | | | Note |
|------------------|--|--|---------------------------------------|--|------|
| | SINPRO Switching power Supply SPU50-1 / 5V , 50W Max | | | | |
| Model | CPU: | | CPU: | | |
| | Onboard Celeron M 600MHz CPU with heat sink | | Onboard Celeron M 1.3GHz CPU with fan | | |
| Os Environment | Windows XP Professional APM | | | | |
| Test condition | Run Prime 95 | Rush current during booting to Windows | Run Prime 95 | Rush current during booting to Windows | |
| 5V | 4.1 A | 4.1 A | 6.0 A | 5.4 A | |
| 4.75V (-5%) | 4.09 A | 4.2 A | 6.1 A | 5.5 A | |
| 5.25V (+5%) | 4.0 A | 4.1 A | 5.8 A | 5.2 A | |

Remark: There is no suspend mode because that hardware and software does not support neither.

6. Timer Accuracy Test

| System Clock & RTC Clock Test | | | | |
|-------------------------------|---------------------------|--------|------|-----|
| Test Method | Margin for error | Result | | |
| | | Pass | Fail | N/A |
| System Clock in Power On Mode | ±3 second during 24 hours | X | | |
| RTC Clock in Power On Mode | ±3 second during 24 hours | X | | |
| RTC Clock in Power Off Mode | ±3 second during 24 hours | X | | |
| Watchdog Timer Test | | Result | | |
| | | Pass | Fail | N/A |
| Time-out Interval | 10 sec | X | | |
| | 60 sec | X | | |
| | 255 sec | X | | |

7. Network HUB / LAN Connection Test

| Location | | LED Type | | | | Result | | |
|--------------|------------------|----------------------------|--------------|-----------|-------------------|--------|------|-----|
| | | | | | | Pass | Fail | N/A |
| LAN1 LED | Link / Speed LED | | | | | X | | |
| | Active LED | | | | | X | | |
| LAN2 LED | Link / Speed LED | | | | | | | X |
| | Active LED | | | | | | | X |
| Location | Speed | HUB Type | Cable Length | HUB Speed | Onboard LAN Speed | Result | | |
| | | | | | | Pass | Fail | N/A |
| Onboard LAN1 | 10/100/1000 Mbps | HP J4095A 24 Ports | 100M | 100 MBps | 100 | X | | |
| | | D-Link DGS-1008T | 100M | 1GBps | 100 | X | | |
| | | D-Link DES-1316 PoE Switch | 100M | 100 MBps | 100 | X | | |
| | | Intel InBusiness 8 Port | 100M | 100 MBps | 100 | X | | |
| | | Accton DeskTop-3005 | 100M | 100 MBps | 100 | X | | |
| | | SVEC FD916H (10 Mbps HUB) | 100M | 10 MBps | 10 | X | | |

8. Hardware Compatibility

| CPU Compatible Test | | | | | | |
|---|-----------------------|-----------|-----------------|-------------------|--------|-----|
| CPU Type | | FSB | Prime95 Version | Result | | |
| | | | | Pass | Fail | N/A |
| Onboard Celeron M 600MHz CPU with heat sink | | 100MHz | V2414 | X | | |
| Onboard Celeron M 1.3GHz CPU with fan | | 100MHz | V2414 | X | | |
| Memory Compatibility Test | | | | | | |
| Memory Brand | Memory Chipset | Frequency | Size | MemTest86 Version | Result | |
| | | | | | Pass | N/A |
| DSL SODIMM | ELPIDA D5116AFTA-6B-E | PC2700 | 512MB | V1.65 | X | |

| DSL SODIMM | EBD11UD8ADDA-6B | DDR333 | 1GB | V1.65 | X | | |
|--|--|-------------|-------|---------|---------------|------|------|
| ATP SODIMM | SAMSUNG K4H510838C-UCB3 | PC2700 | 512MB | V1.65 | X | | |
| On Board Audio Function Test | | | | | Result | | |
| (Remark: M/B has all the audio function but AOP-8080XT only supports line-out connector) | | | | | Pass | Pass | Pass |
| System Sound | | | | | X | | |
| CD_In | | | | | | | X |
| CD_In Sound Recorder | | | | | | | X |
| Play Sound Recorder | | | | | X | | |
| Line Out | | | | | X | | |
| Line In | | | | | | | X |
| Line In Sound Record | | | | | | | X |
| MIC Speaker | | Dynamic | | | | | X |
| | | Condenser | | | | | X |
| MIC Sound Recorder | | Dynamic | | | | | X |
| | | Condenser | | | | | X |
| Audio 5.1 Channel with S/P DIF Function Test | | | | | Result | | |
| | | | | | Pass | Fail | N/A |
| 2-channel mode for stereo speaker output | | | | | | | X |
| 4-channel mode for 4 speaker output | | | | | | | X |
| 6-channel mode for 5.1 speaker output | | | | | | | X |
| S/P DIF function Test | | Input | | | | | X |
| | | Output | | | | | X |
| On Board TV Function Test | | | | | Result | | |
| (Remark: M/B has TV function but AOP-8080XT does not support it.) | | | | | Pass | Fail | N/A |
| NTSC | | AV Terminal | | | | | X |
| PAL | | | | | | | X |
| NTSC | | S Terminal | | | | | X |
| PAL | | | | | | | X |
| On Board LCD Function Test | | | | | | | |
| TFT LCD | Type | | | Voltage | Result | | |
| | | | | | Pass | Fail | N/A |
| LVDS | AU G084SN05_V0 / 800x600x18bit / 8.4" | | | 3.3V | X | | |
| | / Color TFT LVDS (Onboard LCD) | | | | | | |
| | AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3) | | | 3.3V | | | X |
| | AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3) | | | 3.3V | | | X |
| | AU B104SN02 / 10.4" / 800*600 / 18bit (4:3) | | | 3.3V | | | X |
| | AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3) | | | 3.3V | | | X |
| | AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3) | | | 3.3V | | | X |
| | AU M170EG01 / 17" / 1280*1024 / 48bit (4:3) | | | 5V | | | X |
| | AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9) | | | 5V | | | X |
| | AUO T260XW02 / 26" / 1366x768 / 24bit | | | | | | X |
| | AU M201UN02 V.5 / 20.1" / 1600x1200x48bit | | | 5V | | | X |
| TTL | AUO T370HW01 / 37" / 1920x1080 / 48bit | | | | | | X |
| | Toshiba LTM10C209A / 10.4" / 640*480 / 18bit (4:3) | | | 5V | | | X |

| | | | | |
|--|--|--------|--|---|
| | NEC NL8060AC31-12 / 12.1" / 800*600 / 18bit (4:3) | 3.3/5V | | X |
| | Sharp LQ121S1DG11 / 12.1" / 800*600 / 18bit (4:3) | 3.3V | | X |
| | LG LM151X2-C2TH / 15.1" / 1024x768 / 18bit (4:3) | 3.3V | | X |
| | Fujitsu FLC38XGC6V-06 / 15" / 1024*768 / 36bit (4:3) | 5V | | X |

PCI Slot Function (PCI Adapter Card) Test

| Model | Type | Result | | |
|---|--------------|--------|------|-----|
| | | Pass | Fail | N/A |
| CECUBE GC-R9250PCI-D3 (ATI REDEON9250 256MB) | VGA Card | | | X |
| CHAINTECH NVIDIA GeForce4 MX440-8X | VGA Card | | | X |
| SC3000 CMI8738/C3DX | Sound Card | | | X |
| Takram DC-395U V1.02 | SCSI Card | | | X |
| ADAPTEC Ultra160 SCSI ASC-29160 | SCSI Card | | | X |
| I-VIEW CP-1400AS (with Age STD-477FAI CCD) | Capture Card | | | X |
| Intel GD82559 10/100 Mbps Fast Ethernet Adapter | LAN Card | | | X |
| 3Com 3C905C-TXM ETHERLINK 10/100 PCI | LAN Card | | | X |
| D-Link DWL-520+ Wireless LAN | LAN Card | | | X |
| ADAPTEC 1420SA RoHS 4-Port SATA II RAID | RAID Card | | | X |
| LEMEL MD V1456VQH-P2 PCI MODEM Card | Modem Card | | | X |
| D-Link DU-520 USB 2.0 | USB Hub Card | | | X |
| Tekram TR-822 Serial ATA 150 [SA-001] + SATA HDD Seagate ST3120026AS 120GB | SATA Card | | | X |

ISA Slot Function Test

| | Result | | |
|--|--------|------|-----|
| | Pass | Fail | N/A |
| Creative CT4170 Sound Blaster Sound Card | | | X |
| Adaptec AHA-1510/20/22B SCSI Card | | | X |

PCI-Express Function Test

| Model | Result | | |
|---|--------|------|-----|
| | Pass | Fail | N/A |
| SUNIX SATA1414 VER 1.1 PCI-Express x1 SATA Card | | | X |
| SksKonnnect SK-9E21D 10/100/1000 Base-T Adapter PCI-Express x1 LAN Card | | | X |
| Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card | | | X |
| ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card | | | X |
| WinFast PX6200 TC TDH PCI-Express x16 VGA Card | | | X |

HDD Compatibility Test

| Model | Result | | |
|---|--------|------|-----|
| | Pass | Fail | N/A |
| FUJITSU MHW2040AT 2.5" 40GB IDE HDD | X | | |
| FUJITSU MHV2040AT 2.5" 40GB IDE HDD | X | | |
| Seagate ST92011A 2.5" 20GB IDE HDD | X | | |
| Hitachi HTS424020M9AT00 2.5" 20GB IDE HDD | X | | |
| Seagate ST940815A 2.5" 40GB IDE HDD | X | | |
| SILICON Systems 2.5" 44 pin SSD-D08GI-3500 Flash Disk 8GB (Install Windows XP from ASUS CRW-5232AX-U SUB 2.0 DVD-ROM (connect to USB2) to 2.5" flash disk) | X | | |

| CD-ROM Compatibility Test | | | |
|--|---------------|---------------|-------------|
| Model | Result | | |
| | Pass | Fail | N/A |
| TEAC CD-ROM CD-540E 40X | | | X |
| BenQ DW1655 OB2 16 x DVD ReWriter | | | X |
| Acer DVP1640A / 16X / DVD-ROM / ATA33 | | | X |
| Pioneer / DVR-A11FXC1 / 8X DVD-RW / 6X DVD-RW / ATA66 | | | X |
| Pioneer / DVD-126D / 16X / DVD-ROM / ATA66 | | | X |
| Pioneer / DVD-121 / 16X / DVD-ROM / ATA66 | | | X |
| SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X / ATA33 | | | X |
| IBM HL-DT-ST / GCR 8480B-48X /CD-ROM ATA33 | | | X |
| IDE Cable Function test | | | |
| IDE Model | Result | | |
| | Pass | Fail | N/A |
| 40 Pin Cable ATA100 | | | X |
| 44 Pin Cable ATA33 | X | | |
| 80 Pin Cable ATA100 | | | X |
| USB Function Test | | | |
| USB Basic Function Test | | Result | |
| (1) USB 4 is reserved for touch screen (2) USB speed detection message will not show during POST no matter USB 2.0 in BIOS enabled or nor) | | Pass | Fail |
| USB Controller | | X | |
| USB 2.0 Controller | | X | |
| USB Keyboard Support | | | X |
| USB Mouse Support | | | X |
| USB 1.1 Compatible Test | | Result | |
| USB 1.1 Compatible Test | | X | |
| USB 2.0 Compatible Test | | Result | |
| USB 2.0 Compatible Test | | X | |
| USB 2.0 Function Test | | Result | |
| Install Windows XP Professional from USB2.0 DRW-1604P-D/WHT/G/ASUS (Install Windows XP from USB DVD-R/W to 2.5" IDE HDD on USB 1/2/3 ports) | | X | |
| USB Device Full Loading Test | | Result | |
| Model | Pass | Fail | N/A |
| USB Thumb Drive PQI U310 1GB | X | | |
| BENQ 4824WI-ON2 | X | | |
| USB HDD 1394b + USB2.0 External Box (MP-FBHUB20P-V2.0 E10-7073161D60) | X | | |
| USB 4 is reserved for touch screen | | | X |
| Floppy Disk Controller Function Test | | Result | |

| | | Pass | Fail | N/A | |
|--|----------------------|------------------------|--------|------|-----|
| Copy and compare file between C: and A / B: | | | | X | |
| Change Floppy to None value | | | | X | |
| Swap FDD | | | | X | |
| Peripheral Compatibility-Storage Device | | | | | |
| Model | Interface | Result | | | |
| | | Pass | Fail | N/A | |
| FUJITSU MCB3064SS | SCSI | | | X | |
| IOMega ZIP 100 parallel port | Parallel | | | X | |
| IOMega ZIP100MB Internal ATAPI Drive | IDE | X | | | |
| DOC | | | | X | |
| Type-I CF | Fix / PIO Mode | X | | | |
| Type-I CF | Fix / UDMA Mode | | | X | |
| Digital I/O Connector Test | | Result | | | |
| | | Pass | Fail | N/A | |
| Input Address: | | | | X | |
| Output Address: | | | | X | |
| VCC: (5V) | | | | X | |
| DIO-1 Function Test | | | | X | |
| DIO-2 Function Test | | | | X | |
| Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules | | | | | |
| Interface | Model | Type | Result | | |
| | | | Pass | Fail | N/A |
| PC/104 | AAEON PCM-5600 | Modem Module | | | X |
| | AAEON PCM-3115B | PCMCIA Module | | | X |
| PC/104+ | AAEON PCM-3430 | SCSI Module | | | X |
| PCI-104 | AAEON PCM-FA00 | Mini-PCI Converter | | | X |
| | AAEON PCM-3794 | SCSI Module | | | X |
| | AAEON PCM-3730 | Intel 82559 LAN Module | | | X |
| On-Board SCSI Function Test | | | | | |
| Model | Interface | Result | | | |
| | | Pass | Fail | N/A | |
| RICOH MP7060S | SCSI-CDROM 24X | | | X | |
| Fujitsu MCB3064SS | SCSI-MO Device | | | X | |
| Seagate 32155W | SCSI-HDD 2.15GB | | | X | |
| IBM DNES-309170 | SCSI-HDD 9GB | | | X | |
| Seagate ST39205LW/P | 9GB / Ultra160 / LVD | | | X | |
| On-Board RAID Function Test | | | | | |
| Model | Interface | Result | | | |
| | | Pass | Fail | N/A | |
| Set SATA HDDs as RAID 0 | SATA | | | X | |
| Set SATA HDDs as RAID 1 | SATA | | | X | |

| | | | | |
|--|------|------------------|---------------|-------------|
| Set SATA HDDs as RAID 10 | SATA | | | X |
| Set SATA HDDs as RAID 5 | SATA | | | X |
| | | Result | | |
| | | Pass | Fail | N/A |
| Modular System Industrial Workstation Function Test | | X | | |
| Mechanism construction check | | X | | |
| COM Function Test | | Result | | |
| | | Pass | Fail | N/A |
| COM Port Send / Receive Test [Version:1.01] | | X | | |
| COM Port Burn In Test overnight | | | | X |
| Disk On Module [DOM] Compatibility Test | | | | |
| Model | | Interface | Result | |
| | | | Pass | Fail |
| | | | | N/A |
| Transcend / TS512MDOM40V / 512MB | | IDE 40 Pin | | X |
| Transcend / TS512MDOM44V / 512MB | | IDE 44 Pin | X | |
| Mini PCI Card Compatibility Test | | | | |
| Model | | Interface | Result | |
| | | | Pass | Fail |
| | | | | N/A |
| GM-100 WLAN 11g Mini PCI Card (Model: Sky Thru GC-100) | | LAN | X | |
| GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM) | | LAN | X | |
| PER-C20S SATA RAID MiniPCI Card (Silicon Image Sil3512ECTU128 QF7227.1-1) | | SATA | X | |
| COM/LPT Ports & RS-232/422/485 Function Test | | Result | | |
| | | Pass | Fail | N/A |
| RS-422 for COM2 | | X | | |
| RS-485 for COM2 | | | | X |
| COM1 | | X | | |
| COM2 | | X | | |
| COM3 | | | | X |
| COM4 | | | | X |
| COM5 | | | | X |
| COM6 | | | | X |
| LPT1 | | | | X |
| LPT2 | | | | X |
| Card Bus(PCMCIA) Compatibility Function Test | | | | |
| Model | | Result | | |
| | | Pass | Fail | N/A |
| Intel PRO/Wireless 2011B LAN PC Card (WPC2011BWW) | | | | X |
| PQI 16MB Compact Flash Adapter (64MB PQI CF Card inserting) | | | | X |
| Kingston datapack DP-PCM2 / 2GB (PC Card TypeII HDD) | | | | X |
| PCI GW-NS54SG Cardbus Adapter Wireless LAN Type-II | | | | X |

. O.S. Compatibility Test

| Installation Operation System Compatibility Test | | | Result | | |
|---|---|--|--------|------|-----|
| | | | Pass | Fail | N/A |
| [] Linux-RedHat 9.0 or [] Fedora Core 4.0 [] Fedora Core 6.0 | | | | | X |
| Windows Server 2003 English Version / Standard Edition 5.2.3790 | | | | | X |
| Windows Server 2003 English Version /Standard x64 Edition | | | | | X |
| Windows XP Professional English Version V2002 Service Pack 2 | | | X | | |
| Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2 | | | X | | |
| Windows XP Professional Japanese Version V2002 Service Pack 2 | | | X | | |
| Windows XP Professional English Version /Standard x64 Edition | | | | | X |
| Windows 2000 Professional English Version V5.00.2195 Service Pack4 | | | | | X |
| Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4 | | | | | X |
| Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4 | | | | | X |
| Windows Server 2000 English Version | | | | | X |
| Windows 98SE English Version V4.10.2222A | | | | | X |
| DOS 6.22 English Version | | | X | | |
| DOS 6.22 Japanese Version | | | X | | |
| Utility and Driver Test | | | | | |
| OS | Drivers Version | | Result | | |
| | | | Pass | Fail | N/A |
| Linux-Red-Hat 9.0 / Kernel 2.4.20-8 | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows Server 2003 English Version Standard Edition 5.2.3790 | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows Server 2003 English Version Standard x64 Edition | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows XP Professional English Version V2002 Service Pack 2 | Chipset Software | Intel® Chipset Software Installation Utility 6.0.1.1002 | X | | |
| | Graphics Media | Intel® 82852/82855 GM/GME Graphics Controller 6.14.10.4020 1/23/2005 | X | | |
| | LAN Driver | Intel® PRO/100 VE Network Connection 7.1.12.0 2/10/2004 | X | | |
| | Audio Driver | Realtek AC'97 Audio 5.10.0.5630 7/1/2004 | X | | |
| | Touchscreen Driver (Occupy USB 4) | USB Touchscreen Controller(Universal) 4.3.7.3203 8/3/2006 | X | | |
| Windows XP Professional Simplified-Chinese Version | Chipset Software | Intel® Chipset Software Installation Utility 6.0.1.1002 | X | | |

| | | | | | |
|---|-----------------------------------|--|---|--|---|
| V2002 Service Pack 2 | Graphics Media | Intel® 82852/82855 GM/GME Graphics Controller 6.14.10.4020 1/23/2005 | X | | |
| | LAN Driver | Intel® PRO/100 VE Network Connection 7.1.12.0 2/10/2004 | X | | |
| | Audio Driver | Realtek AC'97 Audio 5.10.0.5630 7/1/2004 | X | | |
| | Touchscreen Driver (Occupy USB 4) | USB Touchscreen Controller(Universal) 4.3.7.3203 8/3/2006 | X | | |
| Windows XP Professional Japanese Version V2002 Service Pack 2 | Chipset Software | Intel® Chipset Software Installation Utility 6.0.1.1002 | X | | |
| | Graphics Media | Intel® 82852/82855 GM/GME Graphics Controller 6.14.10.4020 1/23/2005 | X | | |
| | LAN Driver | Intel® PRO/100 VE Network Connection 7.1.12.0 2/10/2004 | X | | |
| | Audio Driver | Realtek AC'97 Audio 5.10.0.5630 7/1/2004 | X | | |
| | Touchscreen Driver (Occupy USB 4) | USB Touchscreen Controller(Universal) 4.3.7.3203 8/3/2006 | X | | |
| Windows XP Professional x64 Edition English Version Service Pack 2 V2002 | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows 2000 Professional English Version V5.00.2195 Service Pack 4 | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows 2000 Professional Simplified-Chinese Version V5.00.2195 Service Pack4 | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows 2000 Professional Japanese Version V5.00.2195 Service Pack4 | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows Server 2000 English Version | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows 98SE English Version V4.10.2222A | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |

10. BIOS Function Test

| Test Item | Result | | |
|---|--------|------|-----|
| | Pass | Fail | N/A |
| Memory Beep Test | X | | |
| Standard CMOS Setup Test | X | | |
| Boot Sequence Test | X | | |
| Power Management Test | | | |
| APM Power Management Test | X | | |
| ACPI Power Management Test | | | X |
| Power On Function Test | | | X |
| Wake Up Event Test | X | | |
| Power On after Power Failure Test | | | X |
| CMOS Backup / Clear CMOS Test | X | | |
| Boot ROM Test (RPL/PXE) | X | | |
| Supervisor / User Password Test | X | | |
| CRT / LCD Function Test | X | | |
| TV Standard Function Test | | | X |
| Init Display First Function Test | | | X |
| On-Chip Serial ATA Function Test | | | X |
| SATA Mode-IDE/RAID Function Test | | | X |
| PC Health Status | | | |
| Voltage Monitor Test | X | | |
| FAN Speed Monitor Test | X | | |
| Temperature Monitor Test | X | | |
| Swap Floppy Drive & Boot up Floppy Seek Function Test | | | X |
| USB Onboard Device Function Test | X | | |
| COM Address / IRQ Test | X | | |
| LPT Address / IRQ Test | | | X |
| BIOS AWDFLASH Program Test | X | | |

11. Performance Test

Platform Information

| | |
|----------------------------------|--|
| System | AOP-8080XT |
| PCB Model / Version | GENE-8310 A1.1 |
| BIOS | AOP-8080XT BIOS Rev 1.0 (8/10/2007) |
| Operating System | Windows XP Professional English Version V2002 Service Pack 2 |
| CPU | Onboard Celeron M 1.3GHz CPU with fan |
| Memory | DSL PC2700 512MB SODIMM SDRAM (ELPIDA D5116AFTA-6B-E) |
| SATA HDD | N/A |
| Primary IDE Master | FUJITSU MHW2040AT 2.5" IDE HDD |
| Primary IDE Slave | N/A |
| CRT | ViewSonic E70 |
| LCD | AU G084SN05_V0 / 800x600x18bit / 8.4" / Color TFT LVDS |
| Inverter | 華元 QF82V4.90S |
| Compact Flash | N/A |
| Backplane | N/A |
| Riser Card | N/A |
| Touch Panel | AMT 4-Wire, Analog Resistive |
| USB Touch Module | Egalax ETP-4500UG-B |
| Chipset Software | Intel® Chipset Software Installation Utility 6.0.1.1002 |
| Graphics Media | Intel® 82852/82855 GM/GME Graphics Controller 6.14.10.4020 |
| LAN Driver | Intel® PRO/100 VE Network Connection 7.1.12.0 2/10/2004 |
| Audio Driver | Realtek AC'97 Audio 5.10.0.5630 7/1/2004 |
| Touchscreen Driver (occupy USB4) | USB Touchscreen controller (Universal) 4.3.7.3203 8/3/2006 |
| AC Adapter | SINPRO Switching power Supply SPU50-1 / 5V , 50W Max |

Display resolution: 800X600X18bit / 60Hz (CRT+LCD)

| Testing Software | Result | Unit |
|---|-------------------------------|-------------------|
| ZD WinBench 99 V2.0 | | |
| Business Disk WinMark99 | N/A | Could not install |
| High-End Disk WinMark99 | | |
| Business Graphics WinMark99 | | |
| High-End Graphics WinMark99 | | |
| PCMark2002 | | |
| CPU | 4242 | |
| Memory | 2594 | |
| HDD | 606 | |
| Final Reality V1.01—BenchMark Test | | |
| 2D image | 12.90 | |
| 3D | 5.56 | |
| Bus transfer | 16.48 | |
| Overall | 9.4 | Reality marks |
| ZD 3D Winbench 2000 V1.1 | | |
| 3D WinMark 2000 | 35.2 ^{1,5,24,26} | Frames / sec |
| 3Dmark2001SE Pro (Demo version) | | |
| 3Dmark2001SE Build 330_Benchmark mode | 1014 | |
| ZD Multimedia Content Creation Winstone 2004 V1.0.1 (Up Pentium III 800 MHZ CPU) | | |
| Multimedia Content Creation Winstone 2004 | Score: 15.6 / Variance: 0.64% | |
| Business Winstone 2004 v1.0.1 (Up Pentium III 800 MHZ CPU) | | |
| Business Winstone2004 | Score: 9.9 / Variance: 20 | |

Test Result:

| Testing Software | Result | Unit |
|------------------------|--------|---------------|
| PCMark05 | | |
| PCMark | N/A | Could not run |
| CPU | | |
| Memory | | |
| Graphics | | |
| HDD | | |
| 3Dmark2003 v360 | | |
| 3Dmark Score | 52 | |
| CPU Score | N/A | Could not run |

Remark: Please uses below two performance software to test mainboard if the chipset is new enough. (ex. Intel Core 2 Duo CPU)