

P5 Verification Test Report

Release No: 09E010007

| | |
|---|--|
| Product Model | COM-45SP |
| Description | Intel GM45 + ICH9-M COM Express Board |
| Test Configuration | <input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : COM-45SP Rev A1.0 <input checked="" type="checkbox"/> BIOS : COM-45SP BIOS Rev 1.0 (12/17/2008) <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> North Bridge : Intel GM45 <input checked="" type="checkbox"/> South Bridge : Intel ICH9M <input checked="" type="checkbox"/> VGA Chipset : Intel GM45 Integrated VGA <input checked="" type="checkbox"/> Audio Chipset : Realtek HD Audio- ALC888 <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82567LM Gigabit Network Connection & Intel PRO/1000 PL Network Connection <input checked="" type="checkbox"/> I/O Chipset : ITE IT8712F-A <input checked="" type="checkbox"/> TV Chipset : Intel GM45 Integrated VGA <input checked="" type="checkbox"/> Remark : QE P5 Report for COM-45SP A1.0 |
| Test Result Summary | |
| <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____ _____ | |

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Issue date

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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 |
|---------------------|---|
| PCB Model / Version | COM-45SP Rev:A1.0 |
| Carrier Board | ECB-916M Rev:A1.0 |
| BIOS / Version | COM-45SP BIOS Rev 1.0 (12/17/2008) |
| CPU Type | Intel Core2 Duo T9400 / 2.53GHz FSB:1066 / 6MB L2 Cache |
| Memory Type | DSL DDR3 SO-DIMM 1066 2G * 2 pcs (Samsung M471B5673DZ1-CF8) |
| SATA HDD | Fujitsu MHY2080BH 80GB 2.5" HDD |
| SATA DVD | ASUS DRW-2014L1T DVD |
| Primary IDE Master | N/A |
| Primary IDE Slave | N/A |
| CRT | ViewSonic E70 17" |
| LCD | N/A |
| Compact Flash | N/A |
| Riser Card | N/A |
| Backplane | N/A |
| Operating System | <input type="checkbox"/> Linux-RedHat 9.0 or <input type="checkbox"/> Fedora Core 4.0 <input checked="" type="checkbox"/> Fedora Core 9.0 |
| | Windows Vista TM Ultimate x64 Edition English Version |
| | Windows XP Professional English Version V2002 Service Pack 2 |
| | Windows XP Professional English Version /Standard x64 Edition |
| Power Supply | ATX Power : Seventeam / ST-300BLP /300W |
| | AT Power : PRM400 |

Test Result for Certification

1. 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 | | | X |
| Secondary IDE Master | | | 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 | X | | |
| COM 2-232 | X | | |
| COM 2-422 | X | | |
| COM 2-485 | X | | |
| COM 2-Ring /+5V /+12V | 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) | X | | |
| Audio Connector | X | | |
| Audio 7.1 Channel / S/P DIF | X | | |
| LPT 1 | X | | |
| LPT 2 | | | X |
| SIR / 115.2 Kbps | X | | |
| FIR / 4M bps | X | | |
| USB 1/2 Ports | X | | |
| USB 3/4 Ports | X | | |
| USB 5/6 Ports | | | X |
| USB 7/8 Ports | | | X |
| USB 2.0 1/2 Ports | X | | |
| USB 2.0 3/4 Ports | X | | |

| | | | |
|---|---------------|-------------|------------|
| USB 2.0 5/6 Ports | | | X |
| USB 2.0 7/8 Ports | | | X |
| DVI Function | | | X |
| DIO Connector | 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 | X | | |
| TV-out / S Terminal | X | | |
| TV-out / AV Terminal | X | | |
| HDTV | X | | |
| Touch Screen – 4 Wire | X | | |
| Touch Screen – 8 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 | X | | |
| Front Panel | Result | | |
| | Pass | Fail | N/A |
| Power On Button | X | | |
| IDE LED | X | | |
| External Buzzer | | | X |
| On Board Buzzer | X | | |
| Power LED | 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 Power Select | X | | |
| COM1-Ring/5V/12V Selection | X | | |
| COM2-Ring/5V/12V Selection | X | | |
| COM2 RS-232/422/485 Selection (Depends on BIOS) | X | | |
| COM3-Ring/5V/12V Selection | X | | |
| COM4-Ring/5V/12V Selection | X | | |
| Clear CMOS | X | | |
| Touch Screen Operating Mode Selection | X | | |
| Clock Shift of TFT LCD | | | X |
| Power Connector & Function | Result | | |
| | Pass | Fail | N/A |

| | | | | |
|--|------|--------|------|-----|
| 5V only Power for Big 4P | | | | X |
| ATX Power Connector | | X | | |
| ATX Power_12V Connector | | | | X |
| AT Power Connector | | X | | |
| Big 4P Power Connector | | | | X |
| Mini 4P Power Connector | | | | X |
| External Power Connector(-12/-5V) | | | | X |
| Option ATX Power Connector (PS-ON / +5VSB) | | | | 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 | | |
| Mini PCI Express card | | X | | |
| Express card | | X | | |

2. Power Consumption Test (Run Prime95 Program)

Platform Information

| | |
|---------------------------------|---|
| PCB Model / Version / CPU Board | COM-45SP A1.0 |
| Carrier Board | ECB-916M Rev. A1.0 |
| BIOS | COM-45SP BIOS Rev 1.0 (12/17/2008) |
| Operating System | Windows XP-sp3 |
| CPU | Intel Core2 Duo T9400 / 2.53GHz FSB:1066 / 6MB L2 Cache |
| Memory | DSL DDR3 SO-DIMM 1066 2G * 2 pcs (Samsung M471B5673DZ1-CF8) |
| SATA HDD | WD 80GB |
| Primary IDE Master | N/A |
| Primary IDE Slave | N/A |
| CRT | ViewSonic E70 17" |
| LCD | N/A |
| Compact Flash | N/A |
| Backplane | N/A |
| Riser Card | N/A |
| Power Supply | ATX Power Supply : 核電廠B350 |
| | AT Power Supply: PRM400 |

| Test Environment | ATX Power: 核電廠 B350 | | AT Power: PRM400 | | Note |
|--|----------------------------------|---|----------------------------------|---|------|
| Model | | | | | |
| CPU | Intel Core2 Duo T9400 2.53GHz | | Intel Core2 Duo T9400 2.53GHz | | S1 |
| HDD | WD 80GB | | WD 80GB | | |
| RAM | Samsung DDR3-1066 2GB | | Samsung DDR3-1066 2GB | | |
| OS Environment | Windows XP-sp3 | | Windows XP-sp3 | | |
| Normal Mode (+5V) | 0.38 | A | 0.54 | A | |
| Suspend Mode (+5V) | 0.2 | A | ----- | A | |
| 5VSB in Power Off Mode (just for ATX) | 0.49 | A | ----- | A | |
| 5VSB in Power On Mode (just for ATX) | 0 | A | ----- | A | |
| Normal Mode (+12V) | 3.94 | A | 3.83 | A | |
| Suspend Mode (+12V) | 1.39 | A | ----- | A | |
| Normal Mode (+3.3V) (just for ATX) | 0 | A | ----- | A | |
| Suspend Mode (+3.3V) (just for ATX) | 0 | A | ----- | A | |
| Normal Mode (-12V) | 0 | A | 0 | A | |
| Suspend Mode (-12V) | 0 | A | ----- | A | |
| Normal Mode (-5V) | 0 | A | 0 | A | |
| Suspend Mode (-5V) | 0 | A | ----- | A | |

3. Power Connector Test (110V / 220V)

| Test Method | Result | | |
|--|--------|------|-----|
| | Pass | Fail | N/A |
| ATX Connector - Power On/Off for 10 times in DOS | X | | |
| AT Connector - Power On/Off for 10 times in DOS | | | X |
| 5V Only - Power On/Off for 10 times in DOS | | | X |

4. Timer Accuracy Test

| System Clock & RTC Clock Test | | | | |
|-------------------------------|---------------------------|--------|------|-----|
| Test Method | Margin for error | Result | | |
| | | Pass | Fail | N/A |
| 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 | | |

5. 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 | D-Link DGS-1008T | 100M | 1GBps | 1000 | X | | |
| | | Accton DeskTop-3005 | 100M | 100 MBps | 100 | X | | |
| | | SVEC FD916H (10 Mbps HUB) | 100M | 10 MBps | 10 | X | | |
| Onboard LAN2 | 10/100/1000 Mbps | D-Link DGS-1008T | 100M | 1GBps | 1000 | X | | |
| | | Accton DeskTop-3005 | 100M | 100 MBps | 100 | X | | |
| | | SVEC FD916H (10 Mbps HUB) | 100M | 10 MBps | 10 | X | | |

6. Hardware Compatibility

| CPU Compatible Test | | | | | | | |
|---|--------------------------|-----------|-----------------|-------------------|--------|------|-----|
| CPU Type | | FSB | Prime95 Version | Result | | | |
| | | | | Pass | Fail | N/A | |
| Intel Core2 Duo T8300 / 2.4GHz FSB:800/ 3MB L2 Cache | | 800MHz | V.256 | X | | | |
| Intel Core2 Duo T9400 / 2.53GHz FSB:1066 / 6MB L2 Cache | | 1066 MHz | V.256 | X | | | |
| Memory Compatibility Test | | | | | | | |
| Memory Brand | Memory Chipset | Frequency | Size | MemTest86 Version | Result | | |
| | | | | | Pass | Fail | N/A |
| DSL DDR3 SO-DIMM 1066 2G DSL | Samsung M471B5673DZ1-CF8 | 1066 | 2G | V1.7 | X | | |
| | | | | | | | |
| | | | | | | | |
| Audio Basic Function Test | | | | | Result | | |
| | | | | | Pass | Fail | N/A |
| 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 |
| 8-channel mode for 7.1 speaker output | | | X | | |
| S/P DIF function Test | | Input | X | | |
| | | Output | X | | |
| On Board TV Function Test | | | Result | | |
| | | | 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 | 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 | | |
| | Data Image 7" / 800*480 / 18bit (16:9) | 3.3V | | | X |
| | AU G084SN05 V.3 / 8.4" / 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 | | |
| | Toshiba /12.1"/1280 x 768 x 18bit (16:9) | 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 | 5V | X | | |
| | AU M201UN02 V.5 / 20.1" / 1600x1200x48bit | 5V | X | | |
| | AUO T370HW01 / 37" / 1920x1080 / 48bit | 5V | X | | |
| | AUO M190PW01 V0 / 19"/1440X900/48 bit | 5V | | | X |
| TTL | 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 | |
| CHAINTECH NVIDIA GeForce4 MX440-8X | VGA Card | X | | | |
| Creative Sound BLASTER Live5.1 | 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 | |
| Seagate / ST3160815A / 160GB /PATA-100 | | | | X |
| Fujitsu MHY2080BH 80GB 2.5" HDD / ATA-133 / SATA | X | | | |
| Western Digital/WD8800AAJS / 80GB / SATA II | X | | | |
| HITACHI HDP725025GLA380 / 250GB / SATA 3.0Gb/s | | | | 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 | | | |
| | Pass | Fail | N/A | |
| USB Controller | X | | | |
| USB 2.0 Controller | X | | | |
| USB Keyboard Support | X | | | |
| USB Mouse Support | X | | | |

| USB 1.1 Compatible Test | | Result | | |
|---|-----------------|--------|--------|------|
| | | Pass | Fail | N/A |
| USB 1.1 Compatible Test | | X | | |
| USB 2.0 Compatible Test | | Result | | |
| | | Pass | Fail | N/A |
| USB 2.0 Compatible Test | | X | | |
| USB 2.0 Function Test | | Result | | |
| | | Pass | Fail | N/A |
| Install Windows XP Professional from HighSpeed Device: USB2.0 DRW-1604P-D/WHT/G/ASUS | | X | | |
| USB Device Full Loading Test | | Result | | |
| | | Pass | Fail | N/A |
| Model | | Pass | Fail | N/A |
| BENQ 4824WI-ON2 | | X | | |
| Mitsumi FLL3.5 D353GUE/FUE | | X | | |
| USB HDD 20GB | | X | | |
| USB Card Reader | | X | | |
| USB Mouse | | X | | |
| USB Flash drive Transcend 2GB | | 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: BF | | X | | |
| Output Address: 33 | | X | | |
| VCC: (5V) , Position : (801) | | 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 |

| | | | | | |
|--|-----------------|------------------------|--------|------|-----|
| 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 |
| COM Function Test | | | Result | | |
| 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 |
| PCI 10/100 LAN Mini PCI Card (Model:PER-C10L) | | LAN | X | | |
| GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM) | | WLAN | X | | |
| COM/LPT Ports & RS-232/422/485 Function Test | | | Result | | |
| 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 |

7. O.S. Compatibility Test

| Installation Operation System Compatibility Test | | Result | | | |
|---|------------------|----------------|--------|------|-----|
| | | Pass | Fail | N/A | |
| [] Linux-Red Hat 9.0 or [X] Fedora Core 9 | | X | | | |
| Windows Vista TM Ultimate English Version | | X | | | |
| Windows Vista TM Ultimate x64 Edition English Version | | X | | | |
| Windows XP Professional English Version V2002 Service Pack 3 | | | | 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 Server 2003 English Version / Standard Edition 5.2.3790 | | | | X | |
| Windows Server 2003 English Version /Standard x64 Edition | | | | X | |
| Windows 98SE English Version V4.10.2222A | | | | X | |
| DOS 6.22 English Version | | | | X | |
| Utility and Driver Test | | | | | |
| OS | Drivers Version | | Result | | |
| | | | Pass | Fail | N/A |
| Linux-Fedora 9 / Kernel- 2.6.25-14-FC9 | Chipset Software | Default Driver | X | | |
| | Graphics Media | Default Driver | X | | |
| | LAN Driver | Default Driver | X | | |
| | Audio Driver | Default Driver | X | | |
| Windows Vista TM Ultimate English Version | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |
| Windows Vista TM Ultimate x64 Edition English Version | Chipset Software | Default Driver | X | | |
| | Graphics Media | Default Driver | X | | |
| | LAN Driver | Default Driver | X | | |

| | | | | | |
|---|------------------|--|---|--|---|
| | Audio Driver | Default Driver | X | | |
| Windows XP Professional English Version V2002 Service Pack 3 | Chipset Software | Intel® Chipset Device Software-- 9.0.0.1007 --3/26/2008 | X | | |
| | Graphics Media | Mobile Intel® 965 Express Chipset --6.14.10.4969 --7/3/2008 | X | | |
| | LAN Driver | Intel PRO/100 PL Network --9.12.13.0 -- 12/11/2007 | X | | |
| | | Intel 82567LM Gigabit Network—9.50.1.0—11/16/2007 | X | | |
| | Audio Driver | Realtek semiconductor --5.10.0.5591 --3/26/2008 | X | | |
| Windows XP Professional x64 Edition English Version Service Pack 2 V2002 | Chipset Software | Default Driver | X | | |
| | Graphics Media | Default Driver | X | | |
| | LAN Driver | Default Driver | X | | |
| | Audio Driver | Default 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 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 98SE English Version V4.10.2222A | Chipset Software | | | | X |
| | Graphics Media | | | | X |
| | LAN Driver | | | | X |
| | Audio Driver | | | | X |

8. 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 / TV 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 | | |

9. Performance Test

Platform Information

| | |
|--------------------|---|
| CPU Board | COM-45SP Rev: A0.2 |
| Carrier Board | ECB-916M REV:A1.0 |
| BIOS | COM-45SP BIOS Rev 0.6 (08/27/2008) |
| Operating System | Windows XP SP3 |
| CPU | Intel Core 2 Duo (Penryn) Processor T9400 2.53GHz |
| Memory | DSL DDR3 SO-DIMM 1066 2G * 2 pcs (Samsung M471B5673DZ1-CF8) |
| SATA HDD | Fujitsu MHY2080BH 80GB 2.5" HDD |
| Primary IDE Master | N/A |
| Primary IDE Slave | N/A |
| CRT | ViewSonic E70 17" |
| LCD | N/A |
| Compact Flash | N/A |
| Expansion Board | N/A |
| Chipset Software | Intel chipset Ver.9.0.0.1007 |
| Graphics Media | Intel Corporation Ver.6.14.10.4969 |
| LAN Driver | Intel 82567LM Ver.9.50.1.0 |

| | |
|--------------------|---|
| | Intel 82573L Ver.9.12.13.0 |
| Audio Driver | Realtek High Definition Audio Ver.5.10.0.5591 |
| Touchscreen Driver | Touchkit Ver.4.3.7.3203 |
| Power Supply | ATX Power: Aopen FSP300-60ATV |

Test result:

| Testing Software | Result | Unit |
|---|--------|---------------|
| PCMark2002 | | |
| CPU | 9959 | |
| Memory | 30789 | |
| HDD | 1095 | |
| Final Reality V1.01—BenchMark Test | | |
| 2D image | 57.19 | |
| 3D | 4.39 | |
| Bus transfer | 113.64 | |
| Overall | 36.62 | Reality marks |
| 3Dmark2001 | | |
| 3DMark2001SE Build 330_Benchmark mode | N/A | |

Test Result:

| Testing Software | Result | Unit |
|------------------------|--------|---------|
| PCMark05 | | |
| PCMark | 4662 | PCMarks |
| CPU | N/A | |
| Memory | N/A | |
| Graphics | N/A | |
| HDD | N/A | |
| 3Dmark2003 v360 | | |
| 3Dmark Score | 2188 | |

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