

# QE P5 Verification Test Plan

Release No : 06E010018

|  |  |
|--|--|
| Product Model  | <b>PCM-6892</b>  |
| Description  | <b>VIA Eden 400/667/C3 1GHz<br/>Compact Board</b>  |
| Test Configuration   | <input checked="" type="checkbox"/> New product<br><input checked="" type="checkbox"/> PCB : PCM-6892 Rev:A2.0<br><input checked="" type="checkbox"/> BIOS : PCM-6892 BIOS Rev.2.0 (08/18/2006)<br><br><input checked="" type="checkbox"/> Chipset :<br><input checked="" type="checkbox"/> North Bridge : VIA VT8606G<br><input checked="" type="checkbox"/> South Bridge : VIA VT82C686B<br><input checked="" type="checkbox"/> VGA Chipset : VIA VT8606G<br><input checked="" type="checkbox"/> Audio Chipset : VIA VT1612A<br><input checked="" type="checkbox"/> Ethernet Chipset : Realtek RTL8139DL<br><input checked="" type="checkbox"/> I/O Chipset : Winbond VT82C686B + W83977EG-AW<br><input checked="" type="checkbox"/> TV Chipset : N/A<br><br><input checked="" type="checkbox"/> Remark : QE NPDP P5 External Report |
| <b>Test Result Summary</b>   |  |
| <input checked="" type="checkbox"/> Pass<br><input type="checkbox"/> Fail<br><input type="checkbox"/> Pass with Deviation<br><br>Comment: _____<br>_____ |  |

*2006/08/21*

Issue date

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## Summary Table of contents :

|                                      |    |
|--------------------------------------|----|
| Summary Table of contents            | 2  |
| Platform Information                 | 3  |
| 1. Dynamic / Boot_UP Burn_In Test    | 4  |
| 2. Power On and Reset Test           | 4  |
| 3. I/O Peripheral Function Test      | 4  |
| 4. Power Consumption Test            | 6  |
| 5. Power Connector Test              | 7  |
| 6. Timer Accuracy Test               | 7  |
| 7. Network HUB / LAN Connection Test | 7  |
| 8. Hardware compatibility            | 8  |
| 9. O.S. Compatibility Test           | 13 |
| 10. BIOS Function Test               | 13 |
| 11. Performance Test                 | 14 |

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                                 |
|---------------------|--|---|
| PCB Model / Version | PCM-6892 Rev:A2.0  | 1,2,3,4,5,6,7,8,9,10,11                   |
| BIOS / Version      | PCM-6892 BIOS Rev:   | 1,2,3,4,5,6,7,8,9,10,11                   |
| CPU Type            | Via C3 1.0A GHz (133x7.5)  | 1,2,3,4,5,6,7,8,9,10,11                   |
| Memory Type         | KINGMAX / KSV88414MA / PC133 / 128MB   | 1,2,3,4,5,6,7,8,9,10,11                   |
| Primary IDE Master  | IBM / IC35L060AVV207-0 /61.4GB / ATA33   | 1,2,3,4,5,6,7,8,9,10,11                   |
| Primary IDE Slave   | TEAC / CD-540E / 40X   | 1,2,3,4,5,6,7,8,9,10,11                   |
| CRT                 | ViewSonic E773   | 1,2,3,4,5,6,7,8,9,10,11                   |
| LCD                 | N/A  |   |
| Compact Flash       | N/A  |   |
| Riser Card          | N/A  |   |
| Backplane           | N/A  |   |
| Operating System    | [ <input checked="" type="checkbox"/> ] Linux-RedHat 9.0 or [ <input type="checkbox"/> ] Fedora Core 4 | 9   |
|                     | Windows Server 2003 English Version<br>/ Standard Edition 5.2.3790                                     | N/A                                       |
|                     | Windows XP Professional English<br>Version V2002 Service Pack 2  | 9   |
|                     | Windows 2000 Professional English<br>Version V5.00.2195 Service Pack 4                                 | 1,2,3,4,5,6,7,8,9,10,11                   |
|                     | Windows 98SE English<br>Version V4.10.2222A  | 9   |
|                     | Windows NT Workstation 4.0 English<br>Version Service Pack 6   | N/A                                       |
|                     | MS-DOS 6.22  | 9   |
|                     | Power Supply   | ATX Power : SHARK /SPC5110-250ATZ2 / 250W |
|                     | AT Power :   | N/A                                       |

## Test Result for Certification

### 1. Dynamic / Boot\_UP Burn\_In Test

| Test Method                        | Test Condition                 | Result |      |     |
|------------------------------------|--------------------------------|--------|------|-----|
|                                    |                                | Pass   | Fail | N/A |
| Diagnostics Software Burn-In Test. | 0°C ~60°C, 30%RH~80%RH, 48 hrs | X      |      |     |
| Power On/Off Test.                 | 0°C ~60°C, 30%RH~80%RH, 24hrs  | X      |      |     |

### 2. Power On and Reset Test

| Test Method  | Test Condition               | Result |      |     |
|--|------------------------------|--------|------|-----|
|  |                              | Pass   | Fail | N/A |
| Power On/Off Test in DOS Mode-100V Power Function Test | 10 times in Room Temperature | X      |      |     |
| Power On/Off Test in DOS Mode-210V Power Function Test | 10 times in Room Temperature | X      |      |     |
| KB Reset in Dos Mode-110V Power Function Test          | 20 times in Room Temperature | X      |      |     |
| Hardware Reset in Dos Mode-110V Power Function Test    | 20 times in Room Temperature | X      |      |     |

### 3. I/O Peripheral Function Test

| I/O Peripheral Function Test –I/O Function | Result |      |     |
|--|--------|------|-----|
|  | Pass   | Fail | N/A |
| <b>Floppy Connector / Driver A:</b>        | 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   |
| 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                                      | X      |      |     |
| COM 2-232                                  | X      |      |     |
| COM 2-422                                  | X      |      |     |
| COM 2-485                                  | X      |      |     |
| COM 2-Ring /+5V /+12V                      | X      |      |     |
| COM 3                                      | X      |      |     |
| COM 4                                      | X      |      |     |

|                                  |               |             |            |
|----------------------------------|---------------|-------------|------------|
| COM 5                            |               |             | X          |
| COM 6                            |               |             | X          |
| PS/2 Mouse & Keyboard (Internal) | X             |             |            |
| PS/2 Mouse & Keyboard (External) |               |             | X          |
| Audio Connector                  | X             |             |            |
| Audio 5.1 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 Ports                      |               |             | X          |
| USB 6 Ports                      |               |             | X          |
| USB 2.0 1 & 2 Ports              |               |             | X          |
| USB 2.0 3 & 4 Ports              |               |             | X          |
| USB 2.0 5 Ports                  |               |             | X          |
| USB 2.0 6 Ports                  |               |             | X          |
| DVI Function                     |               |             | X          |
| DIO Connector                    |               |             | X          |
| Card Bus                         | X             |             |            |
| PC/104                           | X             |             |            |
| PC/104-Plus                      |               |             | X          |
| PCI-104                          |               |             | X          |
| TFT TTL LCD                      | X             |             |            |
| TFT LVDS LCD                     | X             |             |            |
| TV-out / S Terminal              | X             |             |            |
| TV-out / AV Terminal             | 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                      | <b>Result</b> |             |            |
|                                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| 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 Voltage Selection                                   |      | X      |      |     |
| COM2-Ring/5V/12V Selection                              |      | X      |      |     |
| COM2 RS-232/422/485 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 |
| ATX Power Connector                                     |      | X      |      |     |
| ATX Power_12V Connector                                 |      |        |      | X   |
| AT Power Connector (P8 & P9)                            |      |        |      | 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      |      |     |
| I/O Peripheral Function Test – LAN Connector & Function |      | Result |      |     |
|   |      | Pass   | Fail | N/A |
| LAN Speed LED   | LAN1 | X      |      |     |
|   | LAN2 | X      |      |     |
| LAN Active LED  | LAN1 | X      |      |     |
|   | LAN2 | X      |      |     |
| LAN Link LED  | LAN1 | X      |      |     |
|   | LAN2 | X      |      |     |
| LAN 10/100 Ethernet                                     |      | X      |      |     |
| LAN 1G Ethernet   |      |        |      | X   |
| I/O Peripheral Function Test – PCI Connector & Function |      | Result |      |     |
|   |      | Pass   | Fail | N/A |
| PCI Slots   |      | X      |      |     |
| PCI Express   |      | X      |      |     |

#### 4. Power Consumption Test (Run Prime95 Program)

|                                   | ATX Power: SHARK /SPC5110-250ATZ2 / 250W |   |              |   | AT Power: |   |       |   |
|-----------------------------------|--|---|--------------|---|-----------|---|-------|---|
|                                   | CPU: 667MHz                              |   | CPU: C3 1GHz |   | CPU:      |   | CPU:  |   |
| <b>OS Environment</b>             | Win 2K                                   |   | Win 2K       |   |           |   |       |   |
| Normal Mode (+5V)                 | 2.67                                     | A | 3.96         | A |           | A |       | A |
| Suspend Mode (+5V)                | 2.35                                     | A | 3.54         | A |           | A |       | A |
| 5VSB in Power Off Mode (ATX Mode) | 0.13                                     | A | 0.16         | A | -----     | A | ----- | A |
| 5VSB in Power On Mode (ATX Mode)  | 0.05                                     | A | 0.03         | A | -----     | A | ----- | A |
| Normal Mode (+12V)                |  | A |              | A |           | A |       | A |
| Suspend Mode (+12V)               |  | A |              | A |           | A |       | A |
| Normal Mode (+3.3V) (ATX Mode)    |  | A |              | A | -----     | A | ----- | A |
| Suspend Mode (+3.3V) (ATX Mode)   |  | A |              | A | -----     | A | ----- | A |
| Normal Mode (-12V)                |  | A |              | A |           | A |       | A |
| Suspend Mode (-12V)               |  | A |              | A |           | A |       | A |
| Normal Mode (-5V)                 |  | A |              | A |           | A |       | A |
| Suspend Mode (-5V)                |  | A |              | A |           | A |       | A |

#### 5. 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      |      |     |

#### 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 | ±1 second during 24 hours | X      |      |     |
| RTC Clock in Power On Mode    | ±1 second during 24 hours | X      |      |     |
| RTC Clock in Power Off Mode   | ±1 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 |
| OnBoard LAN1 LED |                  | Active LED               |              |           |                   | X      |      |     |
|                  |                  | Link LED                 |              |           |                   | X      |      |     |
|                  |                  | Speed LED                |              |           |                   | X      |      |     |
| OnBoard LAN2 LED |                  | Active LED               |              |           |                   | X      |      |     |
|                  |                  | Link LED                 |              |           |                   | X      |      |     |
|                  |                  | Speed LED                |              |           |                   | X      |      |     |
| Location         | Speed            | HUB Type                 | Cable Length | HUB Speed | Onboard LAN Speed | Result |      |     |
|                  |                  |                          |              |           |                   | Pass   | Fail | N/A |
| LAN1             | 10/100/1000 Mbps | HP J4095A 24 Ports       | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | D-Link DGS-1008T         | 100M         | 1Gbps     | 100               | X      |      |     |
|                  |                  | Intel InBusiness 8 Ports | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | LEMEL LM-S5 5 Ports      | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | Accton Desktop-3005      | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | SVEC FD916H              | 100M         | 10 Mbps   | 10                | X      |      |     |
| Location         | Speed            | Type                     | Cable Length | HUB Speed | Onboard LAN Speed | Result |      |     |
|                  |                  |                          |              |           |                   | Pass   | Fail | N/A |
| LAN2             | 10/100/1000 Mbps | HP J4095A 24 Ports       | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | D-Link DGS-1008T         | 100M         | 1Gbps     | 100               | X      |      |     |
|                  |                  | Intel InBusiness 8 Ports | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | LEMEL LM-S5 5 Ports      | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | Accton Desktop-3005      | 100M         | 100 Mbps  | 100               | X      |      |     |
|                  |                  | SVEC FD916H              | 100M         | 10 Mbps   | 10                | X      |      |     |

## 8. Hardware Compatibility

| CPU Compatible Test       |                     |           |                   |        |      |     |  |
|---------------------------|---------------------|-----------|-------------------|--------|------|-----|--|
| Type                      | Clock Speed         | FSB       | Prime95 Version   | Result |      |     |  |
|                           |                     |           |                   | Pass   | Fail | N/A |  |
| VIA C3 1.0AGHz            |                     | 133       | V2414             | X      |      |     |  |
| VIA C3 667MHz             |                     |           | V2414             | X      |      |     |  |
| Memory Compatibility Test |                     |           |                   |        |      |     |  |
| Brand / Memory Size       | Chipset             | Frequency | MemTest86 Version | Result |      |     |  |
|                           |                     |           |                   | Pass   | Fail | N/A |  |
| HYNIX / 128MB             | HY57V28820HCT-H     |           | V1.65             | X      |      |     |  |
| INFINEON /128MB           | HYB39564800CT-75    |           | V1.65             | X      |      |     |  |
| NEC /128MB                | D45128841G5-A75-9JF |           | V1.65             | X      |      |     |  |
|                           |                     |           |                   |        |      |     |  |
|                           |                     |           |                   |        |      |     |  |



| <b>On Board Audio Function Test</b>                 |  |                |               |               |             |            |
|---|--|----------------|---------------|---------------|-------------|------------|
| <b>Audio Basic Function Test</b>                    |  |                |               | <b>Result</b> |             |            |
|   |  |                |               | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| 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             |             |            |
| <b>Audio 5.1 Channel with S/P DIF Function Test</b> |  |                |               | <b>Result</b> |             |            |
|   |  |                |               | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| 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          |
| <b>On Board TV Function Test</b>                    |  |                |               | <b>Result</b> |             |            |
|   |  |                |               | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| NTSC  |  | AV Terminal    |               | X             |             |            |
| PAL   |  |                |               | X             |             |            |
| NTSC  |  | S Terminal     |               | X             |             |            |
| PAL   |  |                |               | X             |             |            |
| <b>On Board LCD Function Test</b>                   |  |                |               |               |             |            |
| <b>TFT LCD</b>                                      | <b>Type</b>                                    | <b>Voltage</b> | <b>Result</b> |               |             |            |
|   |  |                | <b>Pass</b>   | <b>Fail</b>   | <b>N/A</b>  |            |
| LVDS  | AU B104SN02 / 10.4" / 800*600 / 18bit          | 3.3V           | X             |               |             |            |
|   | Hyundai HT12X11-200 / 12.1" / 1024*768 / 18bit | 3.3V           | X             |               |             |            |
|   | NEC NL6448BC33-63D / 640*480 / 18bit           | 3.3V           | X             |               |             |            |
|   | AU M170EG01 / 17" / 1280*1024 / 48bit          | 5V             |               |               | X           |            |
| TTL   | Toshiba LTM10C209A / 10.4" / 640*480 / 18bit   | 5V             | X             |               |             |            |
|   | Sharp LQ121S1DG11 / 12.1" / 800*600 / 18bit    | 3.3V           | X             |               |             |            |
|   | Fujitsu FLC38XGC6V-06 / 15" / 1024*768 / 36bit | 3.3V           | X             |               |             |            |
| <b>PCI Slot Function (PCI Adapter Card) Test</b>    |  |                |               |               |             |            |
| <b>Model</b>  |  | <b>Type</b>    | <b>Result</b> |               |             |            |
|   |  |                | <b>Pass</b>   | <b>Fail</b>   | <b>N/A</b>  |            |
| SC3000 CMI8738/C3DX                                 |  | Sound Card     | X             |               |             |            |
| Takram DC-395U V1.02                                |  | SCSI Card      | X             |               |             |            |
| Adaptec Ultra160 SCSI ASC-29160                     |  | SCSI Card      | X             |               |             |            |

|   |            |   |  |  |
|---|------------|---|--|--|
| Intel GD82559 10/100 Mbps Fast Ethernet Adapter   | LAN Card   | X |  |  |
| Realtek RTL8139B Ethernet   | LAN Card   | X |  |  |
| D-Link DGE-530T 1000BASE-T Gigabit Ethernet Adapter                                     | LAN Card   | X |  |  |
| D-Link DWL-520+ Wireless LAN  | LAN Card   | X |  |  |
| Genuine GM56-AMI2019  | Modem Card | X |  |  |
| ABIT HotRod 100 Pro   | RAID Card  | X |  |  |
| D-Link DU-520 USB 2.0   | Other Card | X |  |  |
| Tekram TR-822 Serial ATA 150 [SA-001] + SATA HAA Seagate ST312 0026AS 120GB [ID-200305] | Other Card | X |  |  |

### PCI-Express Function Test

| Model  | Result |      |     |
|--|--------|------|-----|
|  | Pass   | Fail | N/A |
| SksKonnnect SK-9E21D 10/100/1000Base-T Adapter PCI-Express X1 LAN Card |        |      | X   |
| WinFast PX6200 TC TDH PCI-Express X16 VGA Card                         |        |      | X   |

### HDD Compatibility Test

| Model   | Result |      |     |
|---|--------|------|-----|
|   | Pass   | Fail | N/A |
| Hitachi / HDS722525VLAT80 / 250GB / ATA-100     | X      |      |     |
| IBM / DTLA-307045 / 46.1GB / ATA-100            | X      |      |     |
| FUJITSU / MPE 3136AH / 13.6GB / ATA-66          | X      |      |     |
| Maxtor / 4G160J8 / 160GB / ATA-133              | X      |      |     |
| Quantum / Fireball Plug AS / 30GB / ATA-100     | X      |      |     |
| Seagate / ST310210A / 10.2GB / ATA-66           | X      |      |     |
| Western / WD400BB-75DEA0 / 40GB / ATA-100       | X      |      |     |
| Seagate / ST3120026AS / 120GB / ATA-100 / S-ATA |        |      | X   |

### CD/DVD-ROM Compatibility Test

| Model   | Result |      |     |
|---|--------|------|-----|
|   | Pass   | Fail | N/A |
| Acer DVP1640A / 16X / DVD-ROM                     | X      |      |     |
| Pioneer / DVR-A11FXC1 / 8X DVD-RW / 6X DVD-RW     | X      |      |     |
| IBM HL-DT-ST / GCR-8480B / 48X / CD-ROM           | X      |      |     |
| Pioneer / DVD-121 / 16X / DVD-ROM                 | X      |      |     |
| SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X | X      |      |     |
| NEC / ND-2500A / DVD R/RW / +R8X-R8X              | X      |      |     |

### IDE Cable Function test

| IDE Model           | Result |      |     |
|---------------------|--------|------|-----|
|                     | Pass   | Fail | N/A |
| 40 Pin Cable ATA33  | X      |      |     |
| 44 Pin Cable ATA33  |        |      | X   |
| 80 Pin Cable ATA100 |        |      | X   |

| <b>USB Function Test</b>   |                  |               |             |            |
|--|------------------|---------------|-------------|------------|
| <b>USB Basic Function Test (USB1/2 on USBRJ1 connector)</b>                      |                  | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| USB Controller   |                  | X             |             |            |
| USB 2.0 Controller   |                  |               |             | X          |
| USB Keyboard Support   |                  | X             |             |            |
| USB Mouse Support  |                  |               |             | X          |
| <b>USB 1.1 Compatible Test</b>   |                  | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| USB 1.1 Compatible Test  |                  | X             |             |            |
| <b>USB 2.0 Compatible Test</b>   |                  | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| USB 2.0 Compatible Test  |                  |               |             | X          |
| <b>USB 2.0 Function Test</b>   |                  | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| Use High Speed Device USB2.0 CD-R/W Ben-Q / 4824W1-ON2 to play Nero CD/DVD Speed |                  |               |             | X          |
| <b>USB Device Full Loading Test</b>  |                  |               |             |            |
| USB Device Full Loading Test   |                  | X             |             |            |
| <b>Floppy Disk Controller Function Test</b>                                      |                  | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| Copy and compare file between C: and A / B:                                      |                  | X             |             |            |
| Change Floppy to None value  |                  | X             |             |            |
| Swap FDD   |                  | X             |             |            |
| <b>Peripheral Compatibility-Storage Device</b>                                   |                  |               |             |            |
| <b>Model</b>   | <b>Interface</b> | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| FUJITSU MCB3064SS  | SCSI             | X             |             |            |
| IO-Mega zip 100 parallel port  | Parallel         | X             |             |            |
| IO-Mega zip 100MB Internal ATAPI Drive   | IDE              | X             |             |            |
| DOC2000 M-System / MD2200-D16  |                  |               |             | X          |
| PQI FC512 512MB  | Type-I CF Card   | X             |             |            |
| HITACHI / HMS360402D5CF00  | Type- II CF Card | X             |             |            |
| <b>Digital I/O Connector Test</b>  |                  | <b>Result</b> |             |            |
|  |                  | <b>Pass</b>   | <b>Fail</b> | <b>N/A</b> |
| Input Address: ( 801 )   |                  | X             |             |            |
| Output Address: ( 801 )  |                  | X             |             |            |
| VCC:   |                  | X             |             |            |
| DIO-1 Function Test  |                  | X             |             |            |
| DIO-2 Function Test  |                  |               |             | X          |

| <b>Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules</b> |                        |                        |        |      |     |
|--|------------------------|------------------------|--------|------|-----|
| Interface  | Model                  | Type                   | Result |      |     |
|  |                        |                        | Pass   | Fail | N/A |
| PC/104   | AAEON PCM-3430         | SCSI Module            | X      |      |     |
|  | AAEON PCM-5600         | Modem Module           | X      |      |     |
|  | AAEON PCM-3115B        | PCMCIA Module          | X      |      |     |
| PC/104+  | AAEON PCM-5600         | Modem Module           |        |      | X   |
|  | AAEON PCM-3115B        | PCMCIA Module          |        |      | X   |
|  | AAEON PCM-3730         | Intel 82559 LAN Module |        |      | X   |
|  | AAEON PCM-3430         | SCSI Module            |        |      | X   |
| PCI-104  | AAEON PCM-3430         | SCSI Module            |        |      | X   |
|  | AAEON PCM-3730         | Intel 82559 LAN Module |        |      | X   |
| <b>On-Board SCSI Function Test</b>   |                        |                        |        |      |     |
| 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    |     |
| <b>COM Port Send / Receive Test</b>  |                        |                        | Result |      |     |
|  |                        |                        | Pass   | Fail | N/A |
| Use software program: COMTEST.exe  |                        |                        | X      |      |     |
| Use software program: LL5.exe  |                        |                        | X      |      |     |
| <b>Disk On Module [DOM] Compatibility Test</b>                                       |                        |                        |        |      |     |
| Model  | Interface              | Result                 |        |      |     |
|  |                        | Pass                   | Fail   | N/A  |     |
| DOM-256-026P Rev: A1K20  | IDE 40 Pin             | X                      |        |      |     |
| DOM-064-426P Rev: A2A11  | IDE 44 Pin             |                        |        | X    |     |
| <b>Mini PCI Card Compatibility Test</b>  |                        |                        |        |      |     |
| Model  | Interface              | Result                 |        |      |     |
|  |                        | Pass                   | Fail   | N/A  |     |
| GM-100 WLAN 11g Mini PCI Card<br>(Model: Sky Thru GC-100)                            | Wireless LAN           |                        |        | X    |     |
| GM-101 WLAN 11b/g 54Mbps Mini PCI Card<br>(Model: VNT6655AM)                         | Wireless LAN           |                        |        | X    |     |
| AAEON<br>PER-C100 Mini PCI Card  | RTL-8100C 10/100M      |                        |        | X    |     |
|  | RTL-8110S 10/100/1000M |                        |        | X    |     |
| <b>COM/LPT Ports &amp; RS-232/422/485 Function Test</b>                              |                        |                        | 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   |
| <b>Card Bus(PCMCIA) Compatibility Function Test</b>         |        |      |     |
| Model   | Result |      |     |
|   | Pass   | Fail | N/A |
| 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      |      |     |

### 9. O.S. Compatibility Test

| Installation Operation System Compatibility Test                    |                  | Result                                     |        |      |     |
|---|------------------|--|--------|------|-----|
|   |                  | Pass                                       | Fail   | N/A  |     |
| Linux-Red-Hat 9.0 Kernel 2.4.20-8                                   |                  | X  |        |      |     |
| Fedora Core 4   |                  |  |        | X    |     |
| Windows Server 2003 English Version / Standard Edition 5.2.3790     |                  |  |        | X    |     |
| Windows XP Professional English Version V2002 Service Pack 2        |                  | X  |        |      |     |
| Windows 2000 Professional English Version V5.00.2195 Service Pack 4 |                  | X  |        |      |     |
| Windows 98SE English Version V4.10.2222A                            |                  | X  |        |      |     |
| Windows NT Workstation 4.0 English Version Service Pack6            |                  |  |        | X    |     |
| MS-DOS 6.22   |                  | X  |        |      |     |
| <b>Utility and Driver Test</b>                                      |                  |  |        |      |     |
| OS  | Drivers Version  |  | Result |      |     |
|   |                  |  | Pass   | Fail | N/A |
| Linux-Red-Hat 9.0 / Kernel 2.4.20-8                                 | Graphics Media   | Default Driver                             | X      |      |     |
|   | LAN1 Driver      | Default Driver                             | X      |      |     |
|   | LAN2 Driver      | Default Driver                             | X      |      |     |
|   | Audio Driver     | Default Driver                             | X      |      |     |
| Windows Server 2003 English Version / Standard Edition 5.2.3790     | Graphics Media   |  |        |      | X   |
|   | LAN Driver       |  |        |      | X   |
|   | Audio Driver     |  |        |      | X   |
|   | Chipset Software |  |        |      | X   |
| Windows XP Professional English Version V2002 Service Pack 2        | Graphics Media   | S3 Graphics Twister Ver :6.13.10.1030      | X      |      |     |
|   | LAN1 Driver      | Realtek RTL8139/810x Ver: 5.612.413.2004   | X      |      |     |
|   | LAN2 Driver      | Realtek RTL8139/810x Ver: 5.612.413.2004   | X      |      |     |
|   | Audio Driver     | VIA AC97 Audio Controller Ver: 5.12.1.3200 | X      |      |     |
| Windows 2000 Professional English Version V5.00.2195 Service Pack 4 | Graphics Media   | S3 Graphics Twister Ver :6.13.10.1030      | X      |      |     |
|   | LAN1 Driver      | Realtek RTL8139/810x Ver: 5.612.413.2004   | X      |      |     |
|   | LAN2 Driver      | Realtek RTL8139/810x Ver: 5.612.413.2004   | X      |      |     |
|   | Audio Driver     | VIA AC97 Audio Controller Ver: 5.12.1.3200 | X      |      |     |

|   |                |  |   |  |   |
|---|----------------|--|---|--|---|
| Windows 98SE English Version<br>V4.10.2222A                           | Graphics Media | S3 Graphics Twister Ver : 4.13.01.0042   | X |  |   |
|   | LAN1 Driver    | RealtekRTL8139/810xVer: 5.397.0823.2001  | X |  |   |
|   | LAN2 Driver    | RealtekRTL8139/810xVer: 5.397.0823.2001  | X |  |   |
|   | Audio Driver   | VIAAC97Audio Controller Ver: 5.12.1.3200 | X |  |   |
| Windows NT Workstation 4.0 English<br>Version 4.00.1381 Service Pack6 | Graphics Media |  |   |  | X |
|   | LAN Driver     |  |   |  | X |
|   | Audio Driver   |  |   |  | X |
|   |                |  |   |  | 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      |      |     |
| <b>Power Management Test</b>                          |        |      |     |
| 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   |
| <b>PC Health Status</b>                               |        |      |     |
| 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

| <b>English Windows 2000 Professional with SP4 5.00.2195 + 1024x768x32bit / 60Hz + Direct 9.0</b> |       |                    |
|--|-------|--------------------|
| <b>ZD WinBench 99 V2.0</b>   |       | <b>Unit</b>        |
| Business Disk WinMark99  | 5760  | Thousand bytes/sec |
| High-End Disk WinMark99  | 21500 | Thousand bytes/sec |
| Business Graphics WinMark99  | 142   |                    |
| High-End Graphics WinMark99  | 351   |                    |
| <b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>  |       |                    |
| 2D Image   | 3.12  |                    |
| 3D   | 2.92  |                    |
| Bus transfer   | 3.27  |                    |
| Overall  | 3.03  | Reality marks      |
| <b>ZD 3D Winbench 2000 V1.1</b>  |       |                    |
| 3D WinMark 2000  | 7.2   | Frames / sec       |
| <b>ZD Multimedia Content Creation Winstone 2004 V1.0.1</b>                                       |       |                    |
| Multimedia Content Creation Winstone 2004  | N/A   |                    |
| <b>3Dmark2001SE Pro (Demo version)</b>   |       |                    |
| 3DMark2001SE Build 330_Benchmark mode  | 225   |                    |
| <b>English Windows XP Professional with SP2 V2002 + 1024x768x32bit / 60Hz + Direct 9.0</b>       |       |                    |
| <b>Business Winstone 2004 v1.0.1</b>   |       |                    |
| Business Winstone2004  | N/A   |                    |