

Workstation / IPC Product Certification Report

Release No: 04P010001

Product Model	WK-3501
Product Description	Full-size CPU Card Socket 478 based Intel Pentium 4 processor with integrated Intel 82845GV chipset, DDR, 4 USBs, Dual Ethernet, & Compact Flash
Test Reason	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : SBC-860 Rev:A1.2 <input checked="" type="checkbox"/> BIOS: SBC-860 BIOS Rev:1.0 (01/16/2003) <input type="checkbox"/> Renew product <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Revision change <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Component: <input checked="" type="checkbox"/> General Function <input checked="" type="checkbox"/> Chipset: North Bridge: Intel / RG82845GV-SL6NR South Bridge: Intel / FW82801DB / F246254 /SL66K <input checked="" type="checkbox"/> Audio Chipset: ALC201 / 31028K1 / 307C <input checked="" type="checkbox"/> Ethernet Chipset: Intel DA82562ET / L302NA70 <input checked="" type="checkbox"/> I/O Chipset: ITE IT-8712F-A / 0250-DYS

<u>2004-01-14</u>	<u>Wenyuan Yang</u>	<u>Rex Chang</u>
Issue date	Manager	Test Engineer

Test result for certification

Stability Test - Dynamic / Boot_UP Burn_In Test	Result
Dynamic Burn-In test. (Media Play Operating at 0 ~60 for 48hours)	Pass
Dynamic Burn-In test. (Coldstart 50 Times 8 8hours)	Pass
Dynamic Burn-In test. (Hi Temp.Storage Test 48hours.)	Pass
Dynamic Burn-In test. (Low Temp Storage Test 48hours.)	Pass
Dynamic Burn-In test. (Humidity Test 48 hors.)	Pass
Dynamic Burn-In test. (H/W Reset / K/B Reset 20 Times) 220V	Pass
Timer Accuracy Test	Result
System clock accuracy of +/-5 sec per day.	Pass
RTC timer accuracy of +/-3 sec per day.	Pass
Network HUB / LAN Connects Test	Result
LAN1 HP J4095A 24Ports [100 /10 Mbps]	Pass
LAN1 D-Link DES-1008 [100 / 10 Mbps]	Pass
LAN1 Accton DeskTop-3005 [100 / 10 Mbps]	Pass
CPU Compatible Test	Result
Pentium IV 3.06G	Pass
Pentium IV 2.4G	Pass
Pentium IV 2.0G	Pass
Memory Test – DDR 266 / 333	Result
SAMSUNG K4H560838C-TCB3 / DDR 333 / 512MB	Pass
Kingston KVR266X64C256 / DDR 266 / 512MB	Pass
KINGMAX KDL684T4AA-60 / DDR 333 / 256MB	Pass
Riser Card Test	Result
D-Link DFE-550TX Fast Ethernet Adapter / NW-2003001(Lan Card)	Pass
Creative Sound Blaster Live5.1 / SC-200200 (Sound Card)	Pass
APTEC/ASC-29160 / SS-200201 (SCSI Card)	Pass
Genuine GM56-AMI2019 / MD-007 (Modem Card)	Pass
Lemel ESS ES1868F 3d/16 PnP / SC-005 (Sound Card)	Pass
AHA-1520B / SS-002 (SCSI Card)	Pass
Intel PILA8560 10/100 Mbps / NW-006 (Lan Card)	Pass
Full Loading Test	Result
D-Link DFE-550TX Fast Ethernet Adapter / NW-2003001(Lan Card)	Pass
Creative Sound Blaster Live5.1 / SC-200200 (Sound Card)	Pass
APTEC/ASC-29160 / SS-200201 (SCSI Card)	Pass
Genuine GM56-AMI2019 / MD-007 (Modem Card)	Pass
Lemel ESS ES1868F 3d/16 PnP / SC-005 (Sound Card)	Pass
AHA-1520B / SS-002 (SCSI Card)	Pass
USB Function Test	Result
USB Function under Windows 98SE	Pass
USB Keyboard under Dos 6.22	Pass

Floppy Disk Controller Test	Result
Copy and Compare file between C : and A/B	Pass
Format A/B with system transfer and boot PC from floppy	Pass
Change CMOS Floppy is NONE value	Pass
SWAP FDD	Pass
Keyboard Pad Function Test	Result
Any Key	Pass
I/O Peripheral Test	Result
USB Ports	Pass
Modular System Industrial Workstation Function Test	Result
AC power outlet / inlet	Pass
Power On / Off	Pass
CD-ROM & Floppy drive included	Pass
Lockable front-panel door	Pass
Touch Screen	Pass
Touch Pad	Note ¹
PS/2 keyboard connector	Pass
59 Data-entry&20/24 function keys	Pass
Digital brightness controller	Pass
OSD Function Test	Pass
Performance Test – CPU Pentium IV / 2.0GHz , DDR 266 512MB	Result
LandMark Speed 2.0 – CPU	22102
LandMark Speed 2.0 – FPU	6111.34
LandMark Speed 2.0 – VIDEO	17873
WinBench 99 V1.1- CPU mark99	123
WinBench 99 V1.1- FPU winmark	6970
WinBench 99 V1.1- Business Graphic winmark99	182
WinBench 99 V1.1- High_end Graphic winmark99	718
Final Reality V1.01 BenchMark Test – 2D image	17.96
Final Reality V1.01 BenchMark Test – 3D	6.98
Final Reality V1.01 BenchMark Test – Bus transfer	14.89
Final Reality V1.01 BenchMark Test – Overall	11.46
3D WinBench 2000 Processor Test	1.98
C.C. WinStone 2001	64.2
High End WinStone 99	77.9
Operation System Compatible Test	Result
Windows 98SE English version	Pass
Windows NT workstation 4.0 English version with service pack 6	Pass
Windows 2000 professional English version	Pass
Windows XP Home Edition English version	Pass
Linux 8.0 English	Pass

Utility and Driver Test	Result
VGA for Windows 98SE (On Board Intel82845G Driver Ver.4.13.01.3317)	Pass
VGA for Windows NT 4.0 (On Board Intel82845G Driver Ver.4.03.1381.3317.)	Pass
VGA for Windows 2000P (On Board Intel82845G Driver Ver.4.13.01.3317.)	Pass
VGA for Windows XP (On Board Intel82845G Driver Ver. 4.13.01.3317.)	Pass
LAN for Windows 98SE (On Board Intel 82562 Driver Ver. 6.01.03.0000)	Pass
LAN for Windows NT 4.0 (On Board Intel 82562 Driver Ver. 6.01.03.0000)	Pass
LAN for Windows 2000P (On Board Intel 82562 Driver Ver. 6.01.03.0000)	Pass
LAN for Windows XP (On Board Intel 82562 Driver Ver. 6.01.03.0000)	Pass
Sound for Windows 98SE (On Board Avance AC'97 Audio Driver Ver.5.10.5011)	Pass
Sound for Windows NT 4.0 (On Board Avance AC'97 Audio Driver Ver.4.3.0.030)	Pass
Sound for Windows 2000P (On Board Avance AC'97 Audio Driver Ver.5.10.0.4010)	Pass
Sound for Windows XP (On Board Avance AC'97 Audio Driver Ver.5.10.0.4010)	Pass

Summary OF Result	
Note¹	Test O.S.: Windows NT 4.0 Chipset vender does not provide NT4.0 USB 2.0 driver.
	Test O.S.: Windows 98 / Windows 2000 / Window XP WK-3501 will have conflict when using Logitech M-S34 PS/2 mouse (with USB / PS/2 converter) and touch screen together in Windows XP. That will cause PS/2 mouse malfunction.

Workstation / IPC

Product Certification Report

Release No: 04P010020

Product Model	WK-3501
Product Description	Full-size CPU Card Socket 478 based Intel Pentium 4 processor with integrated Intel 82845GV chipset, DDR, 4 USBs, Dual Ethernet, & Compact Flash
Test Reason	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : SBC-780 Rev:A1.0 <input checked="" type="checkbox"/> BIOS: AWK-3501 Bios Ver.1.0 (03/26/2004) [SBC-780 BIOS 1.2] <input type="checkbox"/> Renew product <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Revision change <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Component: <input checked="" type="checkbox"/> General Function <input checked="" type="checkbox"/> Chipset: North Bridge: VIA / S3 Twister South Bridge: VIA / VT82C686B <input checked="" type="checkbox"/> Audio Chipset: VIA / VT82C686B <input checked="" type="checkbox"/> Ethernet Chipset: RTL 8139DL <input checked="" type="checkbox"/> I/O Chipset: VIA / VT82C686B <input checked="" type="checkbox"/> Other Power Supply: UMEC UPF300-AF / 300W / (ATX) Backplane : HPCI 10S Ver:6.1

2004-05-31
Issue date

Wenyuan Yang
Manager

Rex Chang
Test Engineer

Test result for certification

Stability Test - Dynamic / Boot_UP Burn_In Test	Result
Dynamic Burn-In test. (Media Play Operating at 0 ~60 for 48hours)	Pass
Dynamic Burn-In test. (Coldstart 50 Times 8 8hours)	Pass
Dynamic Burn-In test. (Hi Temp.Storage Test 48hours.)	Pass
Dynamic Burn-In test. (Low Temp Storage Test 48hours.)	Pass
Dynamic Burn-In test. (Humidity Test 48 hors.)	Pass
Dynamic Burn-In test. (H/W Reset / K/B Reset 20 Times) 220V	Pass
Timer Accuracy Test	Result
System clock accuracy of +/-5 sec per day.	Pass
RTC timer accuracy of +/-3 sec per day.	Pass
Network HUB / LAN Connects Test	Result
LAN1 HP J4095A 24Ports [100 /10 Mbps]	Pass
LAN1 D-Link DES-1008 [100 / 10 Mbps]	Pass
LAN1 Accton DeskTop-3005 [100 / 10 Mbps]	Pass
CPU Compatible Test	Result
Pentium III 1.4G	Pass
Celeron 1.1G	Pass
Celeron 566MHz	Pass
Memory Test – DDR 266 / 333	Result
HYNIX K4H560838C-TCB3 / PC-133 / 512MB	Pass
Kingston KVR266X64C256 / PC-133 / 128MB	Pass
KINGMAX KDL684T4AA-60 / PC-100 / 128MB	Pass
Riser Card Test	Result
D-Link DFE-530TX Fast Ethernet Adapter / NW-200202 (Lan Card)	Pass
Takram DC-395U V1.02 / SS-200200 (SCSI Card)	Pass
APTEC/ASC-29160 / SS-200201 (SCSI Card)	Pass
Genuine GM56-AMI2019 / MD-007 (Modem Card)	Pass
AHA-1520B / SS-002 (SCSI Card)	Pass
Intel PILA8560 10/100 Mbps / NW-006 (Lan Card)	Pass
Full Loading Test	Result
D-Link DFE-550TX Fast Ethernet Adapter / NW-2003001(Lan Card)	Pass
Takram DC-395U V1.02 / SS-200200 (SCSI Card)	Pass
APTEC/ASC-29160 / SS-200201 (SCSI Card)	Pass
Genuine GM56-AMI2019 / MD-007 (Modem Card)	Pass
AHA-1520B / SS-002 (SCSI Card)	Pass
Intel PILA8560 10/100 Mbps / NW-006 (Lan Card)	Pass
USB Function Test	Result
USB Function under Windows 98SE	Pass
USB Keyboard under Dos 6.22	Pass

Floppy Disk Controller Test	Result
Copy and Compare file between C : and A/B	Pass
Format A/B with system transfer and boot PC from floppy	Pass
Change CMOS Floppy is NONE value	Pass
SWAP FDD	Pass
Keyboard Pad Function Test	Result
Any Key	Pass
I/O Peripheral Test	Result
USB Ports	Pass
Modular System Industrial Workstation Function Test	Result
AC power outlet / inlet	Pass
Power On / Off	Pass
CD-ROM & Floppy drive included	Pass
Lockable front-panel door	Pass
Touch Screen	Pass
Touch Pad	Note ¹
PS/2 keyboard connector	Pass
59 Data-entry&20/24 function keys	Pass
Digital brightness controller	Pass
OSD Function Test	Pass
Performance Test – CPU Pentium IV / 2.0GHz , DDR 266 512MB	Result
LandMark Speed 2.0 – CPU	8844.91
LandMark Speed 2.0 – FPU	41820
LandMark Speed 2.0 – VIDEO	65536
WinBench 99 V1.1- CPU mark99	117
WinBench 99 V1.1- FPU winmark	7660
WinBench 99 V1.1- Business Graphic winmark99	432
WinBench 99 V1.1- High_end Graphic winmark99	1380
Final Reality V1.01 BenchMark Test – 2D image	10.17
Final Reality V1.01 BenchMark Test – 3D	5.77
Final Reality V1.01 BenchMark Test – Bus transfer	4.13
Final Reality V1.01 BenchMark Test – Overall	6.84
3D WinBench 2000 Processor Test	3.06
C.C. WinStone 2001	55.2
High End WinStone 99	69.2
Operation System Compatible Test	Result
Windows 98SE English version	Pass
Windows NT workstation 4.0 English version with service pack 6	Pass
Windows 2000 professional English version	Pass
Windows XP Home Edition English version	Pass
Linux 8.0 English	Pass

Utility and Driver Test	Result
VGA for Windows 98SE (On Board S3 Twister Driver Ver.1/24/2002 4.13.01.3025.13.00.25)	Pass
VGA for Windows NT 4.0 (On Board S3 Twister Driver Ver. 4.1024.1310.0002, 4.0.0)	Pass
VGA for Windows 2000P (On Board S3 Twister Driver Ver. 6.13.10.1030)	Pass
VGA for Windows XP (On Board S3 Twister Driver Ver. 12/25/2001 6.13.10.1031)	Pass
LAN for Windows 98SE(On Board Realtek RTL8139DL DriverVer.12/30/2002 5.505.1004.2002)	Pass
LAN for Windows NT 4.0 (On Board Realtek RTL8139DL Driver Ver.)	Pass
LAN for Windows 2000P (On Board Realtek RTL8139DL Driver Ver. 5.505.1004.2002)	Pass
LAN for Windows XP (On Board Realtek RTL8139DL Driver Ver. 10/14/2002 5.505.1004.2002)	Pass
Sound for Windows 98SE (On Board VIA VT82C686B Driver Ver. 4/13/2001 5.12.1.3200)	Pass
Sound for Windows NT 4.0 (On Board VIA VT82C686B Audio Driver Ver.)	Pass
Sound for Windows 2000P (On Board VIA VT82C686B / Driver Ver. 5.12.1.3200)	Pass
Sound for Windows XP (On Board VIA VT82C686B / Driver Ver. 4/13/2001 5.12.1.3200)	Pass

Summary OF Result

Note¹	Test O.S.: Windows NT 4.0 Chipset vender does not provide NT4.0 USB 2.0 driver.
	Test O.S.: Windows 98 / Windows 2000 / Window XP WK-3501 will have conflict when using Logitech M-S34 PS/2 mouse (with USB / PS/2 converter) and touch screen together in Windows XP. That will cause PS/2 mouse malfunction.