

Test Result for Certification

Dynamic / Boot_UP Burn_In Test		
Test Method	Test Condition	Result
Diagnostics Software Burn-In Test.	0 ~60 , 48 hrs	PASS
Power On/Off Test.	0 ~60 , 24hrs	PASS
Voltage Range Test		
Power On/Off Test in DO-100V Power Function Test	10 times in Room Temperature	PASS
Power On/Off Test in DOS-210V Power Function Test	10 times in Room Temperature	PASS
KB Reset in Dos Mode-100V Power Function Test	20 times in Room Temperature	PASS
I/O Peripheral Function Test – I/O Function		Result
Floppy Connector / Driver A:		PASS
Primary IDE Master		PASS
Primary IDE Slave		PASS
SATA1 / Serial ATA Connector 1		PASS
SATA2 / Serial ATA Connector 2		PASS
SATA3 / Serial ATA Connector 3		PASS
SATA4 / Serial ATA Connector 4		PASS
Compact Flash - Type I		PASS
Compact Flash - Type II		PASS
DOM (Disk On Module) - 40 Pin		PASS
COM 1		PASS
COM 2-232		PASS
COM 2-422		PASS
COM 2-485		PASS
Clear CMOS		PASS
PS/2 Mouse & Keyboard (Internal)		PASS
PS/2 Mouse (External)		PASS
PS/2 Keyboard (External)		PASS
Audio Connector		PASS
LPT 1		PASS
SIR / 115.2 Kbps		PASS
USB 1&2 Ports		PASS
USB 3&4 Ports		PASS
USB 5 Ports		PASS
USB 6 Ports		PASS
USB 2.0 1 & 2 Ports		PASS
USB 2.0 3 & 4 Ports		PASS
USB 2.0 5 Ports		PASS
USB 2.0 6 Ports		PASS
VGA Display		PASS
DIMM Slots		PASS
Internal KB & Mouse		PASS
Watchdog IRQ n		PASS
Watchdog Software Control		PASS
I/O Peripheral Function Test –Front Panel and Other connector		Result
Power On Button		PASS
IDE LED		PASS
External Buzzer		PASS
On Board Buzzer		PASS

Power LED					PASS				
Reset Switch					PASS				
Keyboard Lock					PASS				
Ext. K/B Connector					PASS				
Internal K/B Connector					PASS				
CPU FAN Connector					PASS				
I/O Peripheral Function Test – Power Connector & Function					Result				
ATX Power Connector					PASS				
ATX Power_12V Connector					PASS				
Big 4P Power Connector					PASS				
Mini 4P Power Connector					PASS				
Option ATX Power Connector (PS-ON / +5VSB)					PASS				
I/O Peripheral Function Test – LAN Connector & Function					Result				
LAN Active LED	LAN1				PASS				
	LAN2				PASS				
LAN Link LED	LAN1				PASS				
	LAN2				PASS				
LAN 10/100 Ethernet					PASS				
LAN 1G Ethernet					PASS				
I/O Peripheral Function Test – PCI Connector & Function					Result				
PCI Slots					PASS				
Power Consumption Test									
	ATX Power: Seventeam ST-352HLP MAX: 220W				AT Power:				
	CPU: Intel® Pentium® 4 CPU 3.2GHz / 800MHz / L2:1MB		CPU: Intel® Pentium® 4 CPU 2.8GHz / 800MHz / L2:1MB		CPU:		CPU:		
Normal Mode (+5V)	4.00	A	3.90	A	A	A	A		
Suspend Mode (+5V)	3.60	A	3.35	A	A	A	A		
5VSB in Power Off Mode (just for ATX)	0.67	A	0.16	A	-----	A	-----	A	
Normal Mode (+12V)	7.70	A	6.32	A	A	A	A		
Suspend Mode (+12V)	4.34	A	3.29	A	A	A	A		
Normal Mode (+3.3V) (just for ATX)	0	A	0	A	-----	A	-----	A	
Suspend Mode (+3.3V) (just for ATX)	0	A	0	A	-----	A	-----	A	
Normal Mode (-12V)	0.02	A	0.02	A	A	A	A		
Suspend Mode (-12V)	0.02	A	0.02	A	A	A	A		
Normal Mode (-5V)	0	A	0.01	A	A	A	A		
Suspend Mode (-5V)	0.01	A	0.01	A	A	A	A		
Power Connector Test (110V/220V)					Voltage Range				Result
ATX Connector Power On/Off for 10 times in DOS									PASS
Timer Accuracy Test									
System Clock & RTC Clock Test									
Test Method		Margin for error			Result				
System Clock in Power On Mode		+-1 second during 24 hours			PASS				
RTC Clock in Power On Mode		+-1 second during 24 hours			PASS				
Watchdog Timer Test					Result				
Time-out Interval	10 sec				PASS				
	60 sec				PASS				
Network HUB / LAN Connection Test					Result				
OnBoard LAN1 LED	Active LED				PASS				
	Link LED				PASS				
OnBoard LAN2 LED	Active LED				PASS				

		Link LED		PASS
LAN Location	LAN Speed	HUB Type	HUB Speed	Result
LAN1	10/100 Mbps	HP J4095A 24 Ports	100 Mbps	PASS
		D-Link DGS-1008T	1Gbps	PASS
		Intel InBusiness 8 Ports	10 Mbps	PASS
		LEMEL LM-S5 5 Ports	100 Mbps	PASS
		Accton Desktop-3005	100 Mbps	PASS
		SVEC FD916H	10 Mbps	PASS
	1Gbps	D-Link DGS-1008T	1Gbps	PASS
		D-Link DGS-1008T	1Gbps	PASS
LAN Location	Speed	Type	Speed	Result
LAN2	10/100 Mbps	HP J4095A 24 Ports	100 Mbps	PASS
		D-Link DGS-1008T	1Gbps	PASS
		Intel InBusiness 8 Ports	10 Mbps	PASS
		LEMEL LM-S5 5 Ports	100 Mbps	PASS
		Accton Desktop-3005	100 Mbps	PASS
		SVEC FD916H	10 Mbps	PASS
	1Gbps	D-Link DGS-1008T	1Gbps	PASS
		D-Link DGS-1008T	1Gbps	PASS

Hardware Compatibility

CPU Compatible Test

Type	Speed	FSB	Run HCT Version	Result
Intel® Pentium® 4 CPU/ 1MB	3.2GHz	800MHz	9.5	PASS

Memory Compatibility Test

Brand	Chipset	Frequency	Size	Result
184pin	0302VR V58C2256804SAT5	DDR400	256	PASS
184pin	0344VH V58C2256804SAT5B	DDR400	512	PASS
Kingston KVR33364C25	Kingston D328DL-60	DDR333	256	PASS
Kingston KVR266X64C25	Kingston D328DL-60	DDR266	512	PASS
Transcend	SAMSUNG K4H560438E-GCCC	DDR400	1GB	PASS

On Board Audio Function Test

Audio Basic Function Test

	Result	
System Sound	PASS	
Play CD_IN	PASS	
Play Sound Recorder	PASS	
Line Out	PASS	
Line In	PASS	
Line In Sound Record	PASS	
MIC Speaker	Dynamic	PASS
	Condenser	PASS
MIC Sound Recorder	Dynamic	PASS
	Condenser	PASS

PCI Slot Function (PCI Adapter Card) Test

Backplane Jumper/Connector/LED Verification:

Connector

CN3 (3 pin +12V DC Fan connector, 90°)	PASS
CN4 (PS-ON function, to CPU Card for ATX Power signal, 3 pin connector, 90°)	PASS
CN5 (3 pin +12V DC Fan connector, 90°)	PASS
KB1 (KB Out, from CPU card K/B connector , 90°)	PASS
KB2 (KB_In, 5 pin external K/B connector, 180°)	PASS

KB3 (KB Out, from CPU card K/B connector , 90°)		PASS
KB4 (PS/2 keyboard connector)		PASS
Power Connector		
ATX1 (ATX Power, 180°)		PASS
LED (PCB Printout)		
LED1 (+3.3V)		PASS
LED2 (+5V)		PASS
LED3 (+12V)		PASS
LED4 (-5V)		PASS
LED5 (-12V)		PASS
LED6 (+5VSB)		PASS
Model	Type	Result
EP-P80P Rev:0.1: PCI Debug Card	Debug Card	PASS
Matrox G450	VGA Card	PASS
CHAINTECH NVIDIA GeForce4 MX440-8X	VGA Card	PASS
SC3000 CMI8738/C3DX	Sound Card	PASS
Takram DC-395U V1.02	SCSI Card	PASS
D-Link FE-530TX Fast Ethernet Adapter	LAN Card	PASS
Intel SB82559 (10/100Mbps)	LAN Card	PASS
D-Link DGE-530T 1000BASE-T Gigabit Ethernet Adapter	LAN Card	PASS
D-Link DWL-520+ Wireless LAN	LAN Card	PASS
Genuine GM56-AMI2019	Modem Card	PASS
ABIT HotRod 100 Pro	RAID Card	PASS
D-Link DU-520 USB 2.0	Other Card	PASS
Tekram TR-822 Serial ATA 150 [SA-001] + SATA HAA Seagate ST312 0026AS 120GB [ID-200305]	Other Card	PASS
Adapter Card (ISA)		
Creative Sound Blaster CT4170	Sound Card	PASS
Intel EtherExpress™ PRO/100 LAN Adapter	LAN Card	PASS
AHA-1510/20/22B	SCSI Card	PASS
PCI-Express Function Test		
Model		Result
PER-C102 A0.1 PCI-Express x1 LAN Card		PASS
HHDD Compatible Test		
Model		Result
Hitachi / HDS722525VLAT80 / 250GB / ATA-100		PASS
IBM / DTLA-307045 / 46.1GB / ATA-100		PASS
FUJITSU / MPE 3136AH / 13.6GB / ATA-66		PASS
Maxtor / 4G160J8 / 160GB / ATA-133		PASS
Quantum / Fireball Plug AS / 30GB / ATA-100		PASS
Seagate / ST310210A / 10.2GB / ATA-66		PASS
Western / WD400BB-75DEA0 / 40GB / ATA-100		PASS
Seagate / ST3120827AS / 120GB / ATA-100 / S-ATA		PASS
Seagate / ST3120026AS / 120GB / ATA-100 / S-ATA		PASS
CD/DVD-ROM Compatibility Test		
Model		Result
Acer DVP1640A / 16X / DVD-ROM		PASS
Creative DVD1240E / 12X / DVD-ROM		PASS
IBM HL-DT-ST / GCR-8480B / 48X / CD-ROM		PASS
Pioneer / DVD-121 / 16X / DVD-ROM		PASS
PHILIPS CDD5301 / PBC03210G / 32X10X40 / 12X DVD / CD-RW / DVD-ROM		PASS
SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X		PASS
NEC / ND-2500A / DVD R/RW / +R8X-R8X		PASS
TEAC / CD-540E / 40X / CD-ROM		PASS

IDE Cable Function test		
IDE Model		Result
40 Pin Cable ATA33		PASS
80 Pin Cable ATA100		PASS
USB Function Test		
USB Basic Function Test		Result
USB Controller		PASS
USB 2.0 Controller		PASS
USB Keyboard Support		PASS
USB Mouse Support		PASS
USB 1.1 Compatible Test		Result
USB 1.1 Compatible Test		PASS
USB 2.0 Compatible Test		Result
USB 2.0 Compatible Test		PASS
USB 2.0 Function Test		Result
Use High Speed Device USB2.0 CD-R/WBenQ / 4824W1-ON2 to play Nero CD/DVD Speed		PASS
USB Extension Devices Function Test		
Model	Type	Result
CyberLink Power DVD XP4.0	Remote Control	PASS
BENQ 4824WI-ON2	CD-RW	PASS
PLEXTOR PX-S88TU	CD-RW	PASS
USB HDD IBM DARA-206000 6GB [ID-200401] (include USB2.0 2.5" External USB Box)	HDD	PASS
IOMEGA ZIP 100MB	ZIP	PASS
Mitsumi FL3.5D353GUE/FUE	Floppy	PASS
IOMega ZIP100	ZIP	PASS
Floppy Disk Controller Function Test		Result
Copy and compare file between C: and A / B:		PASS
Change Floppy to None value		PASS
Swap FDD		PASS
Peripheral Compatibility-Storage Device		
Model	Interface	Result
FUJITSU MCB3064SS	SCSI	PASS
IOmega zip 100 parallel port	Parallel	PASS
IOmega zip 100MB Internal ATAPI Drive	IDE	PASS
PQI FC512 512MB	Type-I CF Card	PASS
HITACHI / HMS360402D5CF00	Type- CF Card	PASS
COM Port Send / Receive Test		Result
Use software program: COMTEST.exe		PASS
Use software program: LL5.exe		PASS
Disk On Module [DOM] Compatibility Test		
Model	Interface	Result
DOM-256-026P Rev: A1K20	IDE 40 Pin	PASS
COM/LPT Ports & RS-232/422/485 Function Test		Result
RS-422 for COM2		PASS
RS-485 for COM2		PASS
COM1		PASS
COM2		PASS
LPT1		PASS
O.S. Compatibility Test		
Installation Operation System Compatible Test		Result
Linux-RedHat 9.0 / Kernel 2.4.20-8		PASS
Windows 2000 Professional 5.00.2195 with Service Pack 4 Server Version		PASS
Windows XP Professional English Version V2002 with Service Pack 2		PASS
Windows 2000 Professional English Version V5.00.2195 with Service Pack 4		PASS

DOS 6.22		PASS	
Utility and Driver Test			
OS	Drivers Version	Result	
Linux-RedHat 9.0 / Kernel 2.4.20-8	VGA	Default	PASS
	LAN	Default	PASS
	Audio	Linux 9.0 kernel does not support Intel 915 chipset, But Fedora Linux is OK	N/A
Windows 2000 Professional 5.00.2195 with Service Pack 4 Server Version	VGA	Intel® 82915G/GV/910GL Express Chipset Family V6.14.10.4277 3/10/2005	PASS
	LAN	Marvell Yukon 88E8053 PCI-E Gigabit Ethernet Controller V8.24.3.3 03/30/2005	PASS
	Audio	Realtek AC97 Audio V5.10.0.5820	PASS
Windows XP Professional English Version V2002 with Service Pack 2	VGA	Intel® 82915G/GV/910GL Express Chipset Family V6.14.10.4277 3/10/2005	PASS
	LAN	Marvell Yukon 88E8053 PCI-E Gigabit Ethernet Controller V7.29.4.3 11/26/2004 Marvell Yukon 88E8036 PCI-E Fast Ethernet Controller V7.29.4.3 11/26/2004	PASS
	Audio	Realtek AC97 Audio V5.10.0.5530 3/19/2004	PASS
Windows 2000 Professional English Version V5.00.2195 with Service Pack 4	VGA	Intel® 82915G/GV/910GL Express Chipset Family V6.14.10.4277 3/10/2005	PASS
	LAN	Marvell Yukon 88E8053 PCI-E Gigabit Ethernet Controller V8.24.3.3 03/30/2005	PASS
	Audio	Realtek AC97 Audio V5.10.0.5820	PASS
DOS 6.22		PASS	
BIOS Function Test		Result	
Standard CMOS Setup Test		PASS	
Boot Sequence Test		PASS	
Power Management Test			
APM Power Management Test		PASS	
ACPI Power Management Test		PASS	
Wake Up Event Test		PASS	
Power On after Power Failure Test		PASS	
CMOS Backup / Clear CMOS Test		PASS	
Boot ROM Test (RPL/PXE)		PASS	
Supervisor / User Password Test		PASS	
Init Display First Function Test		PASS	
On-Chip Serial ATA Function Test		PASS	
PC Health Status			
Voltage Monitor Test		PASS	
FAN Speed Monitor Test		PASS	
Temperature Monitor Test		PASS	
USB Onboard Device Function Test		PASS	
COM Address / IRQ Test		PASS	
LPT Address / IRQ Test		PASS	
BIOS AWDFLASH Program Test		PASS	
Touch Screen LCD for Serial Ports Test	Address	IRQ	Result

COM1	3F8	IRQ4	PASS
COM2	2F8	IRQ3	PASS
Performance Test			
English Windows 2000 Professional with SP4 5.00.2195 + 1280x1024x32bit / 60Hz + Direct 9.0			
ZD WinBench 99 V2.0			Unit
Business Disk WinMark99	6820 ^{1.3.4}		Thousand bytes/sec
High-End Disk WinMark99	24600 ^{3.5.6}		Thousand bytes/sec
Business Graphics WinMark99	339 ^{3.0.14.15.10}		
High-End Graphics WinMark99	1070 ^{3.0.7.8.9.10.11.12.13}		
Final Reality V1.01—BenchMark Test (Reality Marks)			
2D image	35.13		
3D	5.79		
Bus transfer	49.61		
Overall	21.16		Reality marks
ZD 3D Winbench 2000 V1.1			
3D WinMark 2000	143 ^{2.5.27.44.53.55.56.58.61.62.63.64.66}		Frames / sec
ZD Multimedia Content Creation Winstone 2004 V1.0.1			
Multimedia Content Creation Winstone 2004			1.2
3Dmark2001SE Pro (Demo version)			
3DMark2001SE Build 330_Benchmark mode			3526
English Windows XP Professional with SP2 V2002 + 1280x1024x32bit / 60Hz + Direct 9.0			
Business Winstone 2004 v1.0.1			
Business Winstone2004			1.2
System Integrated Application Test			Result
A. System Integrated Application Test (Burn-In 8 Hrs):			PASS