

Product Certification Report

Release No : 04I010010

Product Model	FSB-865G
Product Description	Full-size PICMG CPU Card. Socket 478 Pentium 4 Processor CPU Card. with VGA / two Ethernet. / LVDS/Mini PCI /Audio/CFD/7USBs/Mini PCI/ATX Rev A1.0
Test Reason	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : FSB-865G Rev:A0.3 <input checked="" type="checkbox"/> BIOS: FSB-865G BIOS Rev.1.0 (2004/10/12) <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 :

2004-10-13

Issue date

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Manager

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Test Engineer

Test result for certification

Operation System Compatible Test	Result
Linux RedHat 9.0 / Kernel 2.4.20-8	Pass
Windows Server 2003 English Version / Standard Edition 5.2.3790	Pass
Windows XP Professional English Version / 2002	Pass
Windows 2000 SERVER English Version	Pass
Windows 2000 Professional English Version /2.00.2195	Pass
DOS 6.22 and DOS Utility Compatibility Test	Pass
Utility and Driver Test	Result
RedHat Linux 9.0 hardware compatible list for VGA	Default
RedHat Linux 9.0 hardware compatible list for LAN	Default
RedHat Linux 9.0 hardware compatible list for Audio	Default
VGA for Windows Server 2003 (Intel®82865G Graphic Controller Ver:6.14.10.3722.)	Pass
VGA for Windows XP (Intel®82865G Graphic Controller Ver:6.14.10.3722.)	Pass
VGA for Windows 2000P (Intel®82865G Graphic Controller Ver:6.14.10.3722.)	Pass
VGA for Windows 2000S (Intel®82865G Graphic Controller Ver:6.14.10.3722.)	Pass
LAN1 for Windows Server 2003(Intel®PRO/100VE Network Connection Ver: 7.1.8.0)	Pass
LAN1 for Windows XP (Intel®PRO/100VE Network Connection Ver : 7.1.8.0)	Pass
LAN1 for Windows 2000P (Intel®PRO/100VE Network Connection Ver: 7.1.8.0)	Pass
LAN1 for Windows 2000S (Intel®PRO/100VE Network Connection Ver: 7.1.8.0)	Pass
LAN2 for Windows Server 2003(Intel®PRO/1000MT Network Connection Ver: 7.3.13.0)	Pass
LAN2 for Windows XP (Intel®PRO/1000MT Network Connection Ver: 7.3.13.0)	Pass
LAN2 for Windows 2000P(Intel®PRO/1000MT Network Connection Ver: 7.3.13.0)	Pass
LAN2 for Windows 2000S (Intel®PRO/1000MT Network Connection Ver: 7.3.13.0)	Pass
Audio for Windows Server 2003 (Realtek AC97 Ver: 5.10.0.5530)	Pass
Audio for Windows XP (Realtek AC97 Ver: 5.10.0.5530)	Pass
Audio for Windows 2000P (Realtek AC97 Ver: 5.10.0.5530)	Pass
Audio for Windows 2000S (Realtek AC97 Ver: 5.10.0.5530)	Pass
BIOS Function Test	Result
Standard CMOS Setup Test	Pass
Boot Sequence Test	Pass
APM Power Manager Test	Pass
ACPI Power Manager Test	Pass
Power On Function Test	Pass
Wake Up Event Test	Pass
CMOS Backup / Clear CMOS Test	Pass
Boot ROM Test (RPL/PXE)	Pass
Supervisor / User Password Test	Pass
Boot Display - CRT Function Test	Pass
Boot Display - LVDS Function Test	Note ¹
Boot Display - CRT + LVDS Function Test	Note ²
Boot Display – TV Function Test	Note ³
Boot Display - CRT + TV Function Test	Note ⁴
TV S Port Standard Function Test – NTSC	Note ⁵
TV AV Port Standard Function Test ---NTSC / PAL	Note ⁶

Init Display First Function Test	Pass	
On-Chip Serial ATA Function Test	Pass	
SATA Mode-IDE/RAID Function Test	Pass	
Voltage Monitor Test	Pass	
FAN Speed Monitor Test	Pass	
Temperature Monitor Test	Pass	
Swap Floppy Drive & Boot up Floppy Seek Function Test	Pass	
USB Onboard Device Function Test	Pass	
COM Address / IRQ Test	Pass	
LPT Address / IRQ Test	Pass	
BIOS Awdflash Program Test	Pass	
Dynamic / Boot_UP Burn_In Test	Test Condition	Result
Diagnostics Software Burn-In Test.	0°C ~60°C , 48 hrs	Pass
Audio Play For Sound Codec Chipset Burn-In Test.	0°C & 60°C , 2 hrs	Pass
LAN Chipset Burn-In Test.	0°C & 60°C , 2 hrs	Pass
Power On/Off Test.	0°C ~60°C , 24hrs	Pass
220V Power Function Test.	Room Temperature	Pass
Voltage Range Test – 210V Power Function Test	Room Temperature	Pass
Voltage Range Test – 100V Power Function Test	Room Temperature	Pass
Keyboard Reset Test.	20 Times , DOS Mode	Pass
Windows HCT 9.5 System Stress Test.		Pass
I/O Peripheral Function Test – I/O Function		Result
Floppy Connector / Driver A: & B:		Pass
Primary IDE Master		Pass
Primary IDE Slave		Pass
Secondary IDE Master		Pass
Secondary IDE Slave		Pass
Serial ATA1		Pass
Serial ATA2		Pass
Compact Flash-Type I		Pass
DOM (Disk On Module) - 40Pin		Pass
COM1		Pass
COM2-232		Pass
COM2-422		Pass
COM2-485		Pass
Clear CMOS		Pass
PS/2 Mouse & Keyboard (Internal)		Pass
PS/2 Mouse & Keyboard (External)		Pass
Audio Connector		Pass
Audio 5.1 Channel S/P DIF		Pass
LCD Voltage 5V/3.3V Selection		Note ⁷
LPT1 – Printer Type : HP Photo Smart P1000		Pass
SIR / 115.2 Kbps		Pass
USB 1 & 2 Ports		Pass
USB 3 & 4 Ports		Pass
USB 5 & 6 & 7 Ports		Pass
USB 2.0 :1 & 2 Ports		Pass

USB 2.0 :3 & 4 Ports	Pass
USB 2.0 :5 & 6 & 7 Ports	Pass
VGA Display	Pass
LVDS	Note ⁸
TV-OUT / AV Output – NTSC	Note ⁹
TV-OUT / S Output – NTSC	Note ¹⁰
TV-OUT / AV Output – PAL	Note ¹¹
Watchdog Software Control	Pass
I/O Peripheral Function Test – Front Panel & Function	Result
Power On Button	Pass
IDE LED	Pass
External Buzzer	Pass
On Board Buzzer	Pass
Power LED	Pass
Reset Switch	Pass
CPU FAN Connector	Pass
I/O Peripheral Function Test – Power Connector & Function	Result
ATX Power Connector	Pass
ATX Power_12V Connector	Pass
Option ATX Power Connector (PS-ON / +5VSB)	Pass
I/O Peripheral Function Test – LAN Connector & Function	Result
LAN1 Speed LED	Note ¹²
LAN2 Speed LED	Pass
LAN1 Active LED	Note ¹³
LAN2 Active LED	Pass
LAN1 Link LED	Note ¹⁴
LAN2 Link LED	Pass
LAN1 10/100 Ethernet	Pass
LAN2 10/100 Ethernet	Pass
LAN2 1G Ethernet	Pass
I/O Peripheral Function Test – PCI Connector & Function	Result
PCI Slots	Pass
Power Consumption Test (Intel / Pentium 4 CPU 2.40GHz(133*18.0))	Result
Normal Mode (+5V)	3.0A
Suspend mode (+5V)	2.56A
5VSB mode – ATX Power Supply	0.1A
Normal Mode (+12V)	3.20A
Suspend mode (+12V)	0.95A
Normal Mode (+3.3V) –ATX Power Supply	0A
Suspend mode (+3.3V)-ATX Power Supply	0A

Power Connector Test (110V/220V)		Voltage Range		Result	
ATX Power (+5V)		4.75V~5.25V		Pass	
ATX Power (+3.3V)		3.3V		Pass	
ATX Power (+12V)		11.4V~12.6V		Pass	
Timer Accuracy Test				Result	
RTC Timer Accuracy of +/-1 sec per day.				Pass	
System Clock Accuracy of +/-1 sec per day.				Pass	
Watchdog Timer Accuracy of +/-20% sec per minute.				Pass	
Network HUB/LAN Connects Test (LAN1/LAN2)				Result	
HUB	Type	Speed		Pass	
	HP J4095A 24 Ports	10/100 Mbps		Pass	
	D-Link DGS-1008T	10/100 Mbps		Pass	
	Intel Inbusiness 8 Ports	10/100 Mbps		Pass	
	LEMEL LM-S5 5 Ports	10/100 Mbps		Pass	
	Accton Desktop-3005	10/100 Mbps		Pass	
	SVEC FD916H	10 Mbps		Pass	
	D-Link DGS-1008T	1Gbps		Pass	
LED Indicator Lights Function		LAN1 LED		Note ¹⁵	
		LAN2 LED		Pass	
Touch Screen LCD for Serial Ports Test		Address	IRQ	Result	
COM1		3F8	IRQ4	Pass	
COM2		2F8	IRQ3	Pass	
CPU Compatible Test (Windows 2000P)					
CPU Speed	Cache Size	FSB	sSpec#	Vcore	Result
Pentium IV 2AG	512	400	SL5ZT	1.5V	Pass
Pentium IV 2.4G	512	533	SL684	1.5V	Pass
Pentium IV 2.4G	512	533	L2-512	1.525V	Pass
Pentium IV 3.20G	512	800	L2-Cache	1.55V	Pass
Memory Test – DDRAM DDR-266~400			Speed	Size	Result
PQI / PQ3D328D60335CU			DDR333	256MB	Pass
KINGSTON / D3208DL1T-6			DDR333	256MB	Pass
MoseI / V58C2256804SAT5B			DDR400	512MB	Pass
Transcend / V58C2256804SAT5B			DDR400	512MB	Pass
SAMSUNG / K4H560438E-GCCC			DDR400	1G	Pass
SAMSUNG / K4H560438E-GCCC			DDR400	1G	Pass
ELPIDA / DD2516AKTA-7A			DDR266	128MB	Pass
Hynix / HY5DU56822AT-H			DDR266	128MB	Pass
Kingston / D328DL-60			DDR266	256MB	Pass

On Board Audio Function Test						Result	
System Sound						Pass	
Play CD_IN						Pass	
Play Sound Recorder						Pass	
Speaker Out						Pass	
Line Out						Pass	
Line In						Pass	
Line In Sound Recorder						Pass	
MIC Speaker – Dynamic / Condenser						Pass	
MIC Sound Recorder – Dynamic / Condenser						Pass	
Play DVD – Audio Function Test						Pass	
Audio 5.1 Channel Function Test						Result	
2-channel mode for stereo speaker output						Pass	
4-channel mode for 4 speaker output						Pass	
6-channel mode for 5.1 speaker output						Pass	
S/P DIF Function Test						Pass	
On Board TV Function Test						Result	
NTSC	AV Port Output					Note ¹⁶	
	S Port Output					Note ¹⁷	
PAL	AV Port Output					Note ¹⁸	
On Board LCD Function Test			Bit	Size	Resolution	Mode	Result
HYUNDAI HT12X11-200			18	12.1”	1024*768	LVDS	Pass
SAMSUNG LTM150XH-L04			24	15”	1024*768	LVDS	Pass
PCI Slot Function (PCI Adapter Card) Test					Type	Interface	Result
AAEON MBC-V100					VGA Card	PCI	Pass
GeForce4 MX-440-8X					VGA Card	PCI	Pass
Creative Sound BLASTER Live5.1					Sound Card	PCI	Pass
Adaptec ASC-29160					SCSI Card	PCI	Pass
Takram DC-395U V1.02					SCSI Card	PCI	Pass
D-Link FE-530TX Fast Ethernet					LAN Card	PCI	Pass
Intel SB82559 10/100 Mbps					LAN Card	PCI	Pass
D-Link DGE-530T 1000BASE-T Gigabit Ethernet					LAN Card	PCI	Pass
Genuine GM56-AM12019					Modem Card	PCI	Pass
ABIT HotRod 100 Pro					RAID Card	PCI	Pass
D-Link DU-520 USB 2.0					USB Card	PCI	Pass
Tekram TR-822 Serial ATA 150					SATA Card	PCI	Pass
HDD Compatible Test					Size	Speed	Result
IBM / IC35L180AVV207-1					185.2GB	ATA-133	Pass
IBM / DTLA-307075					76.8GB	ATA-100	Pass
IBM / DTLA-307045					46.1GB	ATA-33	Pass
Fujitsu / MPE 3136AH					13.6GB	ATA-66	Pass
Maxtor / 94098U8					40GB	ATA-66	Pass
Maxtor / D740X-6L					40GB	ATA-100	Pass
Maxtor / 4G160J8					160GB	ATA-133	Pass
Quantum / Fireball Plug AS					30GB	ATA-100	Pass
Seagate / ST320410A					20GB	ATA-100	Pass
Seagate / ST301021A					10.2GB	ATA-66	Pass

Western / WD200EB-OOC PFO	20GB	ATA-100	Pass
Seagate / ST3120026AS	120GB	SATA	Pass
CD-ROM / DVD-ROM Test		Type	Speed
ACER DVP1640A	DVD-ROM	16X	Pass
AFREY CD-2052E	CD-ROM	52X	Pass
ASUS CD-S520/A	CD-ROM	50X	Pass
BENQ 652A-674	CD-ROM	52X	Pass
CREATIVE PC-DVD	DVD-ROM	12X	Pass
IBM GCR-8480B	CD-ROM	48X	Pass
KODAK 4802	CD-RW	6X	Pass
PHILIPS PBC03210G	CD-RW/ DVD ROM	32X10X40/ 12X	Pass
NEC / ND-2500A	DVD R/RW	+R8X-R8X	Pass
SAMSUNG / SH-W08	DVD+ / -R 8X	8X8X32X	Pass
SONY CDU4811-81	CD-ROM	48X	Pass
TEAC CD-540E	CD-ROM	40X	Pass
Installation Windows XP O.S from USB CDRom Device	USB CD-ROM	48X24X48X	Pass
USB Basic Function Test			Result
CMOS USB Function			Pass
CMOS USB Keyboard			Pass
CMOS USB Mouse			Pass
System Booting Test			Pass
USB Cable of 5 Meters (USB1.1)			Pass
USB Cable of 3 Meters (USB2.0)			Pass
Compatible Test			Pass
USB 2.0 Function Test	USB 1 & 2 Ports		Pass
	USB 3 & 4 Ports		Pass
	USB 5 & 6 & 7 Ports		Pass
USB Extention Device Function Test		Type	Result
CyberLink Power DVD XP4.0		Remote Control	Pass
BENQ 4824WI-ON2		CD-RW	Pass
PLEXTIR PX-S88TU		CD-RW	Pass
Fujitus USB 2.0 High Speed device (2.5"MHN2100AT)		HDD	Pass
IOMEGA ZIP 100MB		ZIP	Pass
Mitsumi FL3.5D353GUE/FUE		Floppy	Pass
Floppy Disk Controller Function Test			Result
Copy and Compare File Between C: and A/B			Pass
Chang BIOS Floppy is NONE value			Pass
SWAP FDD			Pass
Peripheral Compatibility-Storage Device		Interface	Result
FUJITSU MCB3064SS		SCSI	Pass
iomega zip 100 parallel port		Parallel	Pass
iomega zip 100MB Internal ATAPI Drive		IDE	Pass
PQI FC256 256 MB Compact Flash Card		Type I	Pass

COM Port Send & Receive Test		Result
COM1 of 50 Meters		Note ¹⁹
COM2 of 50 Meters		Note ²⁰
Disk On Module [DOM] Compatibility Test	Interface	Result
DOM-256-026P Rev.A1k20	IDE 40 Pin	Pass
Mini PCI Slot Compatibility		Result
RTL8180L Mini PCI Card		Pass
AAEON PER-C100 Mini PCI Card		Pass
AAEON PER-C200 Mini PCI Card		Pass
Wireless LAN Compatibility Test	Interface	Result
ANATEL 2001AJ0673 Mini PCI 802.11b	Mini PCI	Pass
RTL8180L Mini PCI Card	Mini PCI	Pass
D-Link DWL-520+ Wireless LAN	PCI	Pass
System Integer Application Test		Result
System Integer Application Test (Burn-in 8 Hrs.)		Pass
System Integer Power Consumption Test		Result
Normal Mode (+5V)		5.1 A
Normal Mode (+12V)		4.8 A
Normal Mode (+3.3V)		0.3 A
Windows 2000 + SP4 O.S. Performance Test –Intel / Pentium 4 CPU 2.40GHz(133*18.0)		Result
WinBench 99 V2.0-- Business Graphics WinMark 99		8720
WinBench 99 V2.0 -- High-End Graphics WinMark 99		406
WinBench 99 V2.0 – Business Disk WinMark99		32900
WinBench 99 V2.0 – High End Disk WinMark99		809
3D WinBench 2000 V1.1 Processor Test -- DirectX 9.0 / 1280x1024x32Bits		71.2
Content Creation Winstone 2004 -- DirectX 9.0 / 1280x1024x32Bits		18.7
Final Reality V1.01 BenchMark Test -- 2D image (DirectX 9.0 / 1280x1024x32Bits)		21.36
Final Reality V1.01 BenchMark Test -- 3D (DirectX 9.0 / 1280x1024x32Bits)		7.75
Final Reality V1.01 BenchMark Test -- Bus transfer (DirectX 9.0 / 1280x1024x32Bits)		15.68
Final Reality V1.01 BenchMark Test -- Overall (DirectX 9.0 / 1280x1024x32Bits)		12.75
3Dmark2001SE Pro-- 3Dmark2001SE Build 330_Benchmark (1280x1024x32Bits)		2037
Bussiness WinStone 2004 V1.0.1 --DirectX 9.0 / 1280x1024x32Bits		17.2

Result Summary	
Note ^{1-11,16-18}	No Connector were mounted on CN31,JP1,CN34 position of the testing sample
Note ¹²⁻¹⁵	The Lan1 connector (Intel 82562ET) indication LED, Action LED & Link LED, was bright after remove LAN cable
Note ¹⁹⁻²⁰	<ol style="list-style-type: none"> The transmission test was failed when the baud rate was set to 11520 and 50 meters cable was used. The system will shown “unknown code under the target” when front data were transmitted.