

Product Certification Report

Release No : 03E010292

Product Model	SBC-657-Rev.B
Product Description	AIO Half-size PCISA CPU Card.W/667 Eden,ATX Power Connector.4USBs,4COMs,LAN,LCD
Test Reason	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : SBC-657 Rev.B0.1 <input checked="" type="checkbox"/> BIOS : SBC-657 /HSB-657I BIOS Rev.1.3(08/04/2003) <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 :

2003-11-28
 Issue date

Wenyuan Yang
 Manager

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 Test Engineer

Test result for certification

Stability Test - Dynamic / Boot_UP Burn_In Test	Result
Dynamic Burn-In Test. (Operating at 0°C ~60°C for 48hours)	Pass
Power On/Off Test. (Operating at 0°C ~60°C for 24hours)	Pass
LAN Chipset Burn_In Test. (Operating at 0°C & 60°C for 2hours)	Pass
220V Power On/Off Test. (Operating at Room Temperature for 24hours)	Pass
Keyboard Reset Test. (K/B Reset 20 Times in DOS Mode)	Pass
Windows HCT 7.2/9.5 System Stress Test. (Operating at Room Temp. for 8hours)	Pass
Timer Accuracy Test	Result
RTC Timer Accuracy of +/-3 sec per day. (Power On & Power Off)	Pass
System Clock Accuracy of +/-5 sec per day. (Power On)	Pass
Watchdog Timer Accuracy of +/-20% sec per minute.	Fail ¹
Margin Test – Power Consumption –VIA C3 667A MHz	Result
Normal Electrical characteristics -- Normal Mode(+3.3V)	0 A
Normal Electrical characteristics -- Standby or Suspend Mode(+3.3V)	0 A
Normal Electrical characteristics -- Normal Mode(+5V)	2.0 A
Normal Electrical characteristics -- Standby or Suspend Mode(+5V)	1.5 A
Normal Electrical characteristics -- Normal Mode(+12V)	0A
Normal Electrical characteristics -- Standby or Suspend Mode(+12V)	0.24 A
System Integer Electrical characteristics -- Normal Mode(+3.3V)	0 A
System Integer Electrical characteristics -- Normal Mode(+5V)	6.3 A
System Integer Electrical characteristics -- Normal Mode(+12V)	0 A
Power Margin Test -- 4.75V to 5.25V	Pass
Power Margin Test -- 3.3V	Pass
Power Margin Test -- 11.4V to 12.5V	Pass
Power Connector Test – AT Power To ATX Mainboard	Pass
5V Only Operation Function Test	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
COM Address / IRQ Test	Pass
LPT Address / IRQ Test	Pass
Hardware Monitor Test	Pass
Supervisor / User Password Test	Pass
BIOS Awdflash Program Test	Pass

Operation System Compatible Test	Result
Linux RedHat 8.0 Version: 2.4.18.-14	Pass
Windows 98SE English Version: 4.10.2222A	Pass
Windows NT Workstation 4.0 English Version with Service Pack 6 Ver: 4.00.1381	Pass
Windows 2000 Professional English Version : 5.00.2195	Pass
Windows XP Professional English Version: 2002	Pass
DOS and DOS Utility Compatibility Testing	Pass
Performance Test – CPU VIA C3 667A MHz , SODRAM 128MB	Result
LandMark Speed 2.0 -- CPU	2997.12
LandMark Speed 2.0 -- FPU	1738.91
LandMark Speed 2.0 -- VIDEO	27306.00
WinBench 99 V1.1-- CPUmark 99	24.9
WinBench 99 V1.1-- FPU WinMark	1290
WinBench 99 V1.1-- Business Graphics WinMark 99	213
WinBench 99 V1.1 -- High-End Graphics WinMark 99	557
Final Reality V1.01 BenchMark Test -- 2D image (DirectX 7.0 / 1024x768x16Bits)	3.16
Final Reality V1.01 BenchMark Test -- 3D (DirectX 7.0 / 1024x768x16Bits)	3.06
Final Reality V1.01 BenchMark Test -- Bus transfer (DirectX 7.0 / 1024x768x16Bits)	1.35
Final Reality V1.01 BenchMark Test -- Overall (DirectX 7.0 / 1024x768x16Bits)	2.83
3D WinBench 2000 V1.0 Processor Test -- DirectX 7.0 / 1024x768x16Bits	0.552
Content Creation Winstone 2001 -- DirectX 7.0 / 1024x768x16Bits	17.3
WinStone 99 V1.2 -- HighEnd WinStone 99 (1024x768x16Bits)	22.2
WinStone 99 V1.2 -- Business WinStone 99 (1024x768x16Bits)	28.9
Utility and Driver Test	Result
RedHat Linux 8.0 hardware compatible list for VGA	Pass
RedHat Linux 8.0 hardware compatible list for LAN	Pass
VGA for Windows 98SE (Onboard S3 Graphics Twister /Ver: 4.13.01.0042-11.30.42.01)	Pass
VGA for Windows NT 4.0 (Onboard S3 Graphics Twister /Ver..4.1024.1310.0002.4.0.0:)	Pass
VGA for Windows 2000P (Onboard S3 Graphics Twister /Ver: 6.13.10.10301)	Pass
VGA for Windows XP (Onboard Graphics Twister / Ver 6.13.10.10301.)	Pass
LAN for Windows 98SE (Realtek RTL8139DL /Ver: 4.10.2222)	Pass
LAN for Windows NT 4.0 (Realtek RTL8139DL /Ver .)	Pass
LAN for Windows 2000P (Realtek RTL8139DL /Ver. 5.366.818.1999)	Pass
LAN for Windows XP(Realtek RTL8139DL / Ver. 5.504.613.2002)	Pass
Memory Test – SODRAM PC-133/100	Result
INFINEON / HYB39S128800CT-75 / PC133 / 128 MB	Pass
NEC / D45128163G5-A75-9JF / PC100 / 64 MB	Pass
NANYA / NT56V6620C0T-75 / PC133 / 64MB	Pass
NEC / D45128163G5-A75-9JF / PC-133 / 64 MB	Pass
HITACHI / HB52RF648DC-75B / PC-133 / 512 MB	Pass
HITACHI / HB52F328DC-75B / PC133 / 256MB	Pass
KINGMAX / KSV684T4A2A-07L / 256 MB	Pass

CPU Compatible Test	Result
VIA C3 667A MHz(133*5.0)	Pass
HDD Compatible Test	Result
Fujitsu MPC 3043AT-E / 4.3GB / ATA-33	Pass
Fujitsu MPE 3136AH / 13.6GB / ATA-66	Pass
IBM DTLA-307045 / 46.1GB / ATA-33	Pass
IBM DTLA-307075 / 76.8GB / ATA-100	Pass
IBM IC35L180AVV207-1 / 185.2GB / ATA-133	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	Pass
Western WD200EB-OOC PFO / 20GB	Pass
CD-ROM / DVD-ROM Test	Result
ACER DVP1640A / 16X / DVD-ROM	Pass
AFREY CD-2052E / 52X / CD-ROM	Pass
ASUS CD-S500/A / 50X / CD-ROM	Pass
BENQ 652A-674 / 52X / CD-ROM	Pass
CREATIVE PC-DVD / 12X / DVD-ROM	Pass
IBM GCR-8480B / 48X / CD-ROM	Pass
KODAK 4802 / 6X / CDR/RW	Pass
MITSUMI CRMC-FX4824T / 48X / CD-ROM	Pass
NEC C&C-BCD F561B / 52X / CD-ROM	Pass
PIONEER ATAPI DVD-A03S / 6X / DVD-ROM	Pass
SONY CDU5231 / 52X / CD-ROM	Pass
SONY CRX220A1 / 52X/24X/52X / CD-RW	Pass
TEAC CD-540E / 40X / CD-ROM	Pass
Network HUB / LAN Connects Test	Result
HP J4095A 24Ports [100 / 10 Mbps]	Pass
D-Link DES-1008 [100 / 10 Mbps]	Pass
Intel InBusiness 8 Ports [100 / 10 Mbps]	Pass
LEMEL LM-S5 5 Ports [100 / 10 Mbps]	Pass
Accton DeskTop-3005 [100 / 10 Mbps]	Pass
SVEC FD916H [10 Mbps]	Pass
On Board I/O Function Test	Result
COM Port Send - Receive Test	Pass
Checkit 7.0 Portable Edition For COM / LPT Test	Pass

LCD Monitor	Result
SAMSUNG / LTM150XS-T01 / TFT / 15.1" / 3.3V	Pass
NEC / NL8060AC31-12 / TFT / 12.1" / 3.3 or 5V	Pass
Samsung / Samsung LTM150XH-L04 15.1" LCD Module / 5V / 1024*768	Pass
TOSHIBA / LTM10C209A / TFT / 10.4" / 5V	Pass
Touch Screen of Serial Ports Test	Result
COM 1 Serial Port	Pass
COM 2 Serial Port	Pass
COM 3 Serial Port	Pass
COM 4 Serial Port	Pass
VGA Card Compatible Test	Result
MAXTOR G450 (PCI bus)	Pass
CIRRUS LOGIC 5429 (ISA bus)	Fail ²
Sound Card Compatible Test	Result
Creative Sound Blaster Live5.1 (PCI bus)	Pass
Lemel ESS ES1868F 3D / 16 PnP (ISA bus)	Pass
SCSI Card Compatible Test	Result
ADAPTEC ASC-29160 (PCI bus)	Pass
TAKRAM DC-395U V1.02 (PCI bus)	Pass
AHA-1520B (ISA bus)	Pass
Modem Card Compatible Test	Result
Genuine GM56-AMI2019 (PCI bus)	Pass
LAN Card Compatible Test	Result
D-Link FE-530TX Fast Ethernet Adapter (PCI bus)	Pass
Intel SB82559 10/100Mbps (PCI bus)	Pass
DGE-550T 1000BASE-T Gigabit Ethernet Adapter (PCI bus)	Pass
Intel PILA8560 10/100Mbps (ISA bus)	Pass
Multi Media Card Compatible Test	Result
YUAN DVD MPEG - 2 MPEG Card (PCI bus)	Pass
UPMOST 1394 CardBus + FireWire 3.5 HardDisk Enclosure	Pass
PixelView Play Tvpro (PCI bus)	Pass
RAID Adapter Card Test	Result
ABIT HotRod 100 Pro (PCI bus)	Pass
Industry Control Card Compatible Test - PC104 / PC104 Plus	Result
AAEON PCM-5600 / Fax/Modem Module / PC104	Pass
AAEON PCM-3115B / PCMICA Module / PC104	Pass
AAEON PCM-3640 / RS-232 Module / PC104	Pass

System Integer Application Test	Result
On Board I/O Integer Application	Pass
PCI Cards Integer Application	Pass
ISA Cards Integer Application	Pass
PC104 Card Integer Application	Pass
Function Test	Result
On board LAN with 100 feet cable length	Pass
On board VGA function	Pass
U2W SCSI function	Pass
UW SCSI-II function	Pass
Peripheral Storage Device Compatible Test	Result
FUJITSU MO MCB3064SS	Pass
IOMEGA ZIP100M (Parallel Type)	Pass
IOMEGA ZIP100M (IDE Type)	Pass
Compact Flash	Pass
DOM	Pass
HP Photo Smart P1000 Printer (LPT Type)	Pass
33.6 HIGH SPEED MODEM (RS-232)	Pass
Ultra ATA-66 / 100 Test	Pass
Peripheral Input Device Compatible Test	Result
Solidtek ACK-298 Keyboard (USB)	Pass
Logitech M-MJ58 Mouse (USB)	Pass
Acer 6406EU-122 4W6R CDROM (USB)	Pass
HP SJ4200C Scanner (USB)	Pass
HP Photo Smart P1000 Printer (USB)	Pass
IOMEGA ZIP 100MB (USB)	Pass
D-Link DSB-H4/DU-H4 HUB (USB)	Pass
MITSUMI / FLL3.5 D353GUE/FUE Floppy (USB)	Pass
Miscellaneous Test	Result
Windows 98 Power manager test	Pass
Windows 2000 Power manager test	Pass
Floppy Disk Controller	Pass
Primary IDE Master	Pass
Primary IDE Slave	Pass
Compact Flash Card / TYPE I	Pass
DOM	Pass
COM1	Pass
COM2	Pass
COM2-RS-422	Pass
COM2-RS-485	Pass
COM3	Pass
COM4	Pass

LPT1	Pass
PS2 Keyboard / Mouse	Pass
SIR / 115K bps	Pass
USB Port1 - Enabled / Disabled Mode Function	Pass
USB Port2 - Enabled / Disabled Mode Function	Pass
H/W Reset	Pass
On board buzzer	Pass
HDD LED	Pass
Power LED	Pass
LAN1 LED (Active & Link or RX & Link & TX)	Pass
Ext. KB connector	Pass
ATX Power Button	Pass
CPU FAN Connector	Pass
Watchdog – Reset	Fail ³
LCD	Pass
LVDS	Pass

Result Summary

Fail^{1&3} 當每一設定時,Watchdog Timer 會快 4~5 秒 的誤差.

Fail² 使用 VGA Card (Cirrus logic 5429/VC-008(ISA SLOT) 在 WIN98 環境下測試, 與 ON Board 的 VGA 產生衝突(show exclamation mark

Note¹ 在 sample 板子上 I/O Chipset 是 Winbond W83977EF-AM 跟 Features SPEC 上的 VIA VT8606+686B+ITE8712 規格不符..