

QE 【Mainboard】

Product Certification Report

Release No : 05E100054

Product Model	ETX-855
Product Description	Intel 855 GM/ICH4/Socket 478 ETX Board
Test Reason	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : ETX-855 Rev : A0.2 + ECB-901A Rev.A1.0 <input checked="" type="checkbox"/> BIOS : ETX-855 BIOS R.1.0(07/21/2005) <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> North Bridge : Intel 82855GME + ICH4 <input checked="" type="checkbox"/> South Bridge : Intel 82855GME + ICH4 <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 <input checked="" type="checkbox"/> Ethernet Chipset : Intel DA82562ET <input checked="" type="checkbox"/> I/O Chipset : ITE IT 8712F-A

2005/08/02

Wenyuan Yang

Andrew Ku

Issue date

Manager

Test Engineer

Test Result for Certification

I/O Peripheral Function Test – I/O Function	Result
Floppy Connector / Driver A:	Pass
Primary IDE Master	Pass
Primary IDE Slave	Pass
Secondary IDE Master	Pass
Secondary IDE Slave	Pass
Compact Flash - Type I	Pass
Compact Flash - Type II	Pass
DOC (Disk On Chip)	Pass
DOM (Disk On Module) - 40 Pin	Pass
COM 1	Pass
COM 2-232	Pass
COM 2-422	Pass
COM 2-485	Pass
COM 2-Ring /+5V /+12V	Pass
COM 3	Pass
COM 4	Pass
Clear CMOS	Pass
PS/2 Mouse (External)	Pass
PS/2 Keyboard (External)	Pass
Audio Connector	Pass
Audio 5.1 Channel / S/P DIF	Pass
VLCD Voltage (5V or 3.3V)	Pass
LPT 1	Pass
LPT 2	Pass
SIR / 115.2 Kbps	Pass
FIR / 4M bps	Pass
USB 1&2 Ports	Pass
USB 3&4 Ports	Pass
USB 2.0 1 & 2 Ports	Pass
USB 2.0 3 & 4 Ports	Pass
VGA Display	Pass
DIO Connector	Pass
LCD / LVDS / Channel 1	Pass
TV-out / AV	Pass
TV-out / S Port Output	Pass
DIMM Slots	Pass
Internal KB & Mouse	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
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
AT Power Connector (P8&P9)				Pass
Option ATX Power Connector (PS-ON / +5VSB)				Pass
I/O Peripheral Function Test – LAN Connector & Function				Result
LAN Speed LED	LAN1			Pass
LAN Active LED	LAN1			Pass
LAN Link LED	LAN1			Pass
LAN 10/100 Ethernet				Pass
I/O Peripheral Function Test – PCI Connector & Function				Result
PCI Slots				Pass
Power Consumption Test				
	ATX : AOpen / FSP300-60ATV		AT : LEMACS / LP2-4250F	
	CPU: 2.0 GHz		CPU: 2.0 GHz	
Normal Mode (+5V)	2.35	A	2.34	A
Suspend Mode (+5V)	1.19	A		A
5VSB in Power Off Mode (just for ATX)	0.16	A		A
Normal Mode (+12V)	0.1	A	0.1	A
Suspend Mode (+12V)	0.1	A	0.1	A
Normal Mode (+3.3V) (just for ATX)	0.35	A		A
Suspend Mode (+3.3V) (just for ATX)	0.35	A		A
Normal Mode (-12V)	0.1	A	0.1	A
Suspend Mode (-12V)	0.1	A	0.1	A
Normal Mode (-5V)	0.1	A	0.1	A
Suspend Mode (-5V)	0.1	A	0.1	A
Power Connector Test (110V/220V)	Voltage Range			Result
ATX Connector Power On/Off for 10 times in DOS				Pass
AT Connector Power On/Off for 10 times in DOS				Pass
5V Only 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
RTC Clock in Power Off Mode	+-1 second during 24 hours			Pass
Watchdog Timer Test				Result
Time-out Interval	10 sec			Pass
	60 sec			Pass
	255 sec			Pass
Network HUB / LAN Connection Test				Result
On Board LAN LED	Active LED			Pass
	Link LED			Pass
	Speed LED			Pass
LAN Location	LAN Speed	HUB Type	HUB Speed	Result
LAN	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

Hardware Compatibility				
CPU Compatible Test				
Type	Speed	FSB	Run HCT Version	Result
Pentium M Q349A065 SL6F8 RH805351400/1M	1.4GJz		9.5	Pass
Pentium M 7343A478 SL6FA RH805351600/1M	1.6GHz		9.5	Pass
Intel Dothan Pentium M	2.0GHz		9.5	Pass
Memory Compatibility Test				
Brand	Chipset	Frequency	Size	Result
TRANSCEND	0243PR V58C2128804SAT75	SODDDR266	128MB	Pass
HYNIX	HY5DU121622AT-J	SODDDR333	512MB	Pass
NANYA	NT5DS64M8AF-75B	SODDDR266	1GB	Pass
KINGMAX	KDLD88T4AC-60	SODDDR333	1GB	Pass
INFINEON	HYB25D256800CC-6	SODDDR333	512MB	Pass
Kingston	KVR333X64SC25	SODDDR333	256MB	Pass
Kingston	KVR333X64SC25	SODDDR333	512MB	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
On Board TV Function Test				Result
NTSC		AV Port		Pass
		S Port		Pass
PAL		AV Port		Pass
On Board LCD Function Test				
TFT LCD	Type	Voltage	Result	
LVDS	AU B104SN02 / 10.4" / 800*600 / 18bit	3.3V	Pass	
	Hyundai HT12X11-200 / 12.1" / 1024*768 / 18bit	3.3V	Pass	
	Samsung LTM150XH-L04 / 1024*768 / 24bit	3.3V	Pass	
PCI Slot Function (PCI Adapter Card) Test				
Model	Type			Result
EP-P80P Rev:0.1: PCI 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
HDD 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
CD/DVD-ROM Compatibility Test		
Model		Result
Acer DVPI640A / 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-R8X / 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
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		
USB 1.1 Compatible Test		Pass
USB 2.0 Compatible Test		
USB 2.0 Compatible Test		Pass
USB 2.0 Function Test		
Use High Speed Device USB2.0 CD-R/W BenQ / 4824W1-ON2 to play Nero CD/DVD Speed		Pass
USB Extention 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
Check BIOS → "Report No FDD For Win95"		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	
DOC2000 M-System / MD2200-D16		Pass	
PQI FC512 512MB	Type-I CF Card	Pass	
HITACHI / HMS360402D5CF00	Type- II CF Card	Pass	
Digital I/O Connector Test		Result	
Input Address: (200H)		Pass	
Output Address: (200H)		Pass	
VCC: ()		Pass	
DIO Function Test		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	
COM3		Pass	
COM4		Pass	
LPT1		Pass	
LPT2		Pass	
IDE Cable Function Test		Result	
40 Pin ATA33 Cable			
O.S. Compatibility Test			
Installation Operation System Compatible Test		Result	
Linux-RedHat 9.0 / Kernel 2.4.20-8		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
	AUDIO	Default	Pass
	LAN	Default	Pass
Windows XP Professional English Version V2002 with Service Pack 2	VGA	Intel ®82852/82855 GM /GME Graphics Controller Ver : 6.14.10.3792	Pass
	AUDIO	Realtek AC'97 Audio Controller Ver: 5.10.0.5630	Pass
	LAN	Intel ® PRO /100VE Network Connector Ver : 7.1.12.0	Pass
Windows 2000 Professional English Version V5.00.2195 with Service Pack 4	VGA	Intel ®82852/82855 GM /GME Graphics Controller Ver : 6.14.10.3792	Pass
	AUDIO	Realtek AC'97 Audio Controller Ver: 5.10.0.5630	Pass
	LAN	Intel ® PRO /100VE Network Connector Ver : 7.1.12.0	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 (PXE)			Pass
Supervisor / User Password Test			Pass
CRT / LVDS / TV Function Test			Pass
TV Standard Function Test			Pass
Init Display First Function Test			Pass
PC Health Status			
Voltage Monitor Test			Pass
FAN Speed Monitor Test			Pass
Temperature Monitor Test			Pass
Swap Floppy Drive & Boot up Floppy Seek Function Test			
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
COM3	3E8	IRQ10	Pass
COM4	2E8	IRQ11	Pass
Performance Test With (Intel Dothan Pentium M 2.0GHz)			
English Windows 2000 Professional with SP4 5.00.2195 + 1280x1024x32bit / 60Hz + Direct 9.0			
ZD WinBench 99 V2.0			Unit
Business Disk WinMark99		11000	Thousand bytes/sec
High-End Disk WinMark99		381	Thousand bytes/sec
Business Graphics WinMark99		40600	
High-End Graphics WinMark99		1080	
Final Reality V1.01—Benchmark Test (Reality Marks)			
2D image		38.96	
3D		7.99	
Bus transfer		61.01	
Overall		25.24	Reality marks
ZD Multimedia Content Creation Winstone 2004 V1.0.1			
Multimedia Content Creation Winstone 2004			28.9
3Dmark2001SE Pro (Demo version)			
3DMark2001SE Build 330_Benchmark mode			2386
English Windows XP Professional with SP2 V2002 + 1280x1024x32bit / 60Hz + Direct 9.0			
Business Winstone 2004 v1.0.1			
Business Winstone2004			15
System Integrated Application Test			Result
A. System Integrated Application Test (Burn-In 8 Hrs):			Pass