

# Product Certification Report

**Release No : 05I010007**

<b>Product Model</b>	<b>HSB-811P</b>
<b>Product Description</b>	<b>Intel Pentium M PICMG/PCI Half-Size SBC</b>
<b>Test Reason</b>	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : HSB-811P A1.0 <input checked="" type="checkbox"/> BIOS: HSB-811P BIOS Rev:1.0 (02/03/2005) <input checked="" type="checkbox"/> Backplane: BP-204SP-P3 A1.0  <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> On Board CPU Type: Intel Celeron-M CPU, FSB:400MHz, On board 600MHz /ZC CPU <input checked="" type="checkbox"/> North Bridge : Intel 82852GM <input checked="" type="checkbox"/> South Bridge : Intel 82801DB(ICH4) <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 AC97 Audio Codec <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82562EZ/82541GI <input checked="" type="checkbox"/> I/O Chipset : ITE IT8712F-A <input checked="" type="checkbox"/> TV Chipset : N/A  <input checked="" type="checkbox"/> Remark : HSB-811P A1.0 NPDP P5 External Report

**2005/03/08****Wenyuan Yang****Jojo Lin****Issue date****Manager****Test Engineer**

**Test Result for Certification**

Dynamic / Boot_UP Burn_In Test	Test Condition	Result
Diagnostics Software Burn-In Test.	0 ~60 , 48 hrs	PASS
Power On/Off Test.	0 ~60 , 24hrs	PASS
<b>Voltage Range Test</b>		
Voltage Range Test – 210V Power Function Test	Room Temperature	PASS
Voltage Range Test – 100V Power Function Test	Room Temperature	PASS
Voltage Range Test – Keyboard Reset Test.–110V	20 Times , DOS Mode	PASS
<b>I/O Peripheral Function Test – I/O Function</b>		<b>Result</b>
Floppy Connector / Driver A: & B:		PASS
Primary IDE Master		PASS
Primary IDE Slave		PASS
Secondary IDE Master		PASS
Secondary IDE Slave		PASS
SATA1 / Serial ATA Connector 1		N/A
SATA2 / Serial ATA Connector 2		N/A
Compact Flash -Type		PASS
Compact Flash -Type		PASS
DOC (Disk On Chip)		N/A
DOM (Disk On Module)-40 pin		PASS
DOM (Disk On Module)-44 pin		N/A
COM1		PASS
COM2-232		PASS
COM2-422		PASS
COM2-485		PASS
COM2-Ring/+5V/+12V		PASS
COM3		N/A
COM4		N/A
COM5		N/A
COM6		N/A
Clear CMOS		PASS
PS/2 Mouse & Keyboard (Internal)		N/A
PS/2 Mouse & Keyboard (External)		PASS
Audio Out Selection ( <input type="checkbox"/> W/O Amplifier <input type="checkbox"/> W/Amplifier)		N/A
Audio Connector		PASS
Audio 5.1 Channel S/P DIF		N/A
PCI Slot		PASS
Mini PCI		PASS
VCD Voltage (3.3V or 5V)		PASS
LPT1		PASS
LPT2		N/A
SIR / 115.2Kbps		PASS
FIR / 4M bps		N/A
USB 1 & 2 Ports		PASS
USB 3 & 4 Ports		PASS
USB 5 Port		PASS
USB 6 Port		N/A
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		N/A
VGA Display		PASS
DVI Function		N/A
DIO Connector		N/A

Card Bus	N/A
PC/104	N/A
PC/104 Plus	N/A
PCI/104	N/A
LCD / TFT	N/A
LCD / LVDS / Channel 1	PASS
LCD / LVDS / Channel 2	PASS
TV-out / AV	N/A
TV-out / S Port Output	N/A
Touch Screen – 8 Wire	N/A
Touch Screen – 5 Wire	N/A
DIMM Slots	PASS
Internal KB & Mouse	N/A
Watchdog IRQ n	PASS
Watchdog Software Control	PASS
<b>I/O Peripheral Function Test – Front Panel &amp; Function</b>	<b>Result</b>
Power On Button	PASS
IDE LED	PASS
External Buzzer	PASS
On Board Buzzer	PASS
Power LED	PASS
Reset Switch	PASS
Keyboard Lock	PASS
CPU FAN Connector	PASS
System FAN Connector	N/A
<b>I/O Peripheral Function Test – Power Connector &amp; Function</b>	<b>Result</b>
ATX Power Connector	PASS
ATX Power_12V Connector	PASS
AT Power Connector (P8&P9)	N/A
4P Power Connector	PASS
Mini 4P Power Connector	PASS
External Power Connector(-12/-5V)	PASS
Option ATX Power Connector (PS-ON / +5VSB)	PASS
<b>I/O Peripheral Function Test – LAN Connector &amp; Function</b>	<b>Result</b>
LAN1 Speed LED	N/A
LAN2 Speed LED	N/A
LAN1 Active LED	PASS
LAN2 Active LED	N/A
LAN1 Link LED	PASS
LAN2 Link LED	N/A
LAN1 10/100 Ethernet	PASS
LAN2 10/100 Ethernet	PASS
<b>I/O Peripheral Function Test – PCI Connector &amp; Function</b>	<b>Result</b>
PCI Slots	PASS
<b>I/O Peripheral Function Test – PME Connector &amp; Function</b>	<b>Result</b>
Option PME Connector	N/A
<b>Power Consumption Test</b>	
	<b>Onboard Intel Celeron-M 600MHz / FSB:400MHz</b>
Normal Mode (+5V)	2.01A
Suspend mode (+5V)	1.89A
5VSB / ATX Power (Power Off Mode)	0.01A
Normal Mode (+12V)	0.56A
Suspend mode (+12V)	0.41A
Normal Mode (+3.3V for ATX Power)	0.62A

Suspend mode (+3.3V for ATX Power)	0.62A		
Normal Mode (-5V)	0		
Suspend mode (-5V)	0.03A		
Normal Mode (-12V)	0		
Suspend mode (-12V)	0		
<b>Power Connector Test (110V/220V )</b>	<b>Voltage Range</b>		
ATX Power Supply : PRT PRM-400[Female]	5 V	110V	PASS
		220V	PASS
	3.3 V	110V	PASS
		220V	PASS
	12V	110V	PASS
		220V	PASS
AT Power Supply : [Female]	5V	110V	N/A
	12V	220V	N/A
	5V	110V	N/A
	12V	220V	N/A
AT Power To ATX Connector: AT Power Supply : (Female) .	5V	110V	N/A
	12V	220V	N/A
	5V	110V	N/A
	12V	220V	N/A
Power 5V Only Operation Function Test	5V (Play VCD)		N/A
ATX Power simulate AT power (Play VCD)			N/A
<b>Timer Accuracy Test</b>			<b>Result</b>
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
<b>Network HUB/LAN Connects Test (LAN1)</b>			<b>Result</b>
<b>HUB (10/100Mbps)</b>	<b>Type</b>	<b>Speed</b>	PASS
	HP J4095A 24 Ports	10/100 Mbps	
	D-Link DGS-1008T	10/100 Mbps	
	Intel InBusiness 8 Ports	10/100 Mbps	
	LEMEL LM-S5 5 Ports	10/100 Mbps	
	Accton Desktop-3005	10/100 Mbps	
SVEC FD916H	10 Mbps		
<b>HUB (1000Mbps)</b>	D-Link DGS-1008T	1000 Mbps	PASS
	D-Link DGS-1008T	1000 Mbps	PASS
LED Indicator Lights Function	LAN1 LED		PASS
	LAN2 LED		N/A
<b>CPU Compatible Test (Windows 2000 Pro)</b>			
<b>CPU Speed</b>	<b>FSB</b>	<b>SPEC</b>	<b>Result</b>
On board Intel® Celeron 600MHz	400MHz		PASS
<b>Memory Test</b>	<b>Speed</b>	<b>Size</b>	<b>Result</b>
ELPIDA DD2516AKTA-6B	DDR333	256MB	PASS
NANYA CL2.5 NT5DS64M8AF-75B	DDR266	1GB	PASS
HYNIX HY5DU121622AT-J	DDR333	512MB	PASS
<b>On Board Audio Function Test</b>			<b>Result</b>
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	
Game Port		N/A	
Play DVD	Step Forward (4/8/32X)	PASS	
	Step Backward (4/8/20X)	PASS	
Audio 5.1 Channel with S/P DIF Function Test		N/A	
<b>On Board TV Function Test</b>		<b>Result</b>	
NTSC	Japanese NTSC	AV Port	N/A
		S Port	N/A
	US NTSC	AV Port	N/A
		S Port	N/A
PAL	AV Port	N/A	
<b>On Board LCD Function Test</b>			
LVDS	HYUNDAI HT17E11-300 / 17"/1280*1024 /48bit	N/A	
	HYUNDAI HT12X11-200/12.1"/1024*768/18bit	PASS	
	SAMSUNG LTM150XH-L04/1024*768/24bit	PASS	
	AU B104SN02 / 10.4" /800*600 / 18bit	PASS	
TFT	Toshiba LTM10C209A/10.4"/640*480/18bit	N/A	
	Sharp LQ121S1DG11/12.1"/800*600/18bit	N/A	
	Samsung LTM150XS-T01/15"/1024*768/36bit	N/A	
<b>PCI Slot Function (PCI Adapter Card) Test</b>			
	<b>Type</b>	<b>Interface</b>	<b>Result</b>
PCI Debug Card [DG-200200]	Debug Card	PCI	PASS
Matrox G450 / VC-200203	VGA Card	PCI	PASS
GeForce4 MX-440-8X / VC-200200	VGA Card	PCI	N/A
LEMEL SC3000 / SC-001	Sound Card	PCI	PASS
Takram DC-395U V1.02 / SS-200200	SCSI Card	PCI	PASS
D-Link FE-530TX Fast Ethernet Adapter / NW-200202	LAN Card	PCI	N/A
Intel SB82559 (10/100Mbps) / NW-013	LAN Card	PCI	PASS
D-Link DGE-530T 1000BASE-T Gigabit Ethernet Adapter / NW-200401	LAN Card	PCI	PASS
D-Link DWL-520+ Wireless LAN / NW-2002001	LAN Card	PCI	PASS
Genuine GM56-AMI2019 / MD-007	Modem Card	PCI	PASS
ABIT HotRod 100 Pro / RA-001	RAID Card	PCI	PASS
D-Link DU-520 USB 2.0 / DU-001	Other Card	PCI	PASS
Tekram TR-822 Serial ATA 150 / SA-001	Other Card	PCI	PASS
<b>HDD Compatible Test</b>		<b>Speed</b>	<b>Result</b>
Hitachi / HDS722525VLAT80 / 250GB / ATA-100	ATA100	N/A	
IBM / DTLA-307045 / 46.1GB / ATA-100	ATA100	PASS	
FUJITSU / MPE 3136AH / 13.6GB / ATA-66	ATA66	PASS	
Maxtor / 54610H6 / 160GB / ATA-133	ATA133	PASS	
Quantum / Fireball Plug AS / 30GB / ATA-100	ATA100	PASS	
Seagate / ST301021A / 10.2GB / ATA-66	ATA66	N/A	
Western / WD400BB-75DEA0 / 40GB / ATA-100	ATA100	PASS	
Seagate / ST3120026AS / 120GB / ATA-100 / S-ATA	ATA100	PASS	
<b>CD-ROM / DVD-ROM Test</b>		<b>Model</b>	<b>Result</b>
Acer DVP1640A / 16X / DVD-ROM	CD-044	PASS	
Creative PC-DVD / 12X / DVD-ROM	CD-046	PASS	
IBM GCR-8480B / 48X	CD-2002013	PASS	
PINONEER /DVD-121/ CD-ROM /16X	CD-200303	PASS	
PHILIPS PBC03210G / 32X10X40 / 12X DVD / CD-RW / DVD-ROM	CD-2003002	PASS	
SAMSUNG / SH-W08 / DVD+R 8X/DVD-R 8X/CD-R 32X	CD-200404	PASS	
NEC / ND-2500A / DVD R/RW / +R8X-R8X	CD-200403	PASS	
SONY CDU4811-81 / 48X / CD-ROM	CD-030	N/A	

TEAC CD-540E / 40X / CD-ROM	CD-042	N/A
<b>USB Basic Function Test</b>		
CMOS USB Function		PASS
CMOS USB Keyboard		PASS
CMOS USB Mouse		PASS
System Booting Test		PASS
USB Cable of 1.8 Meters (USB1.1)		PASS
USB Cable of 1.8 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 Ports	USB5: PASS
<b>USB Extension Device Function Test</b>		
	<b>Model</b>	<b>Type</b>
CyberLink Power DVD XP4.0	[IR-200200]	Remote Control
BENQ 4824WI-ON2	[CD-200304]	CD-RW
PLEXTOR PX-S88TU	[CD-2002003]	CD-RW
Fujitsu USB 2.0 High Speed device (2.5" MHN2100AT)	[ID-200401]	HDD
IOMEGA ZIP 100MB	[ZP-002]	ZIP
Mitsumi FL3.5D353GUE/FUE	[FL-200201]	Floppy
<b>Floppy Disk Controller Function Test</b>		
Copy and Compare File Between C: and A/B		PASS
Chang BIOS Floppy is NONE value		PASS
SWAP FDD		PASS
Check BIOS → "Report No FDD for Win95"		N/A
<b>Peripheral Compatibility-Storage Device</b>		
	<b>Model</b>	<b>Interface</b>
FUJITSU MCB3064SS	[MO-001]	SCSI
IOmega zip 100 parallel port	[ZIP-200401]	Parallel
IOmega zip 100MB Internal ATAPI Drive	[ZP-001]	IDE
DOC2000 M-System / MD2200-D16		N/A
PQI FC512 512MB	[CF-200302]	Type-I CF Card
HITACHI MicroDrive 1GB	[CF-200303]	Type- CF Card
<b>Digital I/O Connector Test</b>		
Input Address ( )		N/A
Output Address ( )		N/A
VCC		N/A
GND		N/A
<b>Adapter Compatibility-Industry Control Card → PC104 , PCI104 , PC104 Plus</b>		
		<b>Result</b>
PC104	AAeon PCM-5600 (Modem Module)	N/A
	AAeon PCM-3115B (PCMCIA Modula)	N/A
PCI104	AAeon PCM-3730 (Intel 82559 LAN Modula)	N/A
PC104 Plus	AAeon PCM-3430 (SCSI Module)	N/A
<b>SCSI Function Test</b>		
	<b>Interface</b>	<b>Model</b>
RICOH MP7060S	SCSI-CDROM 24X	[CD-045]
Fujitsu MCB3064SS	SCSI-MO Device	[MO-001]
Seagate 32155W	SCSI-HDD 2.15GB	[SD-001]
IBM DNES-309170	SCSI-HDD 9GB	[SD-004]
Seagate ST39205LW/P	9GB / Ultra160 / LVD	[SD-200101]
<b>COM Port Send &amp; Receive Test</b>		
COM1 of 50 Meters		PASS
COM2 of 50 Meters		PASS
COM3 of 50 Meters		N/A
COM4 of 50 Meters		N/A
<b>Disk On Module [DOM] Compatibility Test</b>		
	<b>Model</b>	<b>Interface</b>
DOM-256-026P Rev: A1K20	[DC-200200]	IDE 40 Pin

DOM-064-426P Rev: A2A11	[DC-200201]	IDE 44 Pin	N/A
<b>Mini PCI Slot Compatibility Test</b>		<b>Model</b>	<b>Interface</b>
		<b>Result</b>	
RTL-8180L Mini PCI Card		LAN Module	PASS
AAEON PER-C100 Mini PCICard		LAN Module	PASS
AAEON PER-C200 Mini PCI Card		USB Module	N/A
<b>COM / LPT Ports &amp; RS-232/422/485 Function Test</b>			<b>Result</b>
Installation MS-DOS6.22 & Windows 2000P From FDD & CDROM			PASS
RS-422 (COM2)			PASS
RS-485 (COM2)			PASS
COM1			PASS
COM2			PASS
COM3			N/A
COM4			N/A
LPT1			PASS
LPT2			N/A
<b>Card Bus Compatibility Test</b>		<b>Model</b>	<b>Result</b>
PQI Compact Flash Adapter + PQI Compact Flash Card 16MB		[PC-200100]+ [CF-200100]	N/A
SanDiak / 4MB / Mass Storage System PCMCIA Card		[PC-003]	N/A
<b>Front Panel &amp; Function Test</b>			<b>Result</b>
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
System FAN Connector			N/A
<b>IDE Cable Function Test</b>			<b>Result</b>
40 Pin ATA33 Cable			PASS
44Pin ATA33 Cable			N/A
80 Pin ATA100 Cable			PASS
<b>Card Bus Compatibility Function Test</b>		<b>Model</b>	<b>Result</b>
SanDiak 4MB Mass Storage System PCMCIA Card	Slot1(Up) Slot2 (Down)	[PC-003]	N/A
E-Tech C336MX Data/Fax PCMCIA Card	Slot1(Up) Slot2 (Down)	[PC-004]	N/A
SanDiak 4MB Mass Storage System PCMCIA Card		[PC-003] + [PC-004]	N/A
<b>Installation Operation System Compatible Test</b>			<b>Result</b>
Linux -RedHat 9.0 / Kernel 2.4.20-8			PASS
Windows Server 2003 English Version / Standard Edition 5.2.3790			N/A
Windows XP Professional English Version V2002 with Service Pack 1			PASS
Windows 2000 Professional English Version V5.00.2195 with Service Pack 4			PASS
Windows 98SE English Version V4.10.2222A			PASS
Windows NT Workstation 4.0 English Version with Service Pack6			N/A
DOS6.22			PASS
<b>Utility and Driver Test</b>			<b>Result</b>
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
WinXP Pro VGA Driver→ Intel® 82852/82855 GM/GME Graphics Controller V6.14.10.3943 11/2/2004			PASS

WinXP Rro LAN Driver→ Intel® PRO/1000 MT Network Connection V8.1.8.0 9/15/2004			PASS
WinXP Pro Audio Driver→ Realtek AC'97 Audio V5.10.0.5761 12/6/2004			PASS
Win2000 Pro VGA Driver→ Intel® 82852/82855 GM/GME Graphics Controller V6.14.10.3943 11/2/2004			PASS
Win2000 Pro LAN Driver→ Intel® PRO/1000 MT Network Connection V8.1.8.0 9/15/2004			PASS
Win2000 Pro Audio Driver→ Realtek AC'97 Audio V5.10.0.5761			PASS
Win98SE VGA Driver→ Intel® 82852/82855 GM/GME Graphics Controller V4.14.10.3732			PASS
Win98SE LAN Driver→ Intel® PRO/1000 MT Network Connection V4.10.2222 9/15/2004			PASS
Win98SE Audio Driver→ Realtek AC'97 Audio V5.10.5760 12/9/2004			PASS
<b>BIOS Function Test</b>			<b>Result</b>
Standard CMOS Setup Test			PASS
Boot Sequence Test			PASS
APM Power Manager Test			PASS
ACPI Power Manager Test			PASS
Power On Function Test			N/A
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
TV Standard Function Test			N/A
Init Display First Function Test			PASS
On-Chip Serial ATA Function Test			N/A
SATA Mode-IDE/RAID Function Test			N/A
Voltage Monitor Test			PASS
FAN Speed Monitor Test			N/A
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
<b>Touch Screen LCD for Serial Ports Test</b>			<b>Address</b>
			<b>IRQ</b>
			<b>Result</b>
COM1	3F8	IRQ4	N/A
COM4	2E8	IRQ11	N/A
<b>Windows 2000 Pro+SP4 Performance Test (VIA C3 1A GHz / 512MB SDRAM)</b>			
<b>ZD Media WinBench 99 V2.0</b>			
Bussiness Disk WinMark99	5900 <sup>2,3</sup> Thousand Byte/sec		
Bussiness Graphics WinMark99	20600 <sup>2,3</sup>		
High-End Disk WinMark99	134 <sup>2,3</sup> Thousand Byte/sec		
High-End Graphics WinMark99	295 <sup>2,3</sup>		
<b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>			
2D image Processing Test	7.44		
3D Test	3.54		
Bus transfer Rate	13.88		
Overall Performance	6.26		
<b>ZD 3D Winbench 2000 V1.1</b>			
3D WinMark 2000	N/A		
3D WinBench2000 Processor Test	1.35 <sup>4,39,40,41</sup>		
<b>ZD Multimedia Content Creation Winstone 2004 v1.0.1</b>			
Multimedia Content Creation Winstone 2004	7.4		
<b>3Dmark2001SE Pro (Demo version)</b>			
3DMark2001SE Build 330_ Benchmark mode	1044		
<b>ZD Business Winstone 2004</b>			
Business Winstone 2004	1044		



<b>Business Winstone 2004 v1.0.1 (Up Pentium 800 MHZ CPU)</b>	
Business Winstone2004	7.1
<b>System Integer Application Test</b>	
System Integer Application Test (Burn-in 8 Hours in Room Temperature)	PASS
<b>System Integer Power Consumption Test</b>	
Normal Mode(+5V)	3.04A
Normal Mode(+12V)	1.15A
Normal Mode(+3.3V)(ATX-Power Supply)	0
Normal Mode(-5V)	N/A
Normal Mode(-12V)	N/A