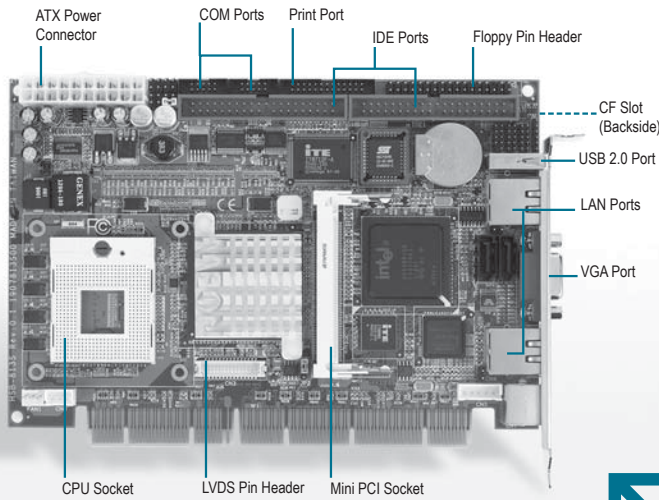


## Intel® Pentium® M/ Celeron® M BGA/ Socket PCISA Half-size SBC



### Features

- Onboard Intel® Pentium®-M Socket 479
- DDR333 Memory Supports Up To 2GB
- Integrated AGP 4X 2D/3D Graphics Accelerator, LVDS Support
- 10/100/1000Base-TX Ethernet x 2 (10/100 & GbE Optional)
- Integrated AC97 Codec Audio (Daughter Board Optional)
- Mini PCI, Type III Socket
- USB 2.0 x 5/ RS-232 x 1, RS-232/422/485 x 1/ Parallel x 1/ IrDA Port x 1
- Ultra ATA100 & CompactFlash™ Type-II & SATA-I Port x 2
- Watchdog Function 1~255 Sec.



### Specifications

System	
Form Factor	PCISA, Half-size SBC
Processor	Intel® Pentium® M/ Celeron® M CPU, FSB: 400MHz, Onboard 600MHz/ non-cache, on Board or Socket type
System Memory	200-pin 2.5V DDR SODIMM Socket x 2, total up to 2 GB Support DDR memory (DDR266/333)
Chipset	Intel® 82855GME + Intel® 82801DB (ICH4)
Ethernet	10/100Mb or 10/100/1000Mb LAN x 2 (optional), RJ-45 X 2, Intel® 82562EZ / 82551QM/ 82541GI controller
BIOS	Award Plug & Play ISA BIOS – 4Mb ROM
IDE Interface	ATA-100 (Support four ATAPI devices) x 2, SATA-I Port x 2
SSD	CFD type II Connector x 1
Expansion Interface	PCISA Interface / Mini PCI Type III socket / ISA bridge ITE8888G
Watchdog Timer	1~255 sec. can be set with software on Super I/O
RTC	Internal RTC
Battery	Lithium battery
Power Requirement	Standard ATX Power Connector ATX12V, 5V/12V use only
Operating Temperature	32°F~140°F (0°C ~ 60°C)
Board Size	7.3" (L) x 4.8" (W) (185 mm x 122 mm)
Gross Weight	0.7 lb (0.3 kg)
MTBF (Hours)	99,680
Power Consumption (Typical)	20W, with Pentium® 4 1.4GHz/ FSB 400MHz/ 2MB L2 Cache
Display	
VGA Controller	Supports CRT/ LCD simultaneous display
Memory	Integrated on Intel® 82855GME, AGP 4X, dual display support and LVDS output
Resolutions	Share system memory up to 128M
LCD Interface	1280x1024@32bpp colors for CRT 1280x1024@24bpp colors for LCD
I/O	Integrated Intel® 82855GME up to 48-bit dual display LVDS
Serial Port	ICH4 + ITE 8712F
Parallel Port	COM port x 2: (Internal Pin Header, External D-sub x 2) COM 1: RS-232 COM 2: RS-232/422/485 (jumperless selection)
Universal Serial Bus	Parallel port supports SPP/ EPP/ ECP mode x 1 USB 2.0 port x 5 Internal 5 x 2-pin header supports up to 2 USB ports x 2 Type-A connector onboard x 1
Floppy Drive Interface	Standard Floppy Disk Drive x 1
Keyboard and Mouse	Mini-DIN PS/2 keyboard and mouse connector x 1 Internal keyboard pin header x 1
IR Interface	IrDA header x 1
Audio (Daughter Board)	AC97 Codec, MIC-in/ Line-in/ Line-out/ CD-in

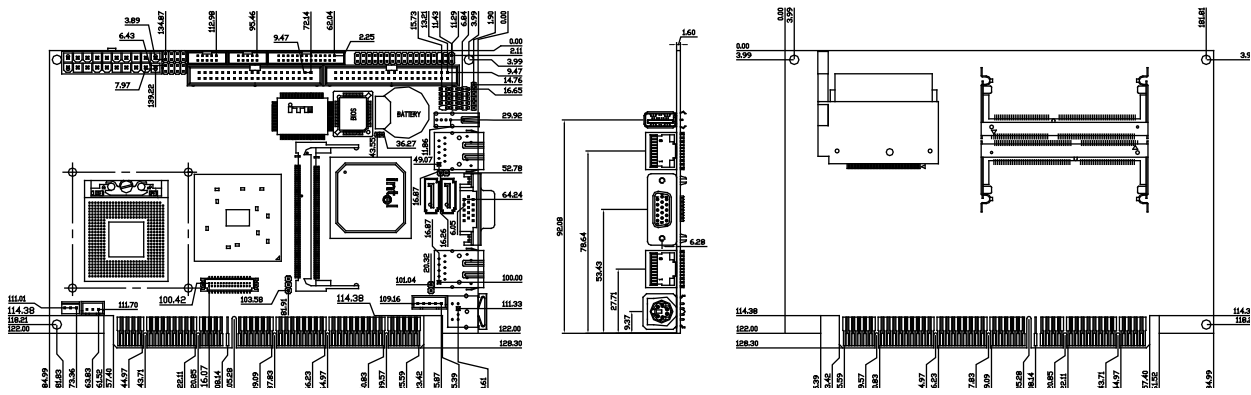
### Packing List

- **1701340704**  
Flat Cable, 34P, 70cm, GRAY for Floppy Disk Drive
- **1701400453**  
Cable, 40P 2.54mm IDC w/Nose w/Fold, 40P 2.54mm IDC w/Nose w/Fold, 45cm, BLUE ATA-100
- **1709100201**  
USB Cable, 20cm 2.0mm, w/Bracket
- **1700060192**  
Cable, 6P-6P-6P, 19cm, IVORY PS/2 / Keyboard & Mouse
- **1701260307**  
Flat Cable, 9P/DB9P MALE & 25P DB25P FEMALE, 10P 2mm & 26P 2mm/IDC NO FOLD, 30cm, w/Bracket
- **1701100305**  
Flat Cable, 9P/DB9P MALE, 10P/2.0mm Pitch/IDC NO FOLD, 30cm, w/Bracket
- **1703030501**  
Wire, 3P 2.5mm Housing, 3P 2.5mm Housing, 50cm
- **CPU Cooler Fan**
- **Quick Installation Guide**
- **Utility CD**
- **HSB-813S**

### Ordering Information

- **TF-HSB-813S-A11-VE**  
Half-size PCISA, Socket 479 Pentium®-M Processor CPU Card, VGA/LVDS, 10/100 LAN, 5 USB, CF, AC97 Audio, Mini PCI, Rev. A1.1
- **TF-HSB-813S-A11-E2**  
Half-size PCISA, Socket 479 Pentium®-M Processor CPU Card, VGA/LVDS, 2 x 10/100 LAN, 5 USB, CF, AC97 Audio, Mini PCI, Rev. A1.1
- **TF-HSB-813S-A11-VG**  
Half-size PCISA, Socket 479 Pentium®-M Processor CPU Card, VGA/LVDS, 10/100/Gigabit Ethernet, 5 USB, CF, AC97 Audio, Mini PCI, Rev. A1.1

## Dimension Unit: mm



## Passive Backplane Options

P/N	Description	Master Interface	Slots (PCI/ISA/PCISA)	Power Connector, ATX Extend Function
TF-BP-204SS-P1-A11	PCISA, 4-slot. Backplane. 1 PCI/ 2 ISA. Single Segment. AT power connector. Ver. 1.1	PCISA	1/1/2	AT
TF-BP-204SS-P2-A10	Wallmount, PCISA, 4-slot Backplane, 2 PCI/ 1 ISA, Single Segment, AT, Ver. 1.0	PCISA	2/1/1	ATX, 6-pin ATX extend
TF-BP-206SS-P4-A11	Wallmount, PCISA, 6-slot. 4 PCI, 3 PCISA, Single Segment, ATX, Ver. 1.1	PCISA	4/0/3	ATX, 6-pin ATX extend

## Optional Accessories

- **TF-PER-U00A**  
AC97 Audio Daughter Board
- **1701400802**  
Flat Cable, 40P-40P-40P (UL: 2651, 15cm + 65cm), 80 cm for ATA33
- **1701400800**  
Flat Cable, 40P-40P-40P (UL: 20674, 15cm + 65cm), 80 cm for ATA100
- **1701400702**  
Flat Cable, 40P ATA-100 2.54 mm, BLUE/GRAY/BLACK 70cm for Hard Disk Drive
- **1703300351**  
LCD Cable, 30-pin to 20-pin, 35cm, for Hyundai HT12X11-200 12.1"/ 1024\*768/ 3.3V LVDS Panel
- **1703300352**  
LCD Cable, 30-pin to 30-pin, 35cm, for Hyundai HT17E11-300 17"/ 1280\*1024/ 3.3V LVDS Panel, Samsung LTM150XH-L04 15.1"/ 1024\*768/ 3.3V LVDS Panel