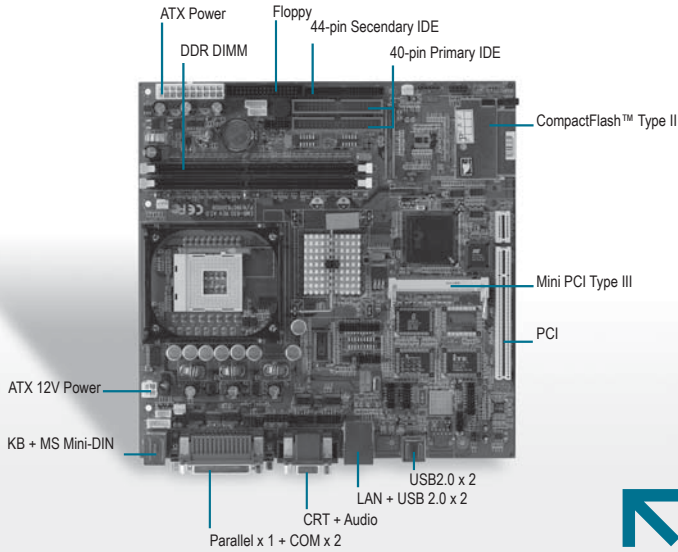


## Intel® Pentium® 4/ Celeron® Processors



### Features

- **Socket 478-based Intel® Pentium® 4/ Intel® Celeron® Processors**
- **DDR 200/266/333 DIMM x 2, Up to 2 GB**
- **Up to 24-bit Dual-channel LVDS LCD**
- **One 10/100 Base-TX Ethernet**
- **AC97 3D Surround 5.1 Channel Audio**
- **Type II CompactFlash™**
- **Type III Mini PCI and PCI Slots**
- **COM x 4/ USB 2.0 x 6/ TV-out Ports**



### Specifications

System	
Form Factor	Embedded ATX
Processor	Socket 478-based Intel® Pentium® 4/ Celeron® processors (.13µ / .18µ) supports up to 2.8GHz with FSB 400/533MHz
System Memory	184-pin DDR DIMM x 2, Max. 2GB (DDR 200/266/333)
Chipset	Intel® 845GV + ICH4
I/O Chipset	ITE IT8712
Ethernet	Intel® 82562ET, 10/100Base-TX
BIOS	Award 4MB FLASH BIOS
Wake On LAN	Yes
Watchdog Timer	Generates a time-out system reset
H/W Status Monitoring	Supports power supply voltages, fan speed and temperature monitoring
Expansion Interface	Mini PCI x 1, PCI x 1
Power Requirement	ATX, ATX12V
Power Consumption (Typical)	Pentium® 4 2.0GHz, DDRII 333 512MB +5V @ 1.42A, +3.3V@1.77A
Board Size	9.6"(L) x 9.6"(W) (243.8mm x 243.8mm)
Gross Weight	0.88 lb (0.4 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	90,000
Display	
Supports CRT/ LCD simultaneous display Supports screen image rotation	
Chipset	Intel® 845GV + Chrontel 7017
Memory	Shared system memory up to 64MB with DVMT
Resolutions	Up to 1280x1024@32bpp colors for CRT Up to 1280x1024@24bpp colors for LCD
LCD Interface	Up to 24-bit dual-channel LVDS TFT
TV-out	Supports NTSC and PAL standard
I/O	
Storage	EIDE x 1 (UDMA 100), Type II CompactFlash™ x 1, Floppy Disk Drive x 1
Serial Port	RS-232 x 3, RS-232/422/485 x 1
Parallel Port	SPP/ EPP/ ECP mode
USB	USB2.0 x 6
PS/2 Port	Keyboard + Mouse x 1
Digital I/O	Supports 8-bit (Programmable)
IrDA	One IrDA Tx/Rx header
Audio	Mic-in, Line-in, Line-out, Speaker-out, 5.1CH

### Packing List

- **1701400453**  
40-pin IDE Cable
- **1701440501**  
44-pin IDE Cable
- **1701340601**  
Floppy Disk Drive Cable
- **1701100207**  
COM Port Cable
- **1700080180**  
TV-out & S-terminal Cable
- **1700140164**  
Audio Cable
- **1709100201**  
USB Cable
- **9657666600**  
Jumper Cap
- **Quick Installation Guide**
- **Utility CD**
- **EMB-830**

### Ordering Information

- **TF-EMB-830-A20-01**  
Embedded ATX Board, Socket 478, 533 FSB, with LCD, LAN, 5.1 Audio, CompactFlash™, 6 USB 2.0, 4 COM, ATX, Rev.A2.0

### Optional Accessories

- **1759200153**  
(TF) CPU Cooler Fan + Heat Sink, Socket 478, 3P, 12V, 2U Low Profile, up to P4 2.8GHz
- **1759200154**  
(TF) CPU Cooler Fan + Heat Sink, Socket 478, 3P, 12V, 1U Low Profile, up to P4 2.2GHz
- **TF-PER-1100-A10**  
Riser Card for PCI, 3-slot, EMB-830, Rev.A1.0
- **TF-PER-C10L-A10**  
Mini PCI 10/100 Base-TX Ethernet Module with Realtek 8100C
- **TF-PER-C10L-A10-01**  
Mini PCI Gigabit Ethernet Ethernet Module with Realtek 8110S
- **TF-PER-C10L-A10-02**  
Mini PCI 10/100 Base-TX Ethernet Module with Intel® 82551QM
- **TF-PER-C10L-A10-03**  
Mini PCI Gigabit Ethernet Ethernet Module with Intel® 82541GI
- **TF-PER-C20S-A10**  
Mini PCI 2-port SATA Module Rev.A1.0
- **TF-PER-C30F-A10**  
Mini PCI 3-port IEEE 1394a Module
- **TF-PER-V30C-A11**  
Mini PCI Single Channel Capture Module with Philips SAA7135
- **TF-PER-C40C-A10**  
Mini PCI 2-port RS-232 Module Rev. A1.0
- **TF-PER-C40C-A10-01**  
Mini PCI 4-port RS-232 Module Rev. A1.0