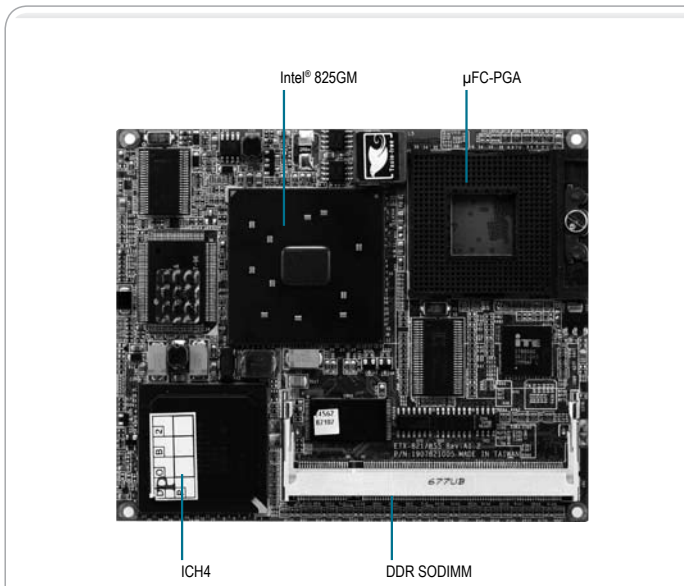


# ETX-821

■ ETX CPU Module with Intel® Pentium® M/ Celeron® M Processors



## Features

- Intel® Pentium® M/ Celeron® M Processors
- Intel® 852GM + ICH4
- SODIMM DDR 200/266 Memory, Max. 1 GB
- 10/100Base-TX Ethernet
- CRT, Up to 24-bit Dual-channel LVDS LCD (Emulated), TV
- AC97 2.3 Codec 2CH Audio
- PATA x 2
- USB2.0 x 4, COM x 2
- +5V Only Operation



## Specifications

System	
Form Factor	ETX
Processor	Intel® Pentium® M/ Celeron® M processors, FSB 400 MHz
System Memory	200-pin DDR SODIMM x 1, Max. 1 GB (DDR 200/266)
Chipset	Intel® 852GM + ICH4
I/O Chipset	ITE IT8712
Ethernet	Intel® 82562ET, 10/100Base-TX
BIOS	Award
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	32-bit PCI x 4 8-bit/16-bit ISA SMBus x 1 I2C x 1
Power Requirement	+5V DC
Power Consumption (Typical)	Celeron® M 1.0 GHz 0KB L2, DDR333 1 GB 0.31A@+12V, 3.3A@+5V w/ TF-ECB-901A-A10
Board Size	4.5" (L) x 3.75" (W) (114 mm x 95 mm)
Gross Weight	0.66 lb (0.3 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)	110,000
Display	
Chipset	Intel® 852GM integrated
Memory	Shared system memory up to 64 MB
Resolutions	Up to 1600 x 1200 (UXGA) for CRT Up to 1280 x 1024 (SXGA) for LCD
LCD Interface	Up to 24-bit dual-channel LVDS (Emulated)
TV-Out	Supports NTSC/PAL (Chrontel CH7009)
I/O	
Storage	PATA x 2 (Four devices)
Serial Port	2
Parallel Port	1
USB	USB 2.0 x 4
PS/2 Port	Keyboard x 1, Mouse x 1
IrDA	One IrDA Tx/Rx header
Audio	Mic-in, Line-in, Line-out

## Packing List

- M2.5 Screw x 4
- Utility CD
- ETX-821

## Ordering Information

- **TF-ETX-821-A12**  
ETX Board, Socket-478M, DDR, LAN, Audio, 2COM, USB2.0, Rev. A1.2
- **TF-ETX-821-A12-01**  
ETX Board, Intel® Celeron® M 600 MHz with 512 KB L2 Cache, DDR, LAN, Audio, 2COM, USB2.0, Rev. A1.2

## Optional Accessories

- **TF-ECB-902M-A10**  
ETX Carrier Board, LAN, Audio, COM, USB, PCI, ISA, AT/ATX, Rev. A1.0
- **TF-PER-A037**  
CPU Cooler, for Socket-type CPU
- **TF-PER-A038**  
CPU Cooler, for Onboard CPU
- **TF-PER-A039**  
Passive Heatsink, for Socket-type CPU
- **TF-PER-A040**  
Passive Heatsink, for Onboard CPU
- **TF-PER-A041**  
Heat Spreader Kit, for Socket-type CPU
- **TF-PER-A042**  
Heat Spreader Kit, for Onboard CPU