

## ESM-2640

Mobile Intel Pentium III-M/  
Celeron-M SOM-ETX module



### FEATURES

- ETX Form Factor
- Mobile Pentium III-M 800 MHz/ Celeron M400 MHz CPU onboard
- Supports CRT and 24-bit TFT and Dual-channel 18-bit LVDS panels
- 100/10Base Tx fast Ethernet
- Integrated AC-97 2.0 Sound Blaster Compatible Audio
- Fanless and Single 5V operation

### Ordering Information

- ESM-2640-P8  
Mobile Intel Pentium III-800 MHz SOM-ETX module
- ECM-2640-C4  
Mobile Intel Celeron M 400 MHz SOM-ETX module

### SPECIFICATIONS

#### General Functions

CPU	Onboard Mobile Pentium III-M 800/Celeron-M 400 MHz CPU
BIOS	Award 256K Flash BIOS
Chipset	VIA TwisterT VT8606/VT82C686B
I/O Chipset	VIA VT82C686B
Memory	Onboard one 144-pin SODIMM socket supports up to 512MB SDRAM
Enhanced IDE	Supports four IDE devices Supports Ultra DMA/100
FDD interface	Supports one floppy disk drive
Parallel port	Supports SPP, ECP and EPP modes
Serial port	Supports two 16C550 equivalent serial ports (TTL only). Ports can be configured as COM1, COM2, COM3, COM4 or disabled individually
IR interface	Supports one IrDA port
KB/Mouse connector	Supports PS/2 keyboard and mouse
USB connectors	Supports four USB ports
Watchdog timer	Reset/IRQx; 2 ~ 255 sec. and 1 sec./step
PCI interface	Supports 4 master PCI bus
ISA interface	Supports one ISA interface
SIRQ	Supports one SIRQ

#### Flat Panel/CRT Interface

Chipset	VIA VT8606 TwisterT with integrated S3 Savage4 2D/3D graphics engine
Display memory	8/16/32 MB frame buffer using system memory
Resolution	CRT mode: 1920 x 1440 @ 16bpp (60Hz) LCD/Simultaneous mode: 12810 x 1024 @16bpp (60Hz) Supports LCD/CRT 1280 x 1024 @ 8 bpp and 1024 x 768 @ 16bpp

#### Ethernet Interface

Chipset	Realtek 8139C PCI-Ethernet controller onboard
Ethernet interface	PCI 100/10 Mbps, IEEE 802.3U compatible
Remote Boot ROM	For Diskless operation

#### Optional LVDS Interface

Chipset	NS DS90C365 or Topshine THC63LVDM63A
Display type	Supports 18-bit LVDS TFT panels

#### Audio Interface

Chipset	NS Geode CS5530A
AC97 Codec	AD1819B
Audio Interface	Microphone in, Line in, CD audio in, Line out

#### Mechanical and Environmental

Power supply voltage	+5V(4.75V to 5.25V)
Min. power requirements	+5V @ 1.66A
Operating temperature	0 to 60°C
Board size	100mm x 114mm
Weight	0.3kg