

ETX CELERON M AND PENTIUM M CPU MODULE

DESCRIPTION

The M671R is a new ETX CPU module designed by SECO, paying attention to customers requiring very high performances.

The module is based on the Celeron® M and Pentium® M CPU at 1.8GHz frequency, with Chipset 855GME (Intel® 852GME on CM ULV 600MHz version) and front side bus at 400 MHz. The chipset has integrated 2D/3D graphic controller, supporting AGP4x interface. An important feature in this module is the LVDS interface at 18bit and 24bit Single and Dual Channel. The module integrates also Audio, Ultra-ATA/ 100 IDE interface, 1 Ethernet 10/ 100 BaseT, 4 USB 2.0 ports, 2 Full modem serial ports, 1 standard parallel, keyboard/mouse controllers, Real Time Clock and Watch Dog Timer.



TECHNICAL SPECIFICATIONS

■ CPU:	Intel Celeron® M up to 1.5 GHz Intel Pentium® M up to 1.8 GHz
■ Chipset:	Intel 855GME Northbridge + ICH4R Southbridge
■ DRAM:	Up to 1GB DDR400 on SO-DIMM supporting 200, 266 and 333 MHz and ECC modules
■ FSB	400 MHz
■ Graphic & Video:	GFX 2D/3D system at 32bit, frequency up to 250 MHz, AGP 4x: <ul style="list-style-type: none"> - Up to 32MB Shared Video RAM - 1600x1200 at 85 Hz on VGA Video Output - 2048x1536 at 75 Hz on VGA Video Output - LVDS Single or Dual Channel UXGA Video Output 1600x1200 at 60 Hz
■ COM Ports:	2 x RS232 Full Modem
■ USB:	4 x USB 2.0 ports
■ LPT:	Standard, EPP or ECP parallel port
■ ETHERNET:	10/100 Base-TX
■ IDE:	Ultra-ATA/100
■ Audio:	Codec AC'97 integrated
■ HW monitor:	- Main voltages - CPU temperature
■ PS/2 Keyboard and Mouse	
■ Watch Dog Timer	
■ Real Time Clock	
■ TEMPERATURE, FAN SPEED AND VOLTAGE MONITORING	
■ Environment:	- Power supply voltage: +5VDC - Power consumption: TBD - Temp. Range 0° to 70° C (*)
■ Dimensions:	114*95 mm (4.5" x 3.7")

(*) In agreement with ETX concept, the max temperature is the max heat-spreader temperature; then user must take care to provide for it.

The processor and chipset are optimized for low power consumption, allowing to use the module in fan-less applications.

The ETX modules integrate in a compact size the most PC's common features; they are connected to the rest of the embedded system through four high density connectors that are carrying to the base-board both ISA and PCI bus signals together with the I/O interfaces. All signals are externally available with TTL logic levels.



ORDERING INFORMATION

Part Number	Description
M671R-BA	ETX CPU Intel Celeron® M 800 MHz, 0 Cache L2
M671R-CA	ETX CPU Intel Celeron® M ULV 1 GHz, 512 KB Cache L2
M671R-DA	ETX CPU Intel Pentium® M 1.6 GHz, 1 MB Cache L2
M671R-EA	ETX CPU Intel Pentium® M 1.8 GHz, 2 MB Cache L2
M671R-LA	ETX CPU Intel Celeron® M ULV 600 MHz, 512 KB Cache L2
M671R-GA	ETX CPU Intel Celeron® M 1.5 GHz, 1 MB Cache L2
M671R-HA(*)	ETX CPU Intel Pentium® M 1.4 GHz, 512 KB Cache L2

(*) = Available on request, min. 100 pcs.