

# ▶ ETXexpress<sup>®</sup>-PM

Perform beyond limits



**COM**   
**Express**



powered by  
**Intel<sup>®</sup> Pentium<sup>®</sup> M**

- ▶ Best performance with latest interface technologies
- ▶ Equipped with the upcoming primary datapath PCI Express
- ▶ Intel<sup>®</sup> Extreme Graphics and PCI Express Graphic
- ▶ USB 2.0 for fast peripherals
- ▶ SerialATA for highspeed drives

## Product Overview

ETXexpress® is the Module concept of the new open Standard COM Express® (by PICMG®). The new ETXexpress®-PM module is based on the Intel® Pentium® M and Intel® Celeron® M processors as well as the Intel® 915GM chipset. PCI Express is the primary data path for upcoming x86 based systems. Non PCI Express components such as PCI plug-in cards can still be supported with the PCI 2.1 32 Bit Interface as ETXexpress® COMs will continue supporting the PCI bus for legacy applications. The ETXexpress®-PM will support 4 PCI Express x1 and PCI Express cards as well as established hardware solutions based on current busses such as 32 bit PCI. For applications that require advanced real-time video capabilities,

the ETXexpress®-PM has both Intel® Extreme Graphics 2 and PCI Express graphics 1x16. Fast communications are possible courtesy of the 10/100Fast-T Ethernet port that will be upgraded to be Gigabit ready in future COM Express®. 8x USB 2.0 provides fast and sufficient interfaces for external peripherals. ETXexpress® COMs modules also will provide the following interfaces that are always located in the same physical position on each board, thus guaranteeing scalability between modules: PCI-express, PCI32, USB, serial ATA, parallel ATA, LVDS Multi Media ports as well as an ACPI (Advanced Configuration and Power Interface) for optimized power management. Six mounting holes on the board provide secure mounting to allow the module increased shock and vibration resistance.

## Technical Information

<b>Processor</b>	Intel® Pentium® M and Intel® Celeron® M Processor, socket or soldered
<b>Memory</b>	Up to 2GB (400/533) DDR2 SODIMM
<b>Hard Disk</b>	2 x Serial ATA, 1 x Parallel ATA 100
<b>USB</b>	8x USB 2.0 Ports for external peripherals
<b>PCI Express</b>	4 PCI Express x1 (3 PCI Express x1 for GbE version), 1 PEG x16
<b>PCI 32</b>	PCI 2.3, 32 bit / 33 MHz PCI bus
<b>Ethernet</b>	10/100 MBit Ethernet (or Gigabit Ethernet)
<b>Sound</b>	Intel® High Definition Audio / AC97
<b>Video Controller</b>	Integrated with Intel® Graphics Media Accelerator (GMA 900) or expand via 1 PEG x16

<b>Resolutions CRT and LCD</b>	XGA 1024x786 32 Bit, SXGA 1280x1024 32 Bit, UXGA 1600x1200 32 Bit, QSXGA 2048x1536 32 Bit
<b>LCD Panel Support</b>	Single and Dual Channel LVDS 18/24 bit, Dual SDVO
<b>TV out</b>	TV out on separate set of pins (component video or composite video)
<b>Other Features</b>	E²PROM BIOS Setup, LAN Boot, JRC support, I²C Bus, RTC, Watchdog, JIDA Support, IrDA enhanced
<b>Power Consumption</b>	typ. Idle 13,3W Pentium® LV738
<b>Form Factor / Pin-out Type</b>	Fully COM Express™ Type 2 compliant 95 x 125 mm
<b>Temperature</b>	operation: 0° to 60°C, storage: -10° to 85°C
<b>Humidity</b>	operation: 10% to 90%, storage: 5% to 95%

## Ordering Information

(\*) Ask about extended temperature ranges

Article	Part.-No.	Description
ETXexpress-PM370 socket	38001-0000-15-0	With * Celeron® M 370 processor (1.5 GHz), socket, 1MB L2
ETXexpress-PM745 socket	38001-0000-18-0	With Intel® Pentium® M 745 processor (1.8 GHz), socket, 2MB L2
ETXexpress-PM760 socket	38001-0000-20-0	With Intel® Pentium® M 760 processor (2.0 GHz, 533 FSB), socket, 2MB L2
ETXexpress-PM373 soldered	38001-0000-10-1	With Intel® Celeron® M ULV 373 processor (1.0 GHz), soldered, 512KB L2
ETXexpress-PM738 soldered	38001-0000-14-2	With Intel® Pentium® M LV 738 processor (1.4 GHz), soldered, 2MB L2
ETXexpress-PM373 GbE	38002-0000-10-1	With Intel® Celeron® M ULV 373 processor (1.0 GHz), soldered, GbE LAN, 512KB L2
ETXexpress-PM745 GbE	38002-0000-18-0	With Intel® Celeron® M ULV 745 processor (1.8 GHz), socket, GbE LAN, 2MB L2
ETXexpress Evaluation Board	38100-0000-00-0	Evaluation Baseboard for ETXexpress modules
HSP ETXexpress-PM soldered	38001-0000-99-0	Heatspreader ETXexpress-PM, soldered, threaded stand off
HSP ETXexpress-PM socket	38001-0000-99-2	Heatspreader ETXexpress-PM, socket, threaded stand off
DDR2-SODIMM-1GB	97011-1024-00-0	DDR2 SODIMM memory module with 1GB

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