



Ampro MightyBoard™ 821

Pentium® M Mini-ITX PCI Express Single Board Computer

Blistering network and video performance



MightyBoard 821

Choose Ampro MightyBoard™ 821 for...

Applications requiring ultra high performance networking and/or graphics in an industry standard form factor.

Description

Ampro MightyBoard 821 is a high performance Mini-ITX form factor SBC offering dual Gigabit Ethernet controllers on the PCI Express bus. A x16 PCI Express expansion slot provides access to high performance video. MightyBoard 821 provides plenty of CPU performance through a choice of Intel® Pentium® M or Celeron® M CPUs, 400MHz DDR2 memory, Serial ATA HDD interface, and six USB 2.0 interfaces.



- Pentium® M / Celeron® M CPUs
- Up to 2GB of DDR2 400MHz memory
- x16 PCI Express Slot
- Dual Gigabit Ethernet ports on PCI Express x1 lanes
- Serial ATA port
- ACPI 2.0 with S3 support
- CRT, LVDS

For more information, pricing, and details on volume discounts, please call us at 1.800.966.5200 or +1.408.360.0200. We'll immediately connect you to your local distributor.

Don't see the product you need? Contact us at 1.800.966.5200 or +1.408.360.0200 for information about our semi-custom and custom solutions.

Ordering Information

MODEL	DESCRIPTION
MB4-821-R-15	1.5GHz Celeron® M CPU, PCI Express, dual Ethernet, Video, 4 COM
MB4-821-R-20	2.0GHz Pentium® M CPU, PCI Express, dual Ethernet, Video, 4 COM
MB4-821-L-15	1.5GHz QuickStart Kit (R-15 SBC, 512MB RAM, Cable Kit, Software, Documentation)
MB4-821-L-20	2.0GHz QuickStart Kit (R-20 SBC, 512MB RAM, Cable Kit, Software, Documentation)
MB1-ALL-X-01	Cable Kit

Specifications

PROCESSORS

- Choice of
 - 2.0GHz Pentium® M 760
 - 1.5GHz Celeron® M 370
- Cache – 2MB or 1MB Level 2
- Chipset – Intel 915GME / ICH6M
- FSB – support up to 533MHz
- System Controllers – PC compatible DMA and interrupt controllers and timers
- Real Time Clock – Battery-backed RTC/CMOS
- Enhanced Power Management with full support of ACPI 2.0
- Watchdog Timer
- Powerfail Reset – Triggers when key voltage drops below predetermined thresholds

MEMORY

- DRAM – Up to 2GB DDR2 400/533MHz DIMM

BUS INTERFACE

- x16 PCI Express slot

I/O

- IDE – Ultra DMA 33/66/100 supports up to 2 devices
- SATA – 2 devices
- Serial – 4 ports, two are RS232/422/485
- Parallel – EPP/ECP bi-directional port
- USB – 6 USB 2.0 ports
- Keyboard/Mouse – PS/2 ports
- GPIO – 4 in/4 out
- Audio – AC97 stereo line in/out, mic

NETWORK INTERFACE

- Ethernet ports – (2) Gigabit Ethernet Ports on PCI Express bus-Intel 82573

INTEGRATED VIDEO INTERFACE

- Controller – Integrated Intel 2D/3D engines
 - Supports CRT, LVDS display interfaces
 - Supports Intel DVMT 3.0 (Dynamic Video Memory Technology) which allows maximum memory of 128MB
 - TV-Out with Composite/S-Video/component interface

SOFTWARE & DEVELOPMENT TOOLS

- OS Support – Ampro Embedded Linux, Windows® CE 5.0, XP, XPe (See Web site for details)
- BIOS – AMI with ACPI 2.0 including S3

MECHANICAL

- Size – 170x170mm (6.7x6.7"), Mini-ITX form factor
- Power Requirements – (with 512MB RAM, 100% loaded)
 - 1.5GHz 0.7A@3.3V 1.11A@5V 1.54A@12V
 - 2.0GHz 0.7A@3.3V 1.30A@5V 0.97A@12V
- Environmental
 - Temperature (100 CFM system air flow), CPU fan installed on all models
 - Standard: 0° to +60°C
 - Storage: –20° to +75°C
- Board Thickness – .062" (1.6mm)



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