



## Ampro ReadyBoard™ 820

### Pentium® M EPIC Single Board Computer

### Ultra High I/O Bandwidth, Easy Interface



## ReadyBoard 820

### Choose Ampro ReadyBoard™ 820 for...

High volume, compact embedded applications that need high CPU performance and I/O bandwidth along with RoHS compliance.

### Description

Ampro ReadyBoard™ 820 SBC uses a high performance, low-power Centrino® processor. It includes Gigabit Ethernet, USB 2.0, SATA and high performance graphics in an easy to use EPIC form factor SBC, connector-compatible with the ReadyBoard™ 800.



- ACPI 2.0 power management
- Dual Ethernet – Gigabit and 10/100BaseT
- 4 USB 2.0, 2 SATA ports
- ReadySystem™ turn-key systems available

**For more information, pricing, and details on volume discounts, please call us at 1. 800. 966. 5200 or +1. 408. 360. 0200.**

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our semi-custom and custom solutions.

### Ordering Information

MODEL	DESCRIPTION
RB4-820-R-21	1.4GHz Pentium® M, Dual Ethernet, no RAM
RB4-820-R-10	1.0GHz Celeron® M, Dual Ethernet, no RAM
RB4-820-L-21	1.4GHz QuickStart Kit (R-21 SBC, 512MB RAM, Cable kit, Software, Documentation)
RB4-820-L-10	1.0GHz QuickStart Kit (R-21 SBC, 512MB RAM, Cable kit, Software, Documentation)
RB4-ALL-X-01	ReadyBoard Cable Kit (RoHS)

### Specifications

#### PROCESSORS

- Choice of
  - 1.4GHz LV Pentium® M 738
  - 1.0GHz Celeron® M
- Cache – 2MB Level 2
- Chipset – Intel® 915GME/ICH6M
- FSB – 400MHz
- 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 input voltage drops below predetermined threshold

#### MEMORY

- DRAM – 2GB DDR2 533 SODIMM

#### BUS INTERFACE

- PCI-104

#### I/O

- IDE – Single Ultra DMA 33/66/100 channel supports up to two devices
- SATA – 2 devices
- Compact Flash on primary IDE
- Serial – 4 ports, 2 are RS232/422/485
- Parallel – EPP/ECP bidirectional port shared with floppy interface (coming Q1 '08)
- Floppy – Supports 1 or 2 drives, shared with parallel port (coming Q1 '08)
- USB – 4 USB 2.0 ports
- Keyboard/Mouse – PS/2 interface
  - GPIO – 8
- Audio – AC97 speaker, mic, headphone

#### NETWORK INTERFACE

- Ethernet – One Gigabit Ethernet port on PCI Express bus; one Intel® 82551QM (10/100BaseT) port

#### VIDEO INTERFACE

- Controller – Integrated Intel® 2D/3D engines
  - Supports CRT and DBDS display interfaces
  - Supports Intel® DVM T 3.0 (Dynamic Video Memory Technology which allows maximum memory allocation support based on total system memory
  - Supports 3.3V and 5V LVDS flat panels

#### 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

#### MECHANICAL

- Size – 114.3x165.1mm (4.5x6.5"); EPIC form factor
- Power Requirements (with 512MB RAM, 100% Loaded)
  - 1.4GHz 4.5A @ 5V
- Environmental
  - Temperature (100 CFM system air flow)
    - Standard: 0° to +60°C
    - Extended: –20° to +65°C
    - Storage: –20° to +75°C
- Board Thickness – .062" (1.6mm)



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