

# Ampro ReadyBoard<sup>™</sup> 800 Pentium MEPIC Single Board Computer High Performance, Easy Interface



# Choose Ampro ReadyBoard™800 for...

High volume, compact embedded applications that need high CPU and I/O performance, fanless operation and notebook-style power management.

## Description

Ampro ReadyBoard™ 800 SBC gives you a choice of high performance, low-power Centrino\* processors with high speed I/O to match. It includes Gigabit Ethernet, USB 2.0, and high performance graphics in an easy to use compact industry standard form factor SBC.



- Up to 1GB DDR memory
- Dual Ethernet Gigabit and 10/100BaseT
- 4 Serial, 4 USB 2.0 ports
- ACPI 2.0 support
- ReadySystem<sup>®</sup> 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.

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
RB1-800-R-08	800MHz ULV Celeron* M CPU, 0kB L2 Cache, PCI-104, dual 10/100 Ethernet, ACPI, 4 COM
RB1-800-R-10	1.0GHz ULV Celeron* M CPU, 512kB L2 Cache, PCI-104, dual Ethernet, ACPI, 4 COM
RB1-800-R-21	1.4GHz LV Pentium* M CPU 2MB L2 Cache, PCI-104, dual Ethernet, ACPI, 4 COM
RB1-800-R-31*	1.8GHz Pentium* M CPU 2MB L2 Cache, PCI-104, dual Ethernet, ACPI, 4 COM
RB1-800-L-08	800MHz 0kB Cache QuickStart Kit (R-08 SBC, 512MB RAM, Cable Kit, Software, Documentation)
RB1-800-L-10	1.0GHz QuickStart Kit (R-10 SBC, 512MB RAM, Cable Kit, Software, Documentation)
RB1-800-L-21	1.4GHz QuickStart Kit (R-21 SBC, 512MB RAM, Cable Kit, Software, Documentation)
RB1-800-L-31	1.8GHz 2MB Cache QuickStart Kit (R-31 SBC, 512MB RAM, Cable Kit, Software, Documentation)
RB1-ALL-X-01	Cable Kit
MM3-ISA-R-11	MiniModule ISA, PCI-104 to PC/104-Plus Bridge, with mini-PCI socket

# \* Requires both +5V and +12V to operate; +12V runs the CPU fan.

#### **Specifications**

#### **PROCESSORS**

- Choice of
  - 1.8GHz Pentium<sup>®</sup> M 745
- 1.4GHz LV Pentium\* M 738
- 1.0GHz ULV Celeron\* M 373
- 800MHz ULV Celeron\* M
  Cache 2MB, 512kB or 0kB Level 2
- Chipset Intel 855GME/ICH4M
- FSB 400MHz
- System Controllers PC-compatible DMA and interrupt controllers and timers
- Real Time Clock Battery-backed RTC/CMOS
- Watchdog Timer
- Powerfail Reset –Triggers when input voltage drops below predetermined thresholds

#### MEMORY

 DRAM – Up to 1GB PC 2700 DDR333 SODIMM, ECC and non-ECC

#### **BUS INTERFACE**

- PCI-104 (PCI)
- PCI-104 to PC/104-Plus bridge through optional MiniModule-ISA card

#### I/O

- EIDE Single PCI-bus Enhanced Ultra DMA 33/66/100 Synchronous IDE Interface supports up to two hard drives
- Compact Flash on secondary IDE
- Serial 4 ports, two are RS232/422/485
- Parallel EPP/ECP bidirectional port shared with floppy interface
- Floppy Supports 1 or 2 drives shared with parallel port
- USB 4 USB 2.0 ports (four root hubs)
- Keyboard/Mouse PS/2 interface
- GPIO Eight digital I/O pins
- Audio AC97 speaker, mic, headphone

# NETWORK INTERFACE

 Ethernet – One Intel 82541 (1000BaseT) and one Intel 82551ER (10/100BaseT)

## VIDEO INTERFACE

- Controller Integrated Intel Extreme Graphics 2
- AGP 128-bit 3D engine
- Supports resolutions to 2048x1536
- Up to 64MB UMA Frame Buffer
- Dual channel LVDS
- Supports 3.3V and 5V flat panels

# SOFTWARE & DEVELOPMENT TOOLS

- OS Support Ampro Embedded Linux\*, VxWorks\* v5.5.1, QNX\* v6.3, Windows\* CE 6.0, 5.0, XP, XPe (See Web site for details)
- BIOS AMI with ACPI 2.0

## **MECHANICAL**

- Size 114.3x165.1mm (4.50x6.50"); EPIC 1.0 form factor
- Power Requirements (with 128MB RAM, 100% Loaded)
  - 1.8GHz\* 4.0A @5V, 0.07A@12V
  - -1.4GHz 3.7A@5V
- 1.0GHz 3.4A @5V - 800MHz 3.3A @5V
- Environmental
- Temperature (100 CFM system air flow), CPU fan installed on 1.8GHz model
  - Standard: 0° to +60°C
- Storage: -20° to +75°C
- Board Thickness .062" (1.6mm)



