



## Ampro ReadyBoard™ 830 Core™ Duo Single Board Computer Ultra High I/O Bandwidth, Easy Interface



# ReadyBoard 830

### Choose Ampro ReadyBoard™ 830 for...

Compact embedded applications that need ultra high CPU performance and high speed I/O.

### Description

Ampro ReadyBoard™ 830 SBC uses an Intel® Core™ Duo processor for ultra high performance. It includes dual Gigabit Ethernet, USB 2.0, SATA and high end graphics in a compact EPIC form factor SBC with PC style connectors.



- ACPI Power Management
- Gigabit Ethernet
- Two SATA ports
- Mini PCI Express socket
- LVDS and DVI support

**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
RB4-830-R-32	1.66GHz LV Core Duo L2400, Dual Gigabit Ethernet, No RAM
RB4-830-R-10	1.07GHz ULV Celeron M 423, Dual Gigabit Ethernet, No RAM
RB4-830-L-32	1.66GHz QuickStart Kit (R-32 SBC, 1GB RAM, Cable Kit, Software, Documentation)
RB4-830-L-10	1.07GHz QuickStart Kit (R-10 SBC, 1GB RAM, Cable Kit, Software, Documentation)
RB4-ALL-X-01	ReadyBoard Cable Kit

### Specifications

#### PROCESSORS

- Choice of
  - 1.66GHz Core™ Duo L2400
  - 1.07GHz ULV Celeron™ M 423
- Cache – 2MB Core Duo, 1MB Celeron™ M
- Chipset – Intel® 945GME/ICH7M
- FSB – 667MHz
- 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 – 4GB DDR2 533 SODIMM

#### BUS INTERFACE

- PCI-104, Mini-PCIe

#### 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
- Floppy – Supports 1 or 2 drives, shared with parallel port
- USB – 6 USB 2.0 ports
- Keyboard/Mouse – PS/2 interface
- GPIO – 8
- Audio – AC97 speaker, mic, headphone

#### NETWORK INTERFACE

- Dual Gigabit Ethernet

#### GRAPHIC INTERFACE

- Intel® GMA 950, 224 MByte 64 Bit Video RAM (DVMT 3.0), Dynamic Display Modes for flat-panel, wide-screen and Digital TV support
- Dual panel display with two independent pipelines
- Flat panel interface, resolutions 640x480 up to 1920x1200
- HD hardware motion compensation to support HD high-bit-rate MPEG2 media playback
- HDTV (1080i/p) support
- CRT resolutions up to 2048x1536 @ 75 Hz, including 1920x1080 @ >85 Hz (HDTV)
- Onboard TV encoder supports HDTV (420p, 720p and 1080i), Component and S-Video for TV-Out
- DVI Interface

#### SOFTWARE & DEVELOPMENT TOOLS

- OS Support – Ampro Embedded Linux®, Windows® CE 6.0, 5.0, XP, XPe (See Web site for details)
- BIOS – AMI with ACPI 2.0

#### MECHANICAL

- Size – 114.3x165.1mm (4.5x6.5"); EPIC form factor
- Power Requirements (with 512MB RAM, 100% Loaded)
  - 1.66GHz TBD @ 5V
  - 1.07GHz TBD @ 5V
- Environmental
  - Temperature (100 CFM system air flow)
    - Standard: 0° to +60°C
    - Storage: –20° to +75°C
- Board Thickness – .062" (1.6mm)



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