

ReadyBoard™ 830

Core™2 Duo EPIC Single Board Computer
Ultra High I/O Bandwidth, Easy Interface



Features

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



Choose the Ampro by ADLINK™ ReadyBoard™ 830 for...

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

Description

The Ampro by ADLINK™ ReadyBoard™ 830 SBC uses an Intel® Core™2 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.

Specifications

Core System

Choice of
–1.50GHz Core™2 Duo L7400
–1.06GHz ULV Celeron® M 423
Cache – 2MB Core™ Duo, 1MB Celeron® M
DRAM – Up to 4GB DDR2 533 SODIMM
Chipset – Intel® 945GME/ICH7-M
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

Bus Interface

PCI-104, PCIe Mini Card

I/O

SATA – 2 devices
CompactFlash
Serial – 4 ports, 2 are RS-232/422/485
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: Line-in, Line-out, Mic

Network Interface

Ethernet - Dual Intel® 82573V Gigabit ports

Video Interface

Intel® GMA 950, 224 MByte 64 Bit Video RAM (DVMT 3.0)
Dual panel display with two independent pipelines
Flat panel interface, resolutions 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 by ADLINK™ Embedded Linux®, Windows® CE 6.0/5.0/XP/XPe
BIOS – AML with ACPI 2.0

Mechanical and Environmental

Size – 165.1 x 114.3 mm (6.5 x 4.5"); EPIC form factor
Power Requirements (with 512MB RAM, 100% loading)
–1.50GHz 2.2A @ 12V
–1.06GHz 2.1A @12V
Temperature (100 LFM system air flow)
• Standard: 0°C to +60°C
• Storage: –20°C to +75°C
Board Thickness – .062" (1.6 mm)

Ordering Information

Model Number	Description/Configuration
RB4-830-R-30	ReadyBoard™ 830, 1.5GHz LV Core™2 Duo L7400, dual Gigabit Ethernet, no RAM
RB4-830-R-10	ReadyBoard™ 830, 1.06GHz ULV Celeron® M 423, dual Gigabit Ethernet, no RAM
RB4-830-L-30	1.50GHz QuickStart Kit (R-30 SBC, 1GB RM, cable kit, software, documentation)