

ReadyBoard™ 850

Core™2 Duo EPIC Single Board Computer with SUMIT™ Expansion and GM45/ICH9-M Chipset



Features

- Intel® Core™2 Duo Processor Supported
- Dual Channel DDR3 SODIMM up to 4GB
- PCI-104 and SUMIT Expansion
- Dual Gigabit LAN
- Single/Dual Channel 18/24-bit LVDS and Analog VGA

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Choose the Ampro by ADLINK™ ReadyBoard™ 850 for...

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

Description

The Ampro by ADLINK™ ReadyBoard™ 850 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. Featured is the new SUMIT™ expansion interface for legacy I/O and PCI Express support.

Specifications

Core System

CPU – Intel® Core™2 Duo up to 2.26GHz (Socket P)
 Cache – 3MB L2 Cache
 DRAM – Up to 4GB Dual Channel DDR3 800/1066 SODIMM
 Chipset – Intel® GM45 Express GMCH/ICH9-M
 FSB – 1066MHz
 BIOS - AMI with CMOS backup in 16 Mbit SPI BIOS
 Hardware Monitor - Supplies voltages and CPU temperature

Bus Interface

PCI-104, SUMIT™

I/O

SATA – 2 devices
 USB – 4 USB 2.0 Ports, plus 4 more on SUMIT-A
 Serial – 2 are RS232/422/485
 LED & reset – Power, IDE(CF) active, SATA active, reset button
 Keyboard/Mouse – PS/2 interface
 GPIO – 8
 Audio – High Definition Audio

Network Interface

Ethernet – Dual Intel® 82574L Gigabit ports

Video Interface

Mobile Intel® Graphic Media Accelerator 4500MHD
 Intel® Clear Video Technology
 Graphics core speeds up to 533MHz
 Dual panel display with two independent pipelines
 Single/Dual Channel 18/24-bit LVDS
 CRT resolutions up to QVGA

Software & Development Tools

OS Support – Linux / Windows® CE 6.0 / XPe / VxWork 6.6 / QNX 6.4*
 BIOS – AMI with ACPI 2.0

Power Specifications

Input Power – AT mode (12 V +/- 5%), ATX mode (12 V and 5 Vsb +/- 5%)
 Power States – Supports S0, S1, S3, S4, S5

Mechanical

Size – 165.1x114.3mm (6.5x4.5"); EPIC form factor
 Board Thickness – .062" (1.6mm)
 Temperature
 • Standard: 0°C to +60°C
 • Extended: -20°C to +70°C
 • Storage: -20°C to +75°C
 Humidity – 90% at 60°C
 Shock - 15G peak-to-peak, 11ms duration, non-operation
 Vibration
 • Non-operating : 1.88 Grms, 5-500 Hz, each axis
 • Operating : 0.5 Grms, 5-500 Hz, each axis

Ordering Information

| Model Number | Description/Configuration |
|-----------------------|--|
| RB-850-S | ReadyBoard™ 850, Socket, dual Gigabit Ethernet, no RAM |
| RB-850-S-P8400 | ReadyBoard™ 850, 2.26 GHz CPU, dual Gigabit Ethernet, no RAM |
| RB-850-L-P8400 | Quick Start Kit (ReadyBoard™ 850, 2.26 GHz, 1GB RAM, cable kit, software, documentation) |