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

RUGGED

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)

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