

ReadyBoard™ 850

SBC with SUMIT™ Expansion and Intel® Core™ 2 Duo + 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 Ethernet
- Single/Dual channel 18/24-bit LVDS and analog VGA

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 flash with ACPI 2.0

Hardware Monitor - Supplies voltages and CPU temperature

Bus Interfaces

PCI-104, SUMIT™

Multi I/O and Storage

SATA – 2 devices

USB – 4 USB 2.0 Ports, plus 4 more on SUMIT-A

Serial – 2 are RS-232/422/485

LED & reset – Power, IDE(CF) active, SATA active, reset button

Keyboard/Mouse – PS/2 interface

GPIO – 8 general-purpose digital I/O pins

Audio – High Definition Audio

Ethernet

Dual Intel® 82574L Gigabit Ethernet ports

Video

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

VGA resolutions up to QXGA

Power

Input Power – AT mode (12 V +/- 5%), ATX mode (12 V and 5 Vsb +/- 5%)

Power States – Supports S0, S1, S3, S4, S5

Mechanical and Environmental

Size – 165.1 x 114.3 mm (6.5 x 4.5"); EPIC form factor

Board Thickness – 0.062" (1.6 mm)

Operating Temperature

- Standard: 0°C to +60°C

- Extended: -20°C to +70°C

Storage Temperature – -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

Operating Systems

Standard Support - Windows XP, Linux

Extended Support (BSP) - Win XPe, WES 2009, Win CE 6.0, VxWorks 6.7, QNX 6.3/6.4

Ordering Information

Modules

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)