

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)