

COM 840

COM Express™ Module with Intel® Core™2 Duo Processor and GME965/ICH8-M Chipset



Features

- Up to 4GB DDR2 memory
- True PICMG COM Express™ COM.0 compliance
- PCI Express, SATA II
- ACPI 2.0 with S3 support
- PCI Express x16 graphics (on baseboard)
- 50% thicker PCB



Choose the Ampro by ADLINK™ COM 840 for ...

Modular, ultra high performance applications that require high end graphics.

Description

The Ampro by ADLINK™ COM 840 is an ultra high performance module featuring the Intel® Core™2 Duo processor with Gigabit Ethernet and high end chipset graphics or PCI Express x16 graphics on the baseboard.

Specifications

Core System

Choice of

- 1.6GHz Core™2 Duo L7500
- 1.06GHz ULV Core™2 Duo U7500

Cache – 4MB, 1MB Level 2

DRAM – Up to 4GB DDR2 667 SODIMM

Chipset – Intel® GME965/ICH8-M

FSB – 800MHz

System Controllers – PC-compatible DMA and interrupt controllers and timers

Watchdog Timer

Bus Interface

PCIe x16, 5 PCIe x1 PCI and LPC

I/O

PATA – Single Ultra DMA 66/100 IDE interface, supports up to two hard drives

SATA II – 2 ports

USB – 8 USB 2.0 ports

Audio – High Definition Audio

GPIO - Eight general-purpose digital I/O pins

Network Interface

Ethernet - One Intel® 82566 Gigabit port

Video Interface

Intel® GMA X3100, 384MB (DVM T 4.0)

3D and 2D engine, HW rotation

Intel® Clear Video Technology: MPEG-2 HW acceleration and decoding

WMV9 HW acceleration, sharpness enhancement, film mode detection

Dual panel display with independent pipes, HD TV support, supports PCIe x16 and SDVO graphics

CRT resolution up to 2048 x 1536 @ 60Hz

Software & Development Tools

OS Support – Ampro by ADLINK™ Embedded Linux®, Windows® CE 6.0, 5.0, XP, XPe, VxWorks® 6.6

BIOS – AMI with ACPI 2.0 including S3

Mechanical

Size – 125x95mm (4.9x3.7"); COM Express™ basic form factor, Type II pinout

Power Requirements (with 2GB RAM, 100% Loaded)

-1.6GHz 1.8A @ 12V

-1.06GHz 0.8A @ 12V

Temperature (with adequate thermal solution and air flow)

- Standard: -20°C to +70°C
- Extended: -40°C to +85°C
- Storage: -55°C to +85°C

Board Thickness – .093" (2.36mm)

Ordering Information

Model Number	Description/Configuration
COM-840-R-32	COM 840, 1.6GHz Core™2 Duo CPU, 4MB L2 Cache, PCI Express, PCI, LPC
COM-840-R-12	COM 840, 1.06GHz ULV Core™2 Duo CPU, 4MB L2 Cache, PCI Express, PCI, LPC, 2 SODIMM sockets
COM-840-R-11	COM 840, 1.06GHz ULV Core™2 Duo CPU, 4MB L2 Cache, PCI Express, PCI, LPC, 1 SODIMM socket
COM-840-L-32	1.6GHz QuickStart Kit (R-32 Module, 2GB RAM, software, documentation, COM Express Baseboard, heatsink w/ fan)
COM-840E-L-32	1.6GHz QuickStart Kit (R-32 Module, 2GB RAM, software, documentation, EBX Baseboard, heatsink w/ fan)
COM-840E-L-12	1.06GHz QuickStart Kit (R-12 Module, 2GB RAM, software, documentation, EBX Baseboard, heatsink w/ fan)