

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 3 Gb/s
- 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 3 Gb/s – 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 (DVMT 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, HDTV support, supports PCIe x16 and SDVO graphics

CRT resolution up to 2048 x 1536 @ 60Hz

Software & Development Tools

OS Support – Linux®, Windows® CE 6.0/5.0/XP/XPe, VxWorks® 6.6

BIOS – AMI with ACPI 2.0 including S3

Mechanical and Environmental

Size – 125 x 95 mm (4.9 x 3.7"); COM Express™ Basic form factor, Type 2 pinout

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

-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" (2.36 mm)

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)