CoreModule® 740

Atom™ PC/104-*Plus* Single Board Computer with ICH8-M Chipset



Features

- Intel® Atom™ Processor N450 1.66GHz
- Onboard Single Channel DDR2 SDRAM
- PC/104-*Plus* Expansion
- Integrated graphics DirectX 9 controller at 200MHz
- Single Channel 18-bit LVDS and Analog VGA

EXTREME RUGGED

Choose Ampro by ADLINK™ CoreModule™ 740 for…

Low power performance Atom™ platform targeting extreme rugged™ and space-constrained applications.

Description

The Ampro by ADLINK™ CoreModule® 740 SBC uses an Intel® Luna Pier platform with 1.66GHz Atom™ N450 Pineview-M processor and ICH8M I/O Control Hub. It includes USB 2.0, Single channel IDE, LPC, Floppy, Parallel, Serial ports, LPT, Stack-through connectors and integrated graphics in a compact ISM form factor SBC.

Specifications

Core System

CPU - 1.66GHz Intel® Atom™ Processor N450 (1 core / 2 threads)
Cache – 512KB L2 Cache
Memory – On board 512MB soldered DDR2 RAM for rugged applications
Chipset – Intel® ICH8-M I/O Control Hub
FSB – 1066MHz
BIOS – AMI with CMOS backup in 16 Mbit SPI Flash
Hardware Monitor – DC voltages, CPU temperature

Bus Interface

PC/104-*Plus* (ISA and PCI) IDE, LPC, Parallel

I/O

USB - 2 USB 2.0 Ports
Floppy
Parallel
Serial – 2 RS-232
2 x GPIO
Keyboard/Mouse – PS/2 interface

Network Interface

Ethernet not supported

Video Interface

Intel® GMA 3150, DirectX 9 compliant Pixel Shader v2.0
Single Channel 18-bit LVDS 1280 x 800
Analog VGA 1400 x 1050 @ 60Hz

Software & Development Tools

OS Support – Linux, Windows® CE 6.0/XPe, VxWork 6.7, QNX 6.4
BIOS – AMI with ACPI 2.0

Power Specifications

Input Power - AT mode (5V DC +/- 5%)
Power States - Supports S0, S5

Mechanical and Environmental

Size – 90 x 96 mm (3.6 x 3.8”), Expanded PC/104-*Plus* form factor
Board Thickness – .093” (2.36 mm thick)
Temperature
- Standard: -20°C to +70°C
- Extended: -40°C to +85°C
- Storage: -55°C to +85°C

Humidity – 90% at 60°C
Shock
Non-operating: 50G peak-to-peak, 11ms duration, MIL-STD-202G Method 213B
Vibration
Operating: 11.95 Grms, 50-2000 Hz, each axis, MIL-STD-202G Method 214A

Ordering Information

Model Number	Description/Configuration
CM-740-R-16	CoreModule™ 740, Intel® Atom™ N450, 1.6GHz, PC/104-*Plus*, 512MB soldered DDR2 RAM
CM-740-L-16	Quick Start Kit (CoreModule™ 740, 1.6 GHz, 512MB soldered DDR2 RAM, cable kit, software, documentation)