



Features

- Intel® Atom™ Processor N450/D510 1.66GHz (D410 optional)
- Up to 2GB Single Channel DDR2 SDRAM
- PC/104-Plus expansion
- Intel® 82574IT Gigabit Ethernet, 3 COMs, 4 USB, 4GB SSD onboard
- Integrated graphics DirectX 9 controller at 200MHz
- Single Channel 18-bit LVDS and analog VGA



Choose Ampro by ADLINK™ CoreModule 745 for...

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

Description

The Ampro by ADLINK™ CoreModule® 745 SBC uses an Intel® Luna Pier platform with 1.66GHz Atom™ N450/D510 Pineview-M/D processor and ICH8M I/O Control Hub. It includes 4 USB 2.0, two SATA 3 Gb/s, 3 serial ports, Gigabit Ethernet, 4GB SSD onboard, SMBus, LPC, and 8 GPIO.

Specifications

Core System

- CPU – Intel® Atom™ N450, 1.66GHz, 5.5 W (1 core/2 threads)
 - Intel® Atom™ D510, 1.66GHz, 13 W (2 cores/4 threads)
 - Intel® Atom™ D410, 1.66GHz, 10 W (1 core/2 threads)(optional)

- Cache – 1MB, 8-way L2 cache for D510 dual-core processor
 - 512KB, 8-way L2 cache for N450/D410 single-core processor

Chipset – Intel® ICH8-M I/O Control Hub

- Memory – Up to 1GB DDR2 667 single SODIMM (N450)
 - Up to 2GB DDR2 667 single SODIMM (D510/D410 optional)

FSB – 1066MHz

BIOS – AMI with CMOS backup in 16Mbit SPI Flash

Hardware Monitor – DC voltages, CPU temperature

Bus Interface

PC/104-Plus (ISA and PCI), SMBus, LPC

I/O

SATA – 2 SATA 3 Gb/s

Storage – Onboard 4GB SSD

USB – 4 USB 2.0 ports

Serial – 2 RS-232 & 1 RS-232/422/485

GPIO – 8

Network Interface

Ethernet – Intel® 82574IT Gigabit Ethernet Controller

Video Interface

Intel® GMA 3150, DirectX 9 compliant Pixel Shader v2.0

Single Channel 18-bit LVDS (N450: 1280 x 800; D410, D510: 1366 x 768)

Analog VGA (N450: 1400 x 1050 @ 60Hz; D410, D510: 2048 x 1536 @ 60Hz)

Software & Development Tools

OS Support – Linux, Windows® CE 6.0 / XPe, VxWork 6.7, QNX 6.4*

BIOS – AMI with ACPI 2.0

*Note: Available upon request or contact us for additional software support

Power Specifications

Input Power – AT mode (5V DC +/-5%)

Power States – Supports S0

Mechanical and Environmental

Size – 106 mm x 96 mm, PC/104-Plus form factor

Board Thickness – 0.093" (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-745-R-17	CoreModule™ 745, Intel® Atom™ SC N450, 1.6GHz, 0MB RAM, 4GB SSD, Video, Gigabit Ethernet, PC/104-Plus
CM-745-R-19	CoreModule™ 745, Intel® Atom™ DC D510, 1.6GHz, 0MB RAM, 4GB SSD, Video, Gigabit Ethernet, PC/104-Plus
CM-745-L-17	1.6GHz QuickStart Kit (R-17 SBC, 1GB RAM, Cable kit, Software)
CM-745-L-19	1.6GHz QuickStart Kit (R-19 SBC, 2GB RAM, Cable kit, Software)