



## Ampro CoreModule™ 420

### 486 PC/I04 Single Board Computer

Rugged, Highly Integrated, RoHS-Compliant



# CoreModule 420

#### Choose Ampro CoreModule 420 for...

Rugged, space-constrained, full-featured embedded systems with modest CPU performance requirements.

#### Description

Based on STMicroelectronics™ 133MHz STPC® Atlas processor; the Ampro CoreModule 420 provides 4 serial ports (two with RS422/485 capability), 10/100BaseT Ethernet, CRT and Flat Panel Video, USB, IDE, floppy and GPIO support in a PC/I04 form factor:



- -40° to +85°C
- 10/100 Ethernet, 3D Video
- 4 Serial, 1 USB, 8 GPIOs
- PC/I04 expansion

#### Ordering Information

MODEL	DESCRIPTION
CM2-420-L-01	133MHz QuickStart Kit (R-01 SBC, Cable Kit, Software, Documentation)
CM2-420-R-01	CoreModule 420, 133MHz STPCAtlas CPU, 64MB RAM, Video, Ethernet
CM2-420-X-01	CoreModule 420 Cable Kit

#### Specifications

##### PROCESSOR

- 133MHz STPC® Atlas
- Cache – 8kB Level I
- System Controllers – PC-compatible DMA and interrupt controller and timers
- Real Time Clock – Battery-backed RTC/CMOS
- Watchdog Timer
- Powerfail Reset – Triggers when key voltage drops below predetermined thresholds

##### MEMORY

- 64MB soldered SDRAM
- 1MB Flash Memory, 768kB for OEM use

##### BUS INTERFACE

- PC/I04 (ISA)

##### I/O

- EIDE – Enhanced DMA 33 Synchronous IDE interface supports up to two hard drives
- Byte-wide Socket for DiskOnChip® 2000
- CompactFlash Socket on primary IDE
- Serial – 4 ports, two are RS232/422/485
- Parallel – EPP/ECP bidirectional port, shared with floppy interface
- Floppy – Supports 1 to 2 drives, shared with parallel port
- USB – 1 USB 1.1 port (one root hub)
- Keyboard/Mouse – PS/2 interface
- GPIO – Eight general-purpose digital I/O pins

##### NETWORK INTERFACE

- Ethernet – Intel 82551 ER 10/100BaseT

##### VIDEO INTERFACE

- Controller – Integrated
  - 64-bit single-cycle 100MHz 2D graphics engine
  - Supports resolutions to 1024x768
  - 4MB UMA Frame Buffer
  - Supports TFT panels
  - Supports 3.3V, 5V flat panels

##### SOFTWARE & DEVELOPMENT TOOLS

- OS Support – See Web site for current listings
- BIOS – General Software 5.2 with Ampro extensions

##### MECHANICAL

- Size – 90x96mm (3.6"x3.8"); PC/I04 form-factor
- Power Requirements (w/64MB RAM, 100% Loaded) – 1.3A @5V
- Temperature
  - Standard operating: -20° to +70°C
  - Optional operating: -40° to +85°C
  - Storage: -55° to +85°C