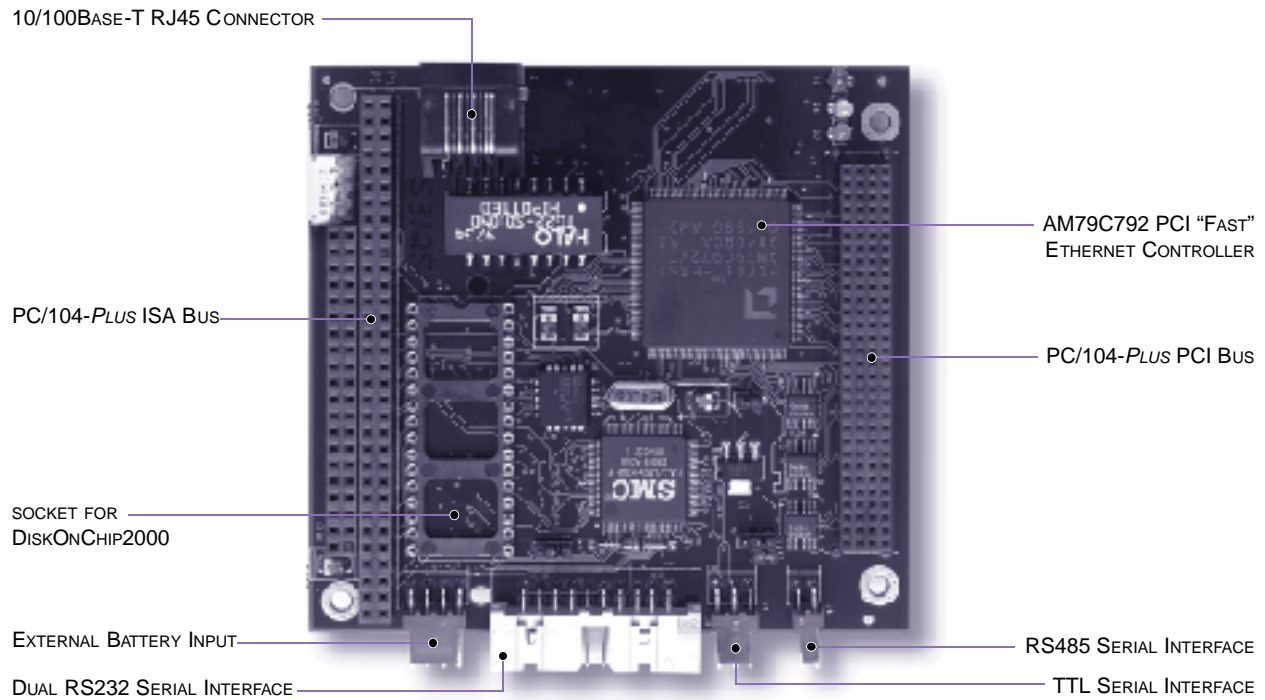


MM3-ESB

MiniModule™/ESB

• High speed 10/100Base-T Ethernet, Serial, Byte-wide Socket module



The MiniModule/ESB multifunction module provides a "Fast" (100 megabits/sec.) Ethernet interface, two serial ports, and an SSD expansion socket in a single highly integrated PC/104-Plus compliant module.

PCI "FAST" ETHERNET

The Ethernet subsystem is based on a PCI interfaced AM79C972 controller, and supports both 10 and 100 megabits per second full-duplex data transfer. 10Base-T or 100Base-T twisted pair media connection is via an onboard industry standard RJ45 connector. The Ethernet interface is well supported by a wide range of operating systems including DOS, Windows® 98, Windows NT, Windows CE, QNX™, VxWorks™, and other leading RTOSes.

SERIAL

Two PC-compatible serial ports are implemented with 16C550-type UARTs that have 16-byte FIFO buffers for fast throughput. One serial port can be configured for either RS232 or RS485 operation; the other is configurable for RS232C or TTL-level signalling.

BYTEWIDE SOCKET

A socket is provided for an M-Systems DiskOnChip2000™ solid state disk. This device provides up to 144 MBytes of highly rugged, non-rotating flash disk storage, and is compatible with most commercial and realtime operating systems.

MM3-ESB

SPECIFICATIONS



ETHERNET

- CONTROLLER** • AM79C972 PCI Ethernet controller
- TOPOLOGY** • Ethernet bus, using CSMA/CD
- 10/100Base-T (twisted pair) via onboard RJ-45 connector
- OPERATION** • 100M or 10M bits/second, autodetected
- Large receive and transmit FIFOs
- Supports full duplex operation
- Port may be disabled with a hardware jumper

SERIAL

- UART** • Two serial ports implemented using 16550 equivalent UARTs with 16 byte data FIFOs
- Supports full handshaking
- INTERFACE OPTIONS** • Serial port one is software-configurable for RS232 or RS485
- Serial port two is software-configurable for RS232 or TTL
- Flexible software selection of interrupts
- Configuration supports optional interrupt sharing
- Both ports may be disabled through software

BYTEWIDE SOCKET

- Supports M-Systems DiskOnChip2000™ bootable SSD
- Occupies 64k address space at 0D0000H or 0E0000H when enabled
- Socket may be disabled through software

MECHANICAL

- SIZE** • 3.6 x 3.8 x 0.9 in. (90 x 96 x 23 mm)
(Includes stackthrough pins. Please refer to PC/104-Plus Specification for stacking and other dimensions.)
- POWER** • Requirement (typical) +5V ±5%
 - Full up: 430 mA
 - Ethernet only: 270 mA
- ENVIRONMENTAL** • 0° to 70° C standard temperature
- -40° to +85° C extended operating temperature (available by special order)
- 5% to 95% relative humidity, non-condensing
- Storage temperature: -55° to +85° C
- Weight: 3.2 oz. (90 gm)

NOTE: Contact Ampro regarding custom configurations and special order options.

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