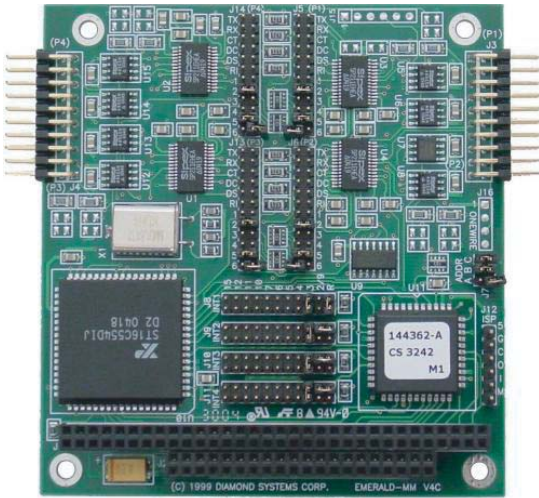# EMERALD-MM

4-Port RS-232/RS-422/RS-485 PC/104 Module

- 4 serial ports, RS232/422/485 protocols

- Full handshake RS232

- Jumper-selectable protocols, addresses and interupts

- 16C554 UARTs with 16-byte FIFOs

- 115.2K max baud rate

- Build-in interrupt sharing

DESCRIPTION

This top-selling serial port module has four independent PC-standard asynchronous serial ports based on the 16C554 quad UART chip.

The board is available in 3 models with different combinations of protocols (see ordering guide below). Each configurable port's protocol can be selected independently of any other port.

Protocol, address, and IRQ level are independently selected for each port. All configurations are made with jumpers for quick visual identification of the board's settings. Select from 8 I/O address combinations and 10 IRQ levels. All transceivers are already on the board, so no chips or modules need to be installed for configuration.

In RS-232 mode, each port has the full set of 8 signals plus ground. Termination resistors of 120 are provided for RS-422/485 protocols and are jumper-selectable. Interrupt sharing is supported with a built-in interrupt status register.

The board has 2 20-pin I/O headers, with 2 serial ports on each header. Use mating cable C-DB9M-2 (qty. 2). Emerald-MM requires only +5V supply and operates over the industrial temperature range of -40 to +85°C.

SPECIFICATIONS

Number of ports	4
Protocols Supported	RS232, RS422, RS485, depending on model
Max Baud Rate	115Kbps
Communications	5,6,7 or 8 data bits; Even, odd or no parity
Base UART	16C554
FIFO	16 bytes
Protocol Config	Jumper
Address / Interrupt Configuration	Jumper
Digital I/O	None
Short protection	Continuous, all outputs
Bus Interface	PC/104 (ISA)
Power Draw (typical)	+5VDC±10%@80mA
Operating temp	-40°C to +85°C
Weight	2.5oz / 71g

ORDERING INFORMATION

Part No.	Description
EMM-XT	Ports 1-2 configurable RS-232/422/485, Ports 3-4 fixed RS-232
EMM-4M-XT	Ports 1-4 configurable RS-232/422/485
EMM-4232-XT	Ports 1-4 fixed RS-232

FOR MORE INFORMATION