Emerald-MM-4 M^{TM}



4-Port RS-232/422/485 PC/104™ Module



Key Features

- ♦ 4 serial ports, RS-232/422/485 protocols
- ◆ Full handshake RS-232
- ◆ Jumper-selectable protocols, addresses, and interrupts
- ♦ 16C554 UARTs with 16-byte FIFOs
- ♦ 115.2K maximum baud rate
- ♦ Built-in interrupt sharing



Product Overview

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 information 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 120ohms 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. Emerald-MM requires only +5V supply and operates over the industrial temperature range of -40°C to +85°C.

SPECIFICATIONS	
Serial ports	Four
Protocols	RS-232/422/485 supported, model dependent
Max baud rate	115Kbps
Communications	Five, six, seven or eight data bits Even, odd, or no parity
Base UART	16C554
FIFO	16 bytes
Protocol configuration	Jumper
Address / interrupt config.	Jumper
Short protection	Continuous, all outputs
Bus interface	PC/104 (ISA)
Power	+5VDC ±10% @80mA
Operating temp.	-40°C to $+85^{\circ}\text{C}$ (- 40°F to $+185^{\circ}\text{F}$)
Weight	2.5oz (71g)

ORDERING INFORMATION	
EMM-4M-XT	Ports 1-4 configurable RS-232/422/485
C-DB9M-2	Dual serial port cable