

- Embedded rugged computers
- -40° to 85° C
- Embedded operating systems
- COTS—high reliability

PC/104 COM-8SM octal serial module

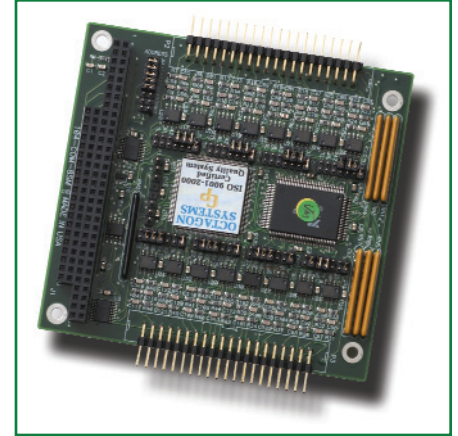
The COM-8SM PC/104 serial interface module provides eight serial ports. Each port can be independently configured for RS-232, RS-422 or RS-485.

The card is capable of data rates to 921.6 Kbps, and utilizes a 16C788 octal UART that provides 64-byte Tx/Rx FIFOs.

RS-422 and RS-485 are designed for multipoint transmission on long bus lines in noisy environments. The 104-COM-8SM can detect differential input signals as low as ± 200 mV superimposed on common mode voltages from +12V to -7V.

The COM-8SM uses an automatic (AUTO) control software selectable channel by channel. The driver is enabled (and the receiver disabled) when data is ready to be transmitted. When transmission is complete, the driver remains enabled for the transmission time of one additional character and then is disabled. This is ideal for use in Windows® based applications as the standard Windows COM port driver is used to ensure compatibility.

PC/104 cards plug into any system with a PC/104 interface. The Octagon family of PC/104 single board computers, expansion cards, and enclosures provides a complete solution for applications in transportation, security, military, communications, distributed control, point-of-sale, ticketing machines, weighing equipment, and other similar applications.



Octagon offers a line of PC/104 CPU modules, expansion cards and enclosures.



Certified Partner program

The COM-8SM is an Octagon Certified Partner product, which is guaranteed compatible with Octagon CPU cards. The 104-COM-8SM will withstand high shock and vibration, and operates in temperature ranges from -20° to +70° C. This rugged expansion card will provide years of reliable service in the most challenging environments.

Features

I/O:

- ◆ Eight ports, individually configurable as eight-wire RS-232C, four-wire RS-422 or two-wire RS-485
- ◆ Programmable baud rate up to 921.6 Kbps
- ◆ 16C780 octal UART, provides 64-byte transmit/receive Tx/Rx FIFOs
- ◆ Character length: 5,6,7, or 8 bits;
Parity: even, odd, or none
Stop interval: 1, 1.5, or 2 bits
- ◆ Receiver input sensitivity: ± 200 mV differential input
- ◆ Common mode voltage range: +12V to -7V
- ◆ Transmitter output drive capability: 60 mA with thermal shutdown
- ◆ Compatible with RS-485 specifications. Up to 32 drivers and receivers allowed on line
- ◆ Compatible with RS-422 specifications. Up to ten receivers allowed on line
- ◆ Jumper selectable terminations for input and output, by channel

BOARD:

- ◆ Selectable base address
- ◆ Selectable interrupts
- ◆ Operate from single 5V supply
- ◆ Compatible with most operating systems

CONNECTORS:

- ◆ Two 40-pin connector; custom cable available with four DB-9 headers

ENVIRONMENTAL:

- ◆ -20° to 70° C operating
- ◆ -50° to 120° C nonoperating
- ◆ 5% to 95%, RH, noncondensing

SIZE & POWER:

- ◆ 3.550 in. x 3.775 in., PC/104 form factor
- ◆ 5V \pm 5% at 400 mA typical, 800 mA max.

SOFTWARE DRIVERS:

- ◆ Linux 2.4, Access 32, Port I/O, DOS, standard Windows® COM port

ORDERING INFORMATION

#6599 PC/104 1COM-8SM
serial interface module

ACCESSORIES ORDERING INFORMATION

#6749 40-pin to (4) DB-9 male connectors terminate the 40-pin header to four DB-9M connectors