Quad Serial Interface
for PC/104
MPC304

Features

- ✓ Four complete PC compatible serial ports
- ✓ RS232 levels with optional RS485 on a per-channel basis
- ✓ Selectable/customizable I/O addresses
- ✓ RTS and CTS supported
- ✓ Selectable IRQ level for each port
- ✓ 5V only operation
- ✓ PC/104 form factor

The MPC304 Quad Serial Interface adds four PC compatible serial ports to any PC/104 system. Control is provided over card configuration through selectable base addresses and IRQ lines. PC standard COM1 through COM4 are one of the possible mappings of the card.

The 5-volt only module is shipped with all ports operating in RS232 mode. Receive data, transmit data, CTS, and RTS are supported on all ports.

Optional transceivers can add RS485 operation to the MPC304 serial ports. From one to four ports can be used in RS485 mode. Both half-duplex and full-duplex RS485/RS422 operation is supported, with distances to 5,000 ft in multi-drop networks.

Separate 10-pin headers are provided for each port, and standard cables can be used to bring signals out to separate DB-9 connectors.
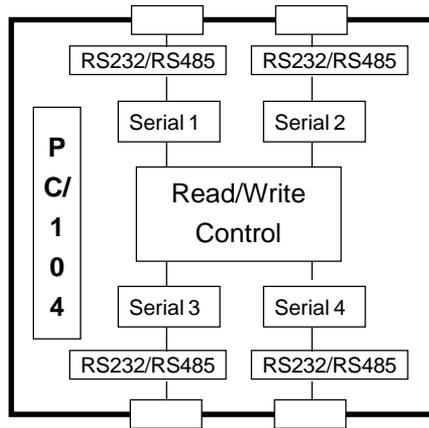
Software Support

Comm library, CommBLOK™
[Item above in Section 6]
Third party PC libraries

Compatible Hardware

Serial RS232 devices
Serial RS485 devices
RS485 networks
Custom interfacing

Mounting/Packaging

PC/104 standard

Diagram showing PC/104 connected to Serial 1, Serial 2, Serial 3, Serial 4 with RS232/RS485 connections and Read/Write Control.

Specifications:

Mechanical:
- ❑ PC/104 standard
- ❑ 3.55" (plus I/O region) x 3.775" x .6"

Power Requirements:
- ❑ +5V ± 5% at 135 mA max

Environmental:
- ❑ 0° - +70°C operating
- ❑ -25° - +85°C storage
- ❑ 5%-95% relative humidity, non-condensing

PC/104 Interface:
- ❑ 8-bit PC/104 module (16-bit connector optional)
- ❑ Selectable IRQ2-7, each port
- ❑ IRQ10-15 also available to each port if 16-bit PC/104 connector option is installed
- ❑ Support for PC/104 shared interrupts
- ❑ Selection of one of four I/O port mappings:
  3F8, 2F8, 3E8, and 2E8
  3E8, 2E8, 280, and 288
  180, 188, 190, and 198
  280, 288, 290, and 298
- ❑ Custom I/O mapping available, consult factory

Serial Ports:
- ❑ PC compatible, 16C550 UARTs with FIFO
- ❑ COM1-COM4 or unique configurations
- ❑ RS232 or RS485 selectable by port pairs
- ❑ TXD, RXD, RTS, CTS and GND signals supported on each port in RS232 mode
- ❑ Baud rates to 115K

External Connections:
- ❑ 10-pin header for each port

Ordering Information:

MPC304	Quad serial interface, PC/104
304OPT1	RS485 transceivers for 4 ports

Related Products:

CA4020	Cable to 9-pin male D, single port
MPCOPT16ST	16-bit PC/104 stackthrough connector