

PMC520 Octal Serial 232 Communication

These modules provide eight asynchronous serial communication ports from a single PMC carrier slot. Software-configuration helps you quickly set baud rates, character-sizes, stop bits, and parity. Signal support for RTS/CTS handshaking is also included.

For more efficient data processing, each serial port is equipped with 64-character FIFO buffers on the transmit and receive lines.

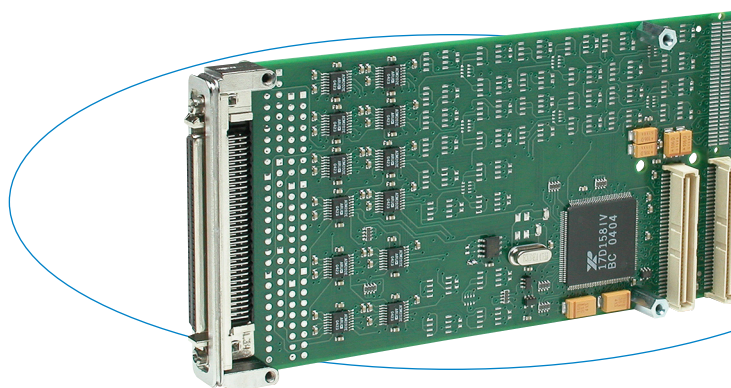
The data ports generate individually controlled transmit, receive, line status, and data set interrupts. A global interrupt source register provides interrupt status indication for all eight channels to speed up interrupt parsing.

Features

- Eight RS232E ports
- 64-byte transmit FIFO buffers
64-byte receive FIFO buffers
- Programmable baud rate (up to 120Kbps)
- Individual handshake lines (RTS, CTS) on each channel
- Line-break and false start-bit detection
- Industry-standard software-compatible 16C550 configuration registers

Benefits

- High-density design lowers per-port costs and saves PMC carrier card slots for other functions.
- 64-byte FIFO buffers minimize CPU interaction for improved system performance.
- Each serial channel provides handshake support to simplify interfacing with modems.



With eight serial ports per module, the PMC520 provides a high-density solution to reduce costs and use fewer card slots.

Specifications

RS232E Serial Ports

Configuration: Independent, non-isolated serial ports with a common single return connection and configured as a DTE device.

Data rate: Programmable up to 120K bits/second using internal baud rate generator.

Max. cable length: 15 meters (50 feet) typical, limited to a cable capacitive load of 2500pF.

Character size: 5 to 8 bits, software-programmable.

Parity: Odd, even, or no parity; software-programmable.

Stop bits: 1, 1-1/2, or 2 bits; software-programmable.

Data register buffers: Double buffered or 64-byte FIFO buffered, mode selectable.

Interrupts: Receiver line status (overrun, parity, framing error, or break interrupt); received data available (FIFO level reached) or character time-out; transmitter (FIFO level reached); or modem status (CTS).

Environmental

Operating temperature: 0 to 70°C (PMC520-64) or -40 to 85°C (PMC520-64E).

Storage temperature: -55 to 125°C.

Relative humidity: 5 to 95% non-condensing.

Power: +5V (±5%), consult factory for current specifications.

MTBF: 2,848,670 hrs at 25°C, MIL-HDBK-217F, notice 2.

PMC Compliance

Conforms to PCI Local Bus Specification, Revision 2.3 and CMC/PMC Specification, P1386.1.

4K Memory Space Required: One Base Address Register.

Signaling: 3.3V and 5V compliant.

Ordering Information

PMC Modules

PMC520

Eight RS232E serial ports, front I/O connector

PMC520E

Same as PMC520 plus extended temperature range.

PMC520R

Same as PMC520 except with rear I/O connector

PMC520RE

Same as PMC520R plus extended temperature range

Customized PMC Modules

† 5085-x

Modified PMC520 with user-specified crystal/baud rate.

† Specify x = crystal frequency when ordering.

Minimum quantity per order is two units.

Software (see [software documentation](#) for details)

PMCSW-API-VXW

VxWorks® software support package

PCISW-API-WIN

Windows® DLL software support

PCISW-API-LNX

Linux® support (website download only)

Accessories (see [accessories documentation](#) for details)

5025-288

Termination panel, SCSI-3 connector, 68 screw terminals

5028-432

Cable, shielded, SCSI-3 connector both ends