

## PMC521 Octal Serial 422/485 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.

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, data set, and flow control interrupts. A global interrupt source register provides interrupt status indication for all eight channels to speed up interrupt parsing.

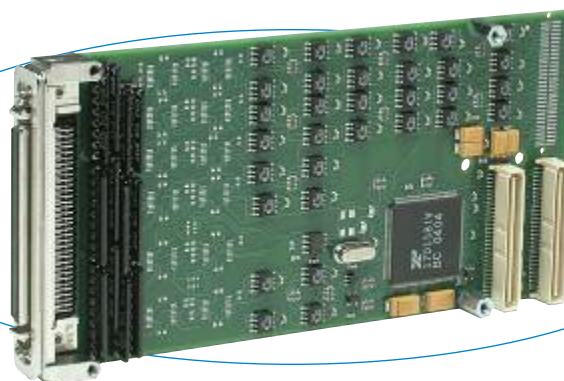
### Features

- Eight asynchronous, full duplex RS422B serial ports (supports RS485)
- 64-byte transmit FIFO buffers  
64-byte receive FIFO buffers
- Programmable baud rate (up to 250Kbps)
- Line-break and false start-bit detection
- Failsafe receivers
- Socketed termination and bias resistors
- 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.
- Extended temperature ranges deliver dependable operation in extreme conditions.

**NEW!**



*With eight serial ports per module, the PMC521 provides a high-density solution to reduce costs and use fewer card slots.*

### Specifications

#### RS422B Serial Ports

Configuration: Independent, non-isolated serial ports with a common single return connection.  
Data rate: 250K bits/second, maximum.  
Max. cable length: 1200 meters (4000 feet), typical.  
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); receive/transmit FIFO level reached or character time-out; Xon/Xoff or special character detected.

#### Environmental

Operating temperature: 0 to 70°C (PMC521-64) or -40 to 85°C (PMC521-64E).  
Storage temperature: -55 to 125°C.  
Relative humidity: 5 to 95% non-condensing.  
Power: +5V (±5%), consult factory for current specifications.  
MTBF: 2,321,047 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

##### PMC521

Eight RS422B serial ports, front I/O connector

##### PMC521E

Same as PMC521 plus extended temperature range.

##### PMC521R

Same as PMC521 except with rear I/O connector

##### PMC521RE

Same as PMC521R plus extended temperature range

#### Customized PMC Modules

##### † 5086-x

Modified PMC521 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-QNX

QNX® software support package

##### PCISW-API-WIN

Windows® DLL software support

##### PCISW-LINUX

Linux® support (website download only)

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

##### 5025-288

Termination panel, SCSI-3 connector,  
68 screw terminals

##### 5028-432

Cable, shielded, SCSI-3 connector both ends

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