**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.

**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.

**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-UNIX**
  - UNIX® 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

---

*All trademarks are the property of their respective owners.*

---

*NEW!*