

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

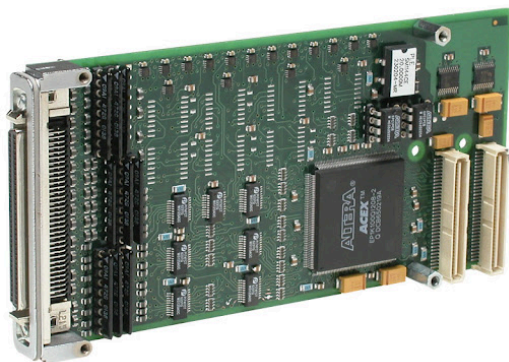
Data Sheet

August 15, 2026

ACROMAG

Acromag PMC521 422/485 Octal Serial Communication Module

Acromag PMC521 Octal EIA/TIA-422B 485 Serial PMC Module The PMC521 provides eight asynchronous full-duplex EIA/TIA-422B ports (EIA-485 supported) from one PMC socket. OEM PMC catalog lists 64-byte Tx and Rx FIFOs, software baud to 1.8432 Mbps (20 MB/s maximum with non-standard crystal), 5 to 8 bit characters, 1 / 1.5 / 2 stop bits, 1200 m typical cable, 16C550-compatible registers, PCI 2.3 / PMC P1386.1, 3.3 V and 5 V signaling, 4K memory BAR, MTBF 2,321,047 hours at 25 C MIL-HDBK-217F, and 0 to 70 C (PMC521-64) or minus 40 to 85 C (E). The PMC521 provides eight asynchronous full-duplex EIA/TIA-422B ports (EIA-485 supported) from one PMC socket. OEM PMC catalog lists 64-byte Tx and Rx FIFOs, software baud to 1.8432 Mbps (20 MB/s maximum with non-standard crystal), 5 to 8 bit characters, 1 / 1.5 / 2 stop bits, 1200 m typical cable, 16C550-compatible registers, PCI 2.3 / PMC P1386.1, 3.3 V and 5 V signaling, 4K memory BAR, MTBF 2,321,047 hours at 25 C MIL-HDBK-217F, and 0 to 70 C (PMC521-64) or minus 40 to 85 C (E). High-density RS-422/485 serial I/O on VME, cPCI, or VPX PMC carriers for industrial and avionics control.



MODEL

Acromag PMC521

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

PMC521

LISTING

<https://aumictechlabs.com/products/pmc521-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Acromag PMC521 is an octal serial communication module for PCI Mezzanine Card slots, delivering eight independent channels of RS-422B/EIA-485 serial communication in a single-width form factor. Each channel operates full-duplex with 64-byte FIFO buffers on both transmit and receive paths, minimizing CPU overhead and interrupt loads in high-density serial connectivity applications. The module supports programmable baud rates to 1.8432 Mbps (standard crystal) and up to 20 Mbps maximum, with software-configurable character formats (5–8 bits), stop bits (1, 1.5, or 2), and parity (odd, even, or none). Integrated line-break detection, failsafe receivers, and comprehensive error detection protect signal integrity in demanding industrial environments. A global interrupt source register across all eight channels simplifies multi-port monitoring and control.

Technical Specifications

- Eight asynchronous full-duplex RS-422B serial ports with EIA-485 compatibility
- Maximum data rate: 20 Mbps; programmable baud rate to 1.8432 Mbps (standard crystal)
- 64-byte transmit and receive FIFO buffers per channel
- Character size: 5–8 bits (software-programmable)
- Stop bits: 1, 1.5, or 2 (software-programmable)
- Parity: Odd, even, or none (software-programmable)
- Power supply: +5V $\pm$ 5%; current draw consult factory
- Operating temperature: 0–70°C (PMC521-64) or –40–85°C (PMC521-64E)
- Storage temperature: –55–125°C
- MTBF: 2,321,047 hours @ 25°C per MIL-HDBK-217F
- notice 2 4 kB memory space; 32-bit PCI target (Altera FPGA implementation)

Key Features

- Independent non-isolated serial ports with common single return
- Per-channel interrupt control: transmit, receive, line status, data set, and flow control
- Selectable double-buffered or 64-byte FIFO data register buffering
- Line-break and false start-bit detection
- Failsafe receiver architecture
- Xon/Xoff and special character detection

PCI Local Bus Specification Rev. 2.3 and CMC/PMC P1386.1 conformance

5V compliant, 3.3V tolerant signaling

Socketed termination and bias resistors

Typical Applications

Industrial automation, data acquisition systems, multi-port serial communication networks, and real-time control requiring high-density RS-422/485 connectivity with minimal latency.

Compatibility & Integration

Available with front I/O connector (PMC521, PMC521E) or rear I/O connector (PMC521R, PMC521RE). Relative humidity: 5–95% non-condensing.

PMC521 Characteristics / Specifications

PARAMETER	VALUE
Model	PMC521
Instrument Type	Octal RS-422/485 serial PMC module
Port Count	8 asynchronous full-duplex EIA/TIA-422B (EIA-485 supported)
Fifo Transmit	64 byte per channel
Fifo Receive	64 byte per channel
Baud Standard Crystal	up to 1.8432 Mbps
Data Rate Maximum	20 MB/s maximum (non-standard crystal)
Cable Length Typical	1200 m (4000 ft)
Character Size	5 to 8 bits software programmable
Stop Bits	1, 1.5, or 2 software programmable
Parity	odd, even, or none
Uart Registers	industry-standard 16C550 compatible
Front Connector	68-pin SCSI (PMC521 / PMC521E)
Rear Connector	J4 64-pin (PMC521R / PMC521RE)
Pci Spec	PCI Local Bus Revision 2.3 and CMC/PMC P1386.1
Signaling	3.3 V and 5 V compliant
Memory Bar	4K memory space one base address register
Operating Temperature Standard	0 to 70 C (PMC521-64)
Operating Temperature E	minus 40 to 85 C (PMC521-64E)
Storage Temperature	minus 55 to 125 C
Humidity	5 to 95 percent non-condensing
Mtbf	2321047 hours at 25 C MIL-HDBK-217F notice 2
Power Rail	plus 5 V plus or minus 5 percent
Manufacturer	Acromag
Receivers	failsafe with socketed termination and bias resistors

PARAMETER	VALUE
Data Rate	Maximum: 20 MB/s maximum (non-standard crystal)
Operating temperature	Standard: 0 to 70 C (PMC521-64)

PMC521 Specifications

PARAMETER	VALUE
Applications	High-density RS-422/485 serial I/O on VME, cPCI, or VPX PMC carriers for industrial and avionics control.
Key Features	Eight full-duplex 422B ports with 485 support
Baud to 1.8432 Mbps standard crystal	Failsafe receivers and socketed termination
Technical Specifications	Model: PMC521
Notes	From Acromag PMC Products Catalog PMC521 specification block. Confirm front versus rear I/O (R) and E temperature suffix.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 55 to 125 C
Operating temperature	Standard: 0 to 70 C (PMC521-64)
Operating Temperature	Standard: 0 to 70 C (PMC521-64)
Humidity	5 to 95 percent non-condensing
Operating Temperature Standard	0 to 70 C (PMC521-64)
Operating Temperature E	minus 40 to 85 C (PMC521-64E)
Mtbf	2321047 hours at 25 C MIL-HDBK-217F notice 2
Power Rail	plus 5 V plus or minus 5 percent
Manufacturer	Acromag
Receivers	failsafe with socketed termination and bias resistors Notes From Acromag PMC Products Catalog PMC521 specification block. Confirm front versus rear I/O (R) and Etemperature suffix.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	PMC521
Instrument Type	Octal RS-422/485 serial PMC module
Port Count	8 asynchronous full-duplex EIA/TIA-422B (EIA-485 supported)
Fifo Transmit	64 byte per channel
Fifo Receive	64 byte per channel
Baud Standard Crystal	up to 1.8432 Mbps
Data Rate Maximum	20 MB/s maximum (non-standard crystal)
Cable Length Typical	1200 m (4000 ft)
Character Size	5 to 8 bits software programmable
Stop Bits	1, 1.5, or 2 software programmable
Parity	odd, even, or none
Uart Registers	industry-standard 16C550 compatible
Front Connector	68-pin SCSI (PMC521 / PMC521E)
Rear Connector	J4 64-pin (PMC521R / PMC521RE)
Pci Spec	PCI Local Bus Revision 2.3 and CMC/PMC P1386.1
Signaling	3.3 V and 5 V compliant
Memory Bar	4K memory space one base address register
Operating Temperature Standard	0 to 70 C (PMC521-64)
Operating Temperature E	minus 40 to 85 C (PMC521-64E)
Storage Temperature	minus 55 to 125 C
Humidity	5 to 95 percent non-condensing
Mtbf	2321047 hours at 25 C MIL-HDBK-217F notice 2
Power Rail	plus 5 V plus or minus 5 percent
Manufacturer	Acromag
Receivers	failsafe with socketed termination and bias resistors

Notes

From Acromag PMC Products Catalog PMC521 specification block. Confirm front versus rear I/O (R) and Etemperature suffix.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.