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Data Sheet

August 15, 2026

ACROMAG / XEMBEDDED / XYCOM

Acromag / Xembedded / Xycom PMC-DX502 Reconfigurable FPGA with Differential I/O Module

The PMC-DX502 is a reconfigurable FPGA module designed for differential I/O applications. It combines the technologies of Acromag, Xembedded, and Xycom, offering a versatile solution for data acquisition and signal processing. Ideal for demanding industrial and embedded systems.

**MODEL****Acromag /
Xembedded /
Xycom PMC-
DX502****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****PMC-DX502****LISTING**<https://aumictechlabs.com/products/pmc-dx502-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Acromag/Xembedded/Xycom PMC-DX502 is a reconfigurable FPGA module engineered for differential I/O applications in industrial and embedded systems. This PMC-form-factor card integrates a field-programmable gate array with differential signal processing capabilities, delivering a flexible platform for custom logic implementation, data acquisition, and signal conditioning. The module supports standard PCI Mezzanine Card connectivity and operates across industrial temperature ranges. Technical Specifications FPGA Core Field-programmable gate array enabling complex custom logic implementation Reconfigurable architecture for

application-specific I/O standards and protocols Memory On-board memory supports FPGA configuration, data buffering, and program execution Memory type and capacity vary by configuration Differential I/O Programmable differential I/O interfaces supporting multiple standards Signal characteristics (voltage levels, data rates, impedance) configurable via FPGA Power Standard PMC power supply: +3.3 V and +5 V PMC Interface PCI Mezzanine Card form factor for carrier board integration PCI bus connectivity with variable width and clock speed per configuration

Key Features Reconfigurable I/O topology - adapt differential signal types post-deployment Industrial-grade design for embedded system integration Standard PMC connector arrangement for modular host compatibility On-board memory and clock management for standalone or synchronized operation

Typical Applications differential signal acquisition Custom protocol implementation via FPGA reconfiguration Real-time data processing in industrial control systems Embedded systems requiring flexible I/O conditioning

Compatibility & Integration The PMC-DX502 mounts directly into PMC/PCI-104 carrier boards and equivalent PMC-compliant hosts. PCI bus interface enables integration into legacy and modern embedded platforms. Differential I/O connector types and quantities are application-configurable through FPGA programming.

PMCDX502 Characteristics / Specifications

PARAMETER	VALUE
Model	PMC-DX502
Instrument Type	reconfigurable FPGA PMC
Form Factor	PMC
FPGA	user programmable Xilinx class
IO Type	differential
Bus Interface	PCI mezzanine
Manufacturer	Acromag Xembedded Xycom
Carrier Compatibility	PMC carriers
Operating Temperature Class	industrial
Humidity Class	non condensing
Power	PMC 3.3 V 5 V rails
Cooling	airflow across PMC
Front IO	differential paired signals
Configuration	FPGA bitstream load
Development	HDL tool chain
Isolation Class	per front end design
Logic Banks	FPGA user logic
Clocking	onboard and external clock class
Reset	PCI and local reset
DMA Class	PCI DMA capable interface
LEDs	status indicators class
Compliance	PMC IEEE P1386.1 class
Storage Temperature Class	industrial storage
Storage temperature	Class: industrial storage
Operating temperature	Class: industrial

PARAMETER	VALUE
Humidity	Class: non condensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: industrial storage
Operating temperature	Class: industrial
Operating Temperature	Class: industrial
Humidity	Class: non condensing
Operating Temperature Class	industrial
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Compliance	PMC IEEE P1386.1 class
Storage Temperature Class	industrial storage Notes Identity from Acromag / Xembedded / Xycom PMC-DX502 listings. Exact FPGA density and channel count are dash-option specific on the Acromag ordering guide.

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	
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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

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