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Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VMIPCI-5588-401 High-Speed Fiber-Optic 1.2 Gbaud Reflective Memory with Interrupts

The VMIPCI-5588-401 is a high-speed fiber-optic reflective memory card with interrupts, operating at 1.2 Gbaud.

**MODEL****Abaco Systems /
VMIC VMIPCI-
5588-401****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****VMIPCI-5588-401****LISTING**<https://aumictechlabs.com/products/vmipci-5588-401-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Abaco Systems VMIPCI-5588-401 is a high-speed fiber-optic reflective memory PCI card operating at 1.2 Gbaud serial communication rate. This single-slot 5 V PCI card enables deterministic, synchronized data sharing across up to 256 networked nodes by automatically mirroring memory writes across all connected systems. The architecture eliminates processor overhead during network operation, making it ideal for real-time embedded systems demanding low-latency data coherence. Technical Specifications Network Speed: 1.2 Gbaud serially over fiber-optic On-Board Memory: 4 MB; series supports 256 Kbyte to 16 Mbyte configurations Maximum Network Nodes: Up to 256 Maximum Node Separation: 10,000 meters (single-mode fiber); 1,000 feet (multimode fiber) Data Transfer Rate: 29.5 Mbyte/s standard; 14.8 Mbyte/s with

redundant transfer mode PCI Target Burst Rate: Up to 44 Mbyte/s PCI Master DMA: Up to 132 Mbyte/s maximum; 33 Mbyte/s sustained; 44 Mbyte/s standard Memory Configuration: Supports block protection via software control Fiber Type: Multimode fiber (Tx/Rx); single-mode fiber option for extended distance Connectors: ST/PC fiber-optic connectors PCI Interface: 5 V, single slot, standard length

Key Features Hardware interrupt generation to single nodes or entire network via single command Error detection and redundant transmission mode for error suppression Zero processor involvement for network operations Configurable endian conversions supporting multiple CPU architectures Software-addressable digital output for optical switch integration or custom signaling

Typical Applications Real-time systems requiring synchronized multi-node memory access, deterministic inter-process communication, and high-bandwidth reflective memory networks.

Compatibility & Integration Interoperable with VMIVME-5588 and VMICPCI-5588 series products. Device drivers and IP stack support provided for Windows NT environments (VMIPCI/SW-RFM1).

VMIPCI5588401 Characteristics / Specifications

PARAMETER	VALUE
Model	VMIPCI-5588
Instrument Type	High-speed fiber-optic Reflective Memory with interrupts PCI board
Card Form Factor	single PCI 5 V slot standard length
Link Serial Rate	1.2 Gbaud
Memory Option 256 Kbyte	supported
Memory Option 512 Kbyte	supported
Memory Option 1 Mbyte	supported
Memory Option 2 Mbyte	supported
Memory Option 4 Mbyte	supported
Memory Option 8 Mbyte	supported
Memory Option 16 Mbyte	supported
Network Node Capacity	up to 256 nodes
Node Spacing Maximum	up to 1000 feet between nodes
Transfer Rate Nonredundant	29.5 Mbyte/s longword accesses
Transfer Rate Redundant	14.7 Mbyte/s longword accesses
Alternate Redundant Rate Statement	14.8 Mbyte/s with redundant transfer
Pci Transfer Rate As Target	44 Mbyte/s
Pci Dma Initiator Maximum	132 Mbyte/s
Pci Dma Sustained	33 Mbyte/s
Memory Access D	supported
Error Detection	supported
Endian Conversion	configurable for multiple CPU architectures
Network Interrupt Capability	any node to any or all nodes with single command
Digital Output Bit	software addressable at output connector
Processor Overhead Network	none for data transport

PARAMETER	VALUE
Ordering Alias Examples	VMIPCI-5588-101, -401, -411, -511

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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Pci Transfer Rate As Target	44 Mbyte/s
Pci Dma Initiator Maximum	132 Mbyte/s
Pci Dma Sustained	33 Mbyte/s
Memory Access D32	supported
Memory Access D16	supported
Memory Access D8	supported
Error Detection	supported
Endian Conversion	configurable for multiple CPU architectures
Network Interrupt Capability	any node to any or all nodes with single command
Digital Output Bit	software addressable at output connector

PARAMETER	VALUE
Processor Overhead Network	none for data transport

Ordering Alias Examples: VMIPCI-5588-101, -401, -411, -511

Notes

From VMIC VMIPCI-5588 PCI bus High-Speed Fiber-Optic Reflective Memory with Interrupts product specification summary. Queue SKUs with -101/-401/-411/-511 suffixes select memory and optical configurations of the same 1.2 Gbaud family.

Ordering Information

OPTION	DESCRIPTION
Option 256	Kbyte: supported
Option 512	Kbyte: supported

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>

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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.