

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VMIPCI-5588-101 High-Speed Fiber-Optic 1.2 Gbaud Reflective Memory with Interrupts

The VMIPCI-5588-101 is a high-speed fiber-optic reflective memory card by Abaco Systems / VMIC. It operates at 1.2 Gbaud and features interrupt capabilities.

**MODEL****Abaco Systems /
VMIC VMIPCI-5588-
101****CALIBRATION****Available on request****CONDITION****Used****STATUS****In stock****RFQ / SKU****VMIPCI-5588-101****LISTING**<https://aumictechlabs.com/products/vmipci-5588-101-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems / VMIC VMIPCI-5588-101 is a high-speed fiber-optic reflective memory interface card for real-time distributed data sharing across networked systems. Operating at 1.2 Gbaud over single-mode fiber links, it delivers 29.5 Mbyte/s throughput without redundancy and 14.8 Mbyte/s with error suppression enabled. The card implements transparent reflective memory architecture - data written to local memory automatically mirrors across up to 256 nodes over distances to 10 km, with no processor overhead. Multi-level interrupt support enables event-driven synchronization: any node can trigger interrupts on any peer or all network nodes using a single command, with four user-definable interrupt levels available. Technical Specifications Serial Communication Link Speed: 1.2 Gbaud Data Transfer Rate (non-redundant): 29.5 Mbyte/s Data Transfer Rate (with redundancy): 14.8 Mbyte/s Maximum PCI Target

Transfer Rate: 44 Mbyte/s Maximum DMA Initiator Transfer Rate: 132 Mbyte/s Sustained DMA Initiator Transfer Rate: 33 Mbyte/s Reflective Memory Capacity: 256 Kbyte to 16 Mbyte configurable SDRAM Memory Access Width: D32:D16:D8 Network Nodes (maximum): 256 Max Distance (Single-Mode Fiber): 10,000 meters Max Distance (Multimode Fiber): 1,000 feet (304.30 m) Max Distance (Twinax Cable): 30 meters User-Definable Interrupt Levels: 4

Key Features Fiber-optic serial operation at 1.2 Gbaud Hardware-transparent reflective memory with automatic node synchronization Error detection with optional redundant transmission mode Interrupt generation independent of source node - any node can signal any or all peers Interrupt ordering tied to data delivery for deterministic synchronization Zero processor involvement in memory coherency operations

Typical Applications Real-time distributed control systems, multi-node data acquisition networks, synchronized instrumentation clusters, and low-latency event-driven architectures requiring transparent memory sharing across geographically separated installations.

Compatibility & Integration PCI interface. Compatible with VME-5588DMA family product variants. Supports single-mode and multimode fiber as well as twinax cable media for flexible network topologies.

VMIPCI5588101 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	
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 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>

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.