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Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VMIPCI-5588-511 High-Speed Fiber-Optic 1.2 Gbaud Reflective Memory with Interrupts

The VMIPCI-5588-511 is a high-speed fiber-optic reflective memory board with interrupts. It supports data transfer rates up to 1.2 Gbaud.

**MODEL****Abaco Systems /
VMIC VMIPCI-
5588-511****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****VMIPCI-5588-511****LISTING**[https://aumictechlabs.c
om/products/vmipci-55
88-511-2/](https://aumictechlabs.com/products/vmipci-5588-511-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Abaco Systems VMIPCI-5588-511 is a high-speed fiber-optic reflective memory interface card that enables deterministic, low-latency data distribution across networked systems. Operating at 1.2 Gbaud over fiber-optic paths, it delivers data transfer rates up to 29.5 Mbyte/s in standard mode or 14.8 Mbyte/s with redundant transmission for enhanced error suppression. The PCI-form-factor board broadcasts writes from local SDRAM to remote nodes without I/O overhead, supporting up to 256 nodes across distances reaching 10 km on single-mode fiber. Interrupt-driven architecture allows any node to signal any other node or the entire network with a single command. Technical Specifications Serial Connection Speed: 1.2 Gbaud Data Transfer Rate (Standard): Up to 29.5 Mbyte/s Data Transfer Rate (Redundant Mode): Up to 14.8

Mbyte/s On-Board Memory: 256 Kbyte to 16 Mbyte SDRAM, user-configurable Node Capacity: Up to 256 nodes per network Maximum Inter-Node Distance (Single-Mode Fiber): 10,000 meters (10 km) Maximum Inter-Node Distance (Multimode Fiber): 300 meters (1,000 feet) Maximum Inter-Node Distance (Twinax Cable): 30 meters Form Factor: PCI, single-slotKey Features Fiber-optic reflective memory architecture eliminates software overhead for inter-node transfers Transmit and Receive FIFOs buffer peak data rates to optimize CPU and bus performance Hardware interrupt generation to any node or all nodes via single command Error detection and redundant transmission mode to suppress data corruption Support for multiple fiber types - single-mode, multimode, and twinax interconnectsTypical Applications Real-time distributed systems requiring synchronized data access across geographically dispersed nodes, military/aerospace test and telemetry networks, and high-availability industrial systems where deterministic memory sharing is critical.Compatibility & Integration Functions within PCI-based host systems. Related modules include VMIVME-5588, VMIPMC-5588, VMIVME-5588DMA, and associated 5565-series reflective memory products.

VMIPCI5588511 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

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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.