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Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VMIPCI-5588-411 High-Speed Fiber-Optic 1.2 Gbaud Reflective Memory with Interrupts

The Abaco Systems VMIPCI-5588-411 is a PCI-based reflective memory interface card delivering software-transparent data sharing across distributed systems via high-speed fiber-optic links. Data written to memory in one node automatically broadcasts to all connected nodes at 1.2 Gbaud, eliminating I/O overhead while sustaining throughput to 29.5 Mbyte/s (14.8 Mbyte/s with redundant transfer enabled). The card supports up to 256 networked nodes with configurable on-board SDRAM from 256 Kbyte to 16 Mbyte and interrupt generation to any node or broadcast to the entire network. Aumictech offers NIST-traceable calibration and repair for the Abaco Systems / VMIC VMIPCI-5588-411. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus fu



MODEL

**Abaco Systems /
VMIC VMIPCI-
5588-411**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

VMIPCI-5588-411

LISTING

[https://aumictechlabs.c
om/products/vmicpci-55
88-411-2/](https://aumictechlabs.com/products/vmicpci-5588-411-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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Technical Specifications
Network Speed: 1.2 Gbaud serial
Data Transfer Rate: 29.5 Mbyte/s (standard mode), 14.8 Mbyte/s (redundant transfer mode)
Maximum Network Nodes: 256
On-board Memory: 256 Kbyte to 16 Mbyte SDRAM (configurable)
Maximum Transmission Distance: 10 km single-mode fiber, 304 m multimode fiber, 30 m twinax cable
PCI Bus Performance: 44 Mbyte/s target, 132 Mbyte/s DMA maximum (33 Mbyte/s sustained)
Form Factor: Single standard-length PCI slot

Key Features
Fiber-optic connectivity (single-mode, multimode) and twinax cable options with ST-style connectors
Error detection and optional redundant transmission mode for enhanced data integrity
Transmit and Receive FIFOs optimize CPU and bus performance during peak data rates
Interrupt capability: any node can trigger interrupts on single or multiple network nodes
Software-transparent operation requiring no explicit I/O management
Configurable endian conversion for heterogeneous CPU architectures

Compatibility & Integration
PCI interface; communication link compatible with other 5588-series products
Device drivers available for Windows NT, 2000, and XP
Datasheets, manuals, and drivers included

VMIPCI5588411 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.