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Data Sheet

August 15, 2026

ABACO SYSTEMS

Abaco Systems PCIE-5565PIORC-200A00 PCI Express (PCIe) Reflective Memory (RFM) Node Interface Card

The Abaco Systems PCIE-5565PIORC-200A00 is a low-profile PCI Express Reflective Memory (RFM) node interface card that enables deterministic, software-transparent data sharing across up to 256 independent nodes. Data written to one node's memory automatically mirrors to all other nodes on the network via fiber-optic links, supporting transfer rates from 43 Mbyte/s (4-byte packets) to 170 Mbyte/s (64-byte packets) in non-redundant mode. Redundant transfer mode delivers 20 Mbyte/s to 87 Mbyte/s with enhanced error suppression. The card integrates x4 Lane PCI Express 1.0a connectivity with one independent DMA channel, field-upgradeable firmware, and configurable 128 Mbyte or 256 Mbyte onboard SDRAM. Compatibility & Integration Supports Linux, VxWorks, and Windows. Bus structure independence allows integration of diverse hardware platforms and operating systems into a single shared-memory n



MODEL

**Abaco Systems
PCIE-5565PIORC-
200A00**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

**PCIE-5565PIORC-
200A00**

LISTING

<https://aumictechlabs.com/products/pcie-5565-piorc-200a00-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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Technical Specifications
Form Factor: Low-profile PCI Express PCI Interface: x4 Lane PCI Express 1.0a to PCI Bridge PCI Express Signaling: 2.5 GHz DMA Channels: One independent channel Onboard SDRAM: 128 Mbyte or 256 Mbyte (configurable) Packet Size: 4 to 64 bytes (dynamic) Fiber Optic Network Speed: 2.12 Gbaud serially Data Transfer Rate (Non-Redundant): 43 Mbyte/s to 170 Mbyte/s Data Transfer Rate (Redundant): 20 Mbyte/s to 87 Mbyte/s Maximum Nodes: 256 Dimensions: 6.6 inches × 2.713 inches Weight: 0.2 lbs Operating Temperature: 0°C to +65°C (with forced air cooling) Cooling: 300 LFM Compliance: RoHS Key Features Multimode fiber support up to 300 meters; single-mode fiber to 10 kilometers Any node can generate interrupts to any other node or all nodes with a single command. Error detection with redundant transfer mode option. Field-upgradeable firmware. Software transparent operation minimizes host processor overhead.

Typical Applications Aircraft simulators Ship and submarine simulators Industrial control systems Automated testing systems Power plant simulators Engine test facilities Aluminum rolling mills

Compatibility & Integration Supports Linux, VxWorks, and Windows. Bus structure independence allows integration of diverse hardware platforms and operating systems into a single shared-memory network.

PCIE5565PIORC200A00 Characteristics / Specifications

PARAMETER	VALUE
Model	PCIE-5565PIORC-200A00
Instrument Type	Fiber-optic Reflective Memory PCI Express node
Card Form Factor	PCI Express low profile
Memory This Config	256 MByte SDRAM
Link Serial Rate	2.12 Gbaud
Nonredundant Transfer Rate	43 MByte/s single longword to 170 MByte/s 64-byte bursts
Redundant Transfer Rate	20 MByte/s single longword to 87 MByte/s 64-byte bursts
Dynamic Packet Size	4 to 64 bytes
Pci Express Lanes	4 lanes at 2.5 Gbit/s
Legacy Pci Rate 33 Mhz 32 Bit	132 MByte/s
Legacy Pci Rate 33 Mhz 64 Bit Or 66 Mhz 32 Bit	264 MByte/s
Legacy Pci Rate 66 Mhz 64 Bit	528 MByte/s
Power Plus 12 Vdc Maximum	0.7 A plus or minus 5 percent
Power Plus 3.3 Vdc Maximum	0.6 A
Board Length	6.6 in
Board Height	2.713 in
Mass	0.2 lb
Cooling Requirement	300 LFM
Operating Temperature	0 to plus 65 C with forced air cooling
Storage Temperature	-40 to plus 85 C
Relative Humidity	20 to 80 percent noncondensing
Mtbf Bellcore	607680 hours
Simplex Cable Distance	up to 820 ft (250 m)
Duplex Cable Distance	up to 721 ft (219.76 m)
Multimode Fiber Distance Family	up to 300 m

PARAMETER	VALUE
Single Mode Fiber Distance Family	up to 10 km
Network Node Capacity	up to 256 nodes
RoHS	designed to meet EU RoHS 2002/95/EC
Ordering String Pattern	PCIE-5565PIORC-ABCDEF
Humidity	20 to 80 percent noncondensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 to plus 85 C
Operating temperature	0 to plus 65 C with forced air cooling
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Ordering String Pattern	PCIE-5565PIORC-ABCDEF Notes From J-Squared PCIE-5565PIORC Reflective Memory datasheet for transfer rates, power, mechanicals, MTBF, and cable distances. Memory digitAequals 1 for 128 MByte or 2 for 256 MByte; C selects multimode or single-mode.

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.

performance versus prior generation

Redundant transfer mode for extra error suppression

One independent DMA channel

Network interrupts to any or all nodes withasingle command

Technical Specifications

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Pci Express Lanes	4 lanes at 2.5 Gbit/s
Legacy Pci Rate 33 Mhz 32 Bit	132 MByte/s

Legacy Pci Rate 33 Mhz 64 Bit Or 66 Mhz 32 Bit: 264 MByte/s

Specifications

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Notes

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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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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
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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.