



Reflective
Memory

PMC-5565PIORC Reflective Memory PMC Node Card

ULTRA-HIGH-SPEED, FIBER OPTIC
NETWORK FOR DISTRIBUTED
PROCESSING USING REFLECTIVE
MEMORY

FAST SOLUTION TO HIGHER PERFORMANCE

The PMC-5565PIORC Reflective Memory node card is well-suited for industrial control applications in which implementation simplicity, a lack of software overhead, and bus structure and operating system independence are key factors, such as:

- Aircraft simulators
- Automated testing systems
- Ship and submarine simulators
- Aluminum rolling mill
- Power plant simulators
- Engine test stands
- Industrial process control
- High-speed data acquisition
- PLCs

PCI Express, PMC, PCI and VME node interface cards are available, and we support a wide variety of operating systems.



BEST CUSTOMER EXPERIENCE

At J-Squared, we understand that there is more to providing solutions than speeds and feeds, and therefore, we complement the performance and practical aspects of our RFM products with long-term product availability, best-in-class domain expertise, and a focus on exceptional customer service.

We offer:

- A variety of form factors, operating system support, and configurations for network flexibility
- Ease of integration and migration
- Ease of use
- Long-term availability
- Robust lifecycle management
- Global support and services from J-Squared, the leader in RFM technology



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PMC-5565PIORC REFLECTIVE MEMORY PMC NODE CARD

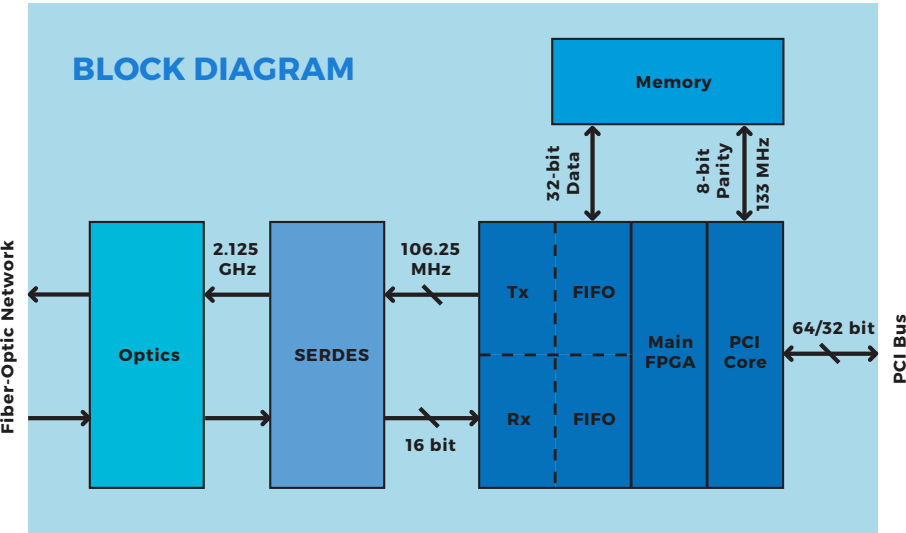
As a longstanding leader in Reflective Memory (RFM) technology, J-Squared understands the demands of real-time networks. We know that certain types of applications require the determinism, implementation simplicity, and lack of software overhead that ubiquitous technologies such as Ethernet can't deliver.

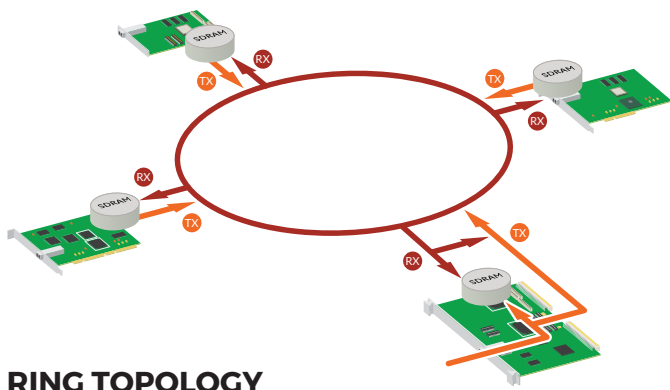
Our PMC-5565PIORC Reflective Memory node card in PMC form factor is engineered specifically to provide highly deterministic, tightly timed performance for a variety of advanced networking applications that need to deterministically move large amounts of data fast and share that data in real time among similar or disparate network nodes.

J-Squared's RFM products are designed to fit into your existing hardware and operating system environment, integrating diverse hardware platforms running different operating systems into a single, shared memory network.

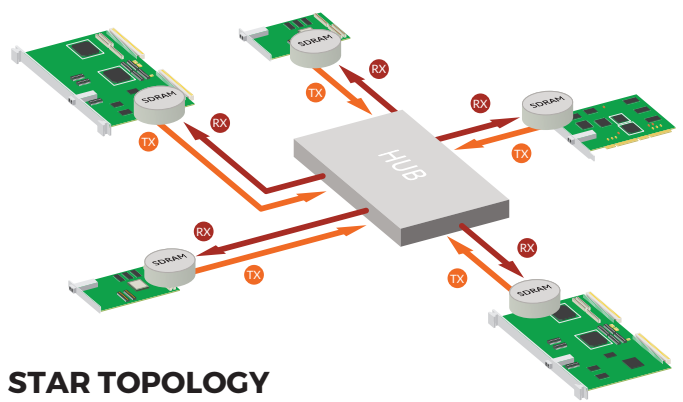
FEATURE BENEFIT

Low latency, deterministic transfer rates	Achieve predictable, high-performance application deployment
Operating system & bus structure independence	Integrate diverse systems into a single, shared memory network
Transparent data transfers between nodes	Eliminate processor overhead; Deliver higher levels of performance
Error management and detection	Protect against lost dataspace.
RFM network supports up to 256 nodes	Enable the scalability to build the network to fit the application & add more nodes when needed
2.12Gbaud serial connection speed	Transfer data faster between nodes
128 or 256 Mbytes of onboard SDRAM	Share large amounts of data





RING TOPOLOGY



STAR TOPOLOGY

SPECIFICATIONS

RAM

- 128 or 256 MByte

Transfer Specifications

- 43 MByte/s (single longword accesses) to 170 MByte/s (64 byte bursts) nonredundant transfer rate
- 20 MByte/s (single longword accesses) to 87 MByte/s (64 byte bursts) redundant transfer rate

PCI Transfer Rate

- 132 MByte/s (33MHz/32-bit bus), 264 MByte/s (33 MHz/64-bit bus or 66 MHz/32-bit bus) or 528 MByte/s (66 MHz/64-bit bus) and throttles back to available link data rate as FIFOs begin to fill
- PCI Express transfer rate: 4 lanes at 2.5 Gbit/s

Environmental Specifications

- Operating: 0°C to +65°C, with forced air cooling
- Storage: -40°C to +85°C
- Relative humidity: 20% to 80%, noncondensing

Operating Systems Support

- Microsoft® Windows® XP
- Microsoft Windows 7
- Linux®
- VxWorks®
- Solaris®

CE

- BS EN55024
- BS EN55022, Class A
- IEC61000 4 2
- IEC61000 4 3

United States

- FCC Part 15, Subpart B, Section 109, Class A
- CISPR 22 (1997), Class A
- ANSI C63.4 (2003) method

Australia / New Zealand

- AS/NZS CISPR 22 (2002) Class A
- EN55022 (1998) Class A

Power Requirements

- 3.3VDC (± 5%), 0.7A typical, 0.9A maximum
- 5VDC (± 5%), 0.7A typical, 0.9A maximum

Mechanical

- Form Factor: PMC
- Weight: 0.15 lbs

Cooling Requirements

- 300LFM

MTBF (Bellcore)

- 1, 307,078 hours

Cables

- Simplex cable up to 820 feet (250 m)
- Duplex cable up to 721 feet (219.7608 m)

Compliance

- Designed to meet the European Union (EU) Restriction of Hazardous Substance (RoHS) Directive (2002/95/EC) current revision

European Union

- BS EN55024 (1998 w A1:01 & A2: 03)
- CISPR22, EN55022 (Class A)
- CISPR11, EN55011 (Class A, Group 1)

Japan

- VCCI (April 2005) Class A
- CISPR 22 (1997) Class A
- ANSI C63.4 (2003) method

Canada

- ICES 003 Class A
- CISPR 22 (1997) Class A
- ANSI C63.4 (2003) Method

ORDERING INFORMATION

PMC-5565PIORC - A B C D E F

A = Memory Options
 0 = Reserved
 1 = 128 Mbyte
 2 = 256 Mbyte

B = 1 (4k FIFO)

C = Transmission Mode
 0 = Multimode
 1 = Single mode

DEF = 000 (reserved for future use)