GE VMIPCI-5565-110000

Reflective Memory Board

GE Fanuc VMIPCI-5565-110000 is a 64-bit PCI reflective-memory board with 128 MB SDRAM, 4K FIFOs and multimode fiber for deterministic shared-data exchange across as many as 256 nodes.

01	02	03	04
128 MB local SDRAM reflective memory	2.12 Gbaud multimode fiber ring	Two independent PCI DMA engines	Up to 256 network nodes with remote interrupts

System position

64-bit PCI host memory access	VMIPCI-5565-110000 local SDRAM and FIFOs	Fiber-optic daisy-chain ring	Replicated addresses and interrupts at remote nodes

Evidence boundary

Only verified exact-model facts and explicitly identified family context are included. Similar codes are not treated as substitutes.

Model-specific release focus

- 128 MB local SDRAM reflective memory
- 2.12 Gbaud multimode fiber ring
- Two independent PCI DMA engines
- Up to 256 network nodes with remote interrupts

02 / CAPABILITY MAP

Engineering domains and architecture

Memory option	1: 128 MB SDRAM
FIFO option	1: 4K FIFOs
Transmission mode	0: multimode fiber
Conformal coating	0: no conformal coating

Serial link rate	2.12 Gbaud
Network nodes	Up to 256
Nonredundant transfer rate	47.1 MB/s to 174 MB/s
PCI interface	64-bit, 66 MHz, PCI revision 2.2

Interface architecture

PCI bus

64-bit host interface with 33/66 MHz transfer capability

Fiber ring

Multimode SFF 850 nm link for node-to-node retransmission

Reflective memory

128 MB local SDRAM mapped to matching addresses across nodes

Interrupt and DMA

Network interrupt FIFOs and two independent read/write DMA engines

Interface evidence for acceptance

- PCI bus: 64-bit host interface with 33/66 MHz transfer capability
- Fiber ring: Multimode SFF 850 nm link for node-to-node retransmission
- Reflective memory: 128 MB local SDRAM mapped to matching addresses across nodes
- Interrupt and DMA: Network interrupt FIFOs and two independent read/write DMA engines

Use cases with controlled scope

Real-time shared data

Replicates control and simulation data among computers, PLCs and embedded controllers.

Distributed test systems

Synchronizes high-rate measurements across independent PCI hosts.

Hardware-in-the-loop

Provides deterministic low-overhead exchange between simulation nodes.

Multi-controller coordination

Combines memory updates and network interrupts for ordered process actions.

INTEGRATION CHECKPOINTS

Identity

GE VMIPCI-5565-110000 is preserved in full.

Host system

Rack, slot and surrounding hardware are verified.

Configuration

Project, firmware and settings are recorded.

Acceptance

Functional evidence is captured before release.

System relationship

64-bit PCI host memory access	VMIPCI-5565-110000 local SDRAM and FIFOs	Fiber-optic daisy-chain ring	Replicated addresses and interrupts at remote nodes

Configuration-control record

- Serial link rate: 2.12 Gbaud
- Network nodes: Up to 256
- Nonredundant transfer rate: 47.1 MB/s to 174 MB/s
- PCI interface: 64-bit, 66 MHz, PCI revision 2.2

Decision matrix

Question	Answer
How much memory is fitted to GE Fanuc VMIPCI-5565-110000?	The first option digit is 1, selecting 128 MB of onboard SDRAM.
Which FIFO option is used by GE Fanuc VMIPCI-5565-110000?	The second option digit is 1, selecting 4K FIFOs.
Which fiber type is specified for GE Fanuc VMIPCI-5565-110000?	The transmission digit is 0, selecting multimode fiber.
Is GE Fanuc VMIPCI-5565-110000 conformally coated?	No. The final option digit is 0, selecting no conformal coating.

Eight release precautions

1

Power down the PCI host and discharge static before installing GE Fanuc VMIPCI-5565-110000.

2

Use grounded ESD protection and handle the board only by its edges.

3

Verify that the host slot supports the required 64-bit PCI electrical and mechanical interface.

4

Set a unique node ID from 0 to 255 before joining the reflective-memory ring.

5

Use multimode fiber and compatible LC/SFF optics for the 110000 transmission option.

6

Maintain the daisy-chain ring direction and protect connectors from dust and excessive bend radius.

7

Coordinate redundant-transfer mode and packet-size settings across every participating node.

8

After installation, verify ring continuity, memory replication, DMA, interrupts and error-status handling.

Commissioning decision points

- Use multimode fiber and compatible LC/SFF optics for the 110000 transmission option.
- Maintain the daisy-chain ring direction and protect connectors from dust and excessive bend radius.
- Coordinate redundant-transfer mode and packet-size settings across every participating node.
- After installation, verify ring continuity, memory replication, DMA, interrupts and error-status handling.

Product verification and support

Apter Power verification record

Model identity	Keep the complete GE model code and every suffix in purchasing, installation and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power references	Scope note
GE IC698ETM001	Portfolio reference only; verify compatibility independently.
GE IS200VRTDH1DAC	Portfolio reference only; verify compatibility independently.
GE product catalog	Portfolio reference only; verify compatibility independently.

	Apter Power technical and sourcing support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com Scan for the Apter Power contact page.	Model record GE VMIPCI-5565-110000 Reflective Memory Board Verify the complete nameplate before installation.

Handover evidence to retain

- Exact identity retained: GE VMIPCI-5565-110000
- VMIPCI-5565-110000 local SDRAM and FIFOs
- Fiber-optic daisy-chain ring
- Archive as-left checks and measured results before release.