# 1.3 Memory Xchange Features

1.3.1 RX3i Reflective Memory Module Features

A PACSystems RX3i main rack supports a maximum of six Memory Xchange modules.

- PACSystems RX3i single slot form factor.

- 128 Mbytes reflective memory with parity.

- Software configuration of all node parameters (no jumper or switch settings required).

- No RX3i CPU processing required to operate the network.

- Network-compatible with the GE Intelligent Platforms 5565 family of reflective memory devices.

- Connection with multimode fiber up to 1000 ft (304.80 m) or

- Connection with single mode fiber supports up to 32,808 ft 4 in (10 Kms)

- Dynamic packet sizes of 4 to 64 bytes, controlled by the CMX module.

- Network transfer rate of 43 Mbyte/s (4 byte packets) to 174 Mbyte/s (64 byte packets)

- Network link speed of 2.1 Gbits/s

- Programmable module interrupt.

- Four general-purpose network interrupts with 32 bits of data each.

- Network error detection.

- Up to 256 nodes per network.

- Redundant transfer mode operation. This optional mode reduces the chance of a data packet being dropped from the network.

- Configurable network memory offset for compatibility with RX7i Memory Xchange applications.
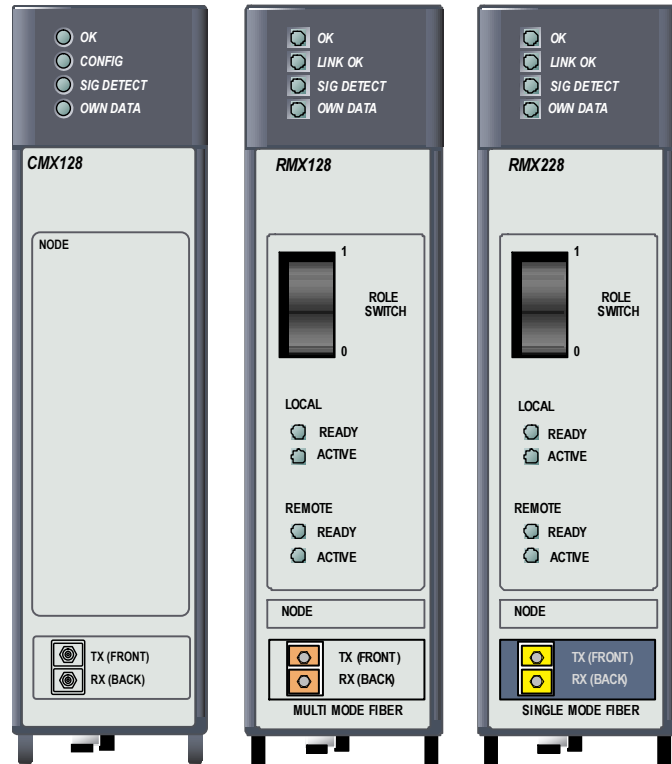
1.3.2   IC695CMX128, IC695RMX128, and IC695RMX228 Functional Compatibility


Note The CMX128, RMX128, CMX016, RMX016 (multi mode interface) cannot be directly connected to the RMX228 (single mode interface).

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*   PACSystems RX3i CPU with firmware version 5.50 or later for CMX128 and PACSystems RX3i CPU with firmware version 5.70 or later for RMX128 and PACSystems RX3i CPU with firmware version 8.15 or later for RMX228.

*   Programming software: Proficy Machine Edition Logic Developer, version 5.8 or later for CMX128 and Proficy Machine Edition Logic Developer, version 5.9 SIM1 or later for RMX128 and Proficy Machine Edition Logic Developer, version 8.5 SIM2 or later for RMX228.

*   Only the RMX can operate as a redundancy link. Redundancy link operation requires a CPU that supports CPU redundancy, such as the IC695CRU320.

*   Compatible with reflective memory devices in the GE Intelligent Platforms 5565 family. The PACSystems Memory Xchange module does not operate with other reflective memory families offered by GE Intelligent Platforms.

1.3.3   RX7i Reflective Memory Module Features

An RX7i main rack supports a maximum of four Memory Xchange modules in any combination of RMX and CMX modules. When using CPU redundancy, up to two RMX modules in a rack can be configured as redundancy links.

- PACSystems single slot form factor.

- 16 Mbytes reflective memory with parity.

- Software configuration of all node parameters (no jumper or switch settings required).

- No PACS CPU processing required to operate the network.

- Network-compatible with the GE Intelligent Platforms 5565 family of reflective memory devices.

- Connection with multimode fiber up to 1000 ft. (304.80 m).

- Dynamic packet sizes of 4 to 64 bytes, controlled by the Memory Xchange module.

- Network transfer rate of 43 Mbyte/s (4 byte packets) to 174 Mbyte/s (64 byte packets)

- Network link speed of 2.1 Gbits/s

- Programmable VMEbus interrupt output.

- Four general-purpose network interrupts with 32 bits of data each.

- Network error detection.

- Up to 256 nodes per network.

- Redundant transfer mode operation. This optional mode reduces the chance of a data packet being dropped from the network.

- Configurable network memory offset allows you to assign nodes on a network to groups according to the 16 MB segment in the network address space that they use.

IC698CMX016   IC698RMX016
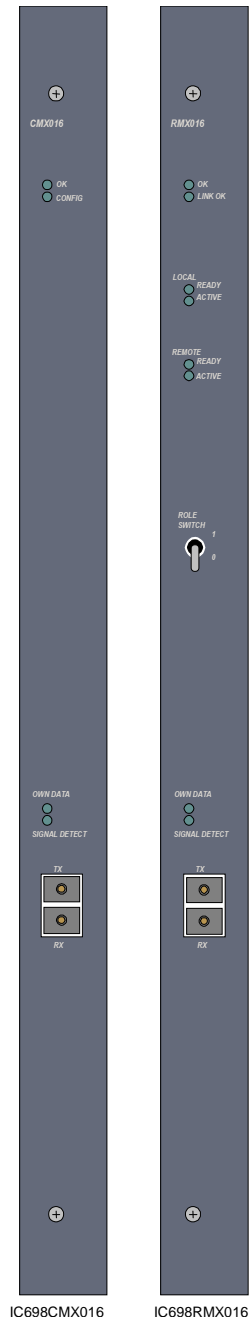
1.3.4 IC698CMX016 and IC698RMX016 Functional Compatibility

- PACSystems RX7i CPU with firmware version 2.0 or later.

- Only an RMX can operate as a redundancy link. To operation as a redundancy link, RMX modules require a CPU that supports CPU redundancy, such as the IC698CRE020.

- Programming software: Proficy Machine Edition Logic Developer, version 4.5 or later

- When used as a general-purpose reflective memory module, the RX7i Memory Xchange modules are compatible with reflective memory devices in the GE Intelligent Platforms 5565 family. The PACSystems Memory Xchange module does not operate with other reflective memory families offered by GE Intelligent Platforms.

1.3.5 Reflective Memory Hub

The VMIACC-5595 is a managed hub designed to operate with the GE Intelligent Platforms 5565 family of Reflective Memory real-time network products. The Reflective Memory hub can automatically bypass ports when it detects a loss of signal or the loss of valid synchronization patterns, allowing the other nodes in the network to remain operational.

For additional information, refer to the VMIACC-5595 2 Gb/s Reflective Memory Hub Installation Guide, 522-805595-000, which is available at *http://www.ge-ip.com*.