GE RX3i PacSystem Series Service Manual

IC695RMX128

1. Description

The IC695RMX128 is a PACSystems RX3i Redundancy memory Exchange module that is manufactured by Emerson Automation, formerly by GE Intelligent Platforms (GE IP). This module has a user memory of 128MB SDRAM and supports operating as a reflective memory network or as a dedicated link between Redundant configured RX3i CPUs. This module comes with single-mode fiber supporting 2.12 Gbaud fiber-optic network.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**RX3i PacSystem**
Manufacturer	**Emerson Automation**
Part	**Number IC695RMX128**
Part	**Number IC695RMX128**
Type	**Redundancy memory module**
Type	**Redundancy exchange memory module**
Packet	**Size Dynamic, controlled by the RMC128/RMX228**
User	**Memory 128 MB SDRAM**
User	**Memory 128 MB SDRAM**
Communication	**Single-mode Fiber-optic LC type**
Input	**Power 580 mA at 3.3 VDC / 220 mA at 5 VDC**
Transmission	**speed High-speed easy-to-use 2.12 Gbaud fiber-optic network**
Nodes	**Up to 256 per network**
Nodes	**Up to 256 per network**
Resolution	**Four networks of 32 bits each**
Configurable	**Network Yes**
Network	**Error Detection Yes**
Compatibility	**RMC128/RMX228 module**
Hot	**Insertion and Removal Yes**
Configurable	**Network Yes**
Compatibility	**RMC128/RMX228 module**
The	**IC695RMX128 is a PACSystems RX3i Redundancy Memory Exchange Module. The main function of this module is to act as a single node on a reflective memory topology or as or as dedicated memory module for a redundant RX3i CPU pair. When used in a redundant CPU configura**

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Technical specifications for IC695RMX128

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Compatibility RMC128/RMX228 module

Hot Insertion and Removal Yes

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Compatibility RMC128/RMX228 module

The IC695RMX128 is a PACSystems RX3i Redundancy Memory Exchange Module. The main function of this module is to act as a single node on a reflective memory topology or as or as dedicated memory module for a redundant RX3i CPU pair. When used in a redundant CPU configuration, the IC695RMX128 reflects the contents of the IC695CMX128. With a reflective memory link, any update on one node is reflected and updated to every other nodes connected to the same network. Connection is established via a fiber-optic network and supports connection of up to 256 nodes. This module comes with 128 MB of reflective memory with a fiber optic power that requires LC type connector, designed for transmission speed of up to 2.12 Gbaud. This module operates when supplied with 580 mA @ 3.3 VDC and 220 MA @ 5 VDC. The IC695RMX128 is used in redundancy systems, it cannot be utilized to perform general purpose memory Xchange capabilities. Additionally, a complete communication path must be established to complete the memory Xchange network. A complete communication path consists of a primary RMX unit and a corresponding secondary RMX unit. Two (2) high-speed fiber-optic cables must be connected to the RMX pair and must form a 2-node ring. Since a dedicated RMX module must be used for redundant controller configuration, no other RMX or reflective nide must be used for any redundant controller design. Configuration of RMX node(s) is doe via the programming software, not by jumper or DIP switch settings. This ensure centralized modification of the module and minimizes hardware interruption.

The IC695RMX128 memory module is a redundancy memory module that comes in the RX3i PACSystems series by GE Fanuc Automation. This module is applied specifically where there is a hot standby CPU redundancy system on which a second CPU works as a backup device for the main CPU and there is a constant data transfer between these 2 devices. This module operates on this kind of reflective network and as a link between these 2 CPUs. When this link is inactive or when it is not being used currently, it is identical to the main module, which is the IC695CMX128 module. The GE Fanuc Automation IC695RMX128 redundancy memory module provides data sharing between different PCs and computing devices that are connected through a high-speed fiber-optic network. The module comes with network error detection features. The GE Fanuc Automation IC695RMX128 redundancy memory module can be connected to other devices through fiber-optic cables in a daisy-chain loop. The transmission is performed from node to node until it reaches the final receiver. This module comes with a reflective memory of 128 KB and a high-speed and easy-to-use 2.12 GBaud fiber-optic network. This module occupies a single slot in the RX3i rack. The GE Fanuc Automation IC695RMX128 redundancy memory change module has a zirconium ceramic ferrule, an insertion loss rating of 0.35 dB maximum, and a return loss. The input power of this module is 580 milliamps at 3.3 Volts DC and it is 220 milliamps at 5 Volts DC. This module can be inserted in an easily and with the power to the system still on. This insertion mode is called jot insertion and applies to certain parts from the RX3i PacSystems series.