

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE PACSYSTEMS RX3i

IC695RMX128

128 MB MEMORY EXCHANGE MODULE

Used with the applicable PACSystems RX3i memory exchange configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GE official manufacturer documentation

Release	Firmware Version	Date	Comments
IC695RMX228-ACAB	HW -ACxx	March 2016	Hardware change: Power Cycle issue that in rare cases after cycling power on the module could result in “loss of module” during power up. A subsequent power cycle will clear this condition. Refer to the section Problems Resolved by Hardware version -ACxx for additional information. Firmware version 2.01: In rare cases a timing issue occurs after a power cycle resulting in a “loss of module” during power up. A subsequent power cycle will clear this condition.
IC695RMX228-ABAA	2.00	July 2015	Revision ABAA enhances the design’s resistance to the rare condition of corruption during a memory read (seen by user as a broken redundant link on an RMX228) from occurring.
IC695RMX228-AAAA	2.00	June 2014	Initial release for IC695RMX228

Important Product Information for this Release

Upgrades

⚠ CAUTION

- Do not install firmware versions earlier than 2.00. This will render the unit inoperable and will require the unit be returned to the factory.

Functional Compatibility

The RMX requires the following versions for configuration and operation.

Subject	Description
Programmer Version Requirements	PME version 8.50 SIM2 or later must be used for compatibility with the RMX228 module.
RX3i CPU	RX3i CPU firmware version 8.15 (CI_R69431_2014_04_30_E3KL) or later is required to be used with the RMX228 module. PACSystems RX3i CRU320 is required for use in a redundancy system.
RMX228 Versions	Firmware versions earlier than 2.00 are not compatible with any of the RMX228 hardware versions.
Rack Location	The RMX128/RMX228 must be located in the main RX3i rack. IC695RMX128/RMX228 modules require a PCI backplane, which is not available on IC694CHSxxx expansion bases.

Restrictions and Open Issues in this Release

Subject	Description
RX3i RMX/CMX modules require grounded ESD strap for EMC Installation	When installing, operating, or maintaining the IC695RMX128/RMX228, personnel must ensure any electrostatic charge is discharged through the use of a grounded ESD strap or other means to meet IEC-61000-4-2 (ESD) requirements. A direct electrostatic discharge event of 4 kV or higher applied to the metal optical transceiver housing may result in a lights out module requiring a power cycle to recover.
RX3i RMX and CMX modules require a metal enclosure to meet radiated emissions requirements.	For installation requirements, refer to the section, EMC Installation Requirements.

Subject	Description
RX3i CMX/RMX does not disable transmitter when the CPU goes to Stop/Halt mode.	For IC695CMX128, IC695RMX128, and IC695RMX228 modules not used as redundancy links, the automatic transmitter disable feature currently does not work correctly when a controller goes to Stop/Halt mode. When the CPU goes to Stop/Halt mode or fails and the automatic transmitter disable feature is enabled, the fiber-optic transmitter should be turned off, breaking the reflective memory link. When the feature is disabled, the transmitter remains ON and the reflective memory link will not be broken. If this feature is enabled, the automatic transmitter disable feature does not work when the CPU goes into Stop/Halt mode (such as after a software watchdog trip or multi-bit ECC error detection) leaving the fiber-optic transmitter ON. The fiber-optic transmitter is properly disabled if the CPU fails or is lost (for instance the CPU hardware is removed, the CPU experiences a hardware watchdog event, or displays a blink code such as a page fault). This user-configurable feature is enabled by default. The feature may be disabled by clearing bit 12 with a BUS_WRITE to region 3, offset 0x440.
The LCSR status bit is not turning ON after LISR turns ON when Interrupt (Sync Loss) is generated.	When a sync loss condition is detected the LISR bit is latched ON but the LCSR sync loss bit is not latched ON (that is, it remains OFF). To check the sync loss status, monitor the sync loss bit in the LISR register instead of the LCSR sync loss bit.
SVC_REQ 17 is not supported	SVC_REQ 17 is not supported to mask or unmask module interrupts on RX3i CPUs. There is currently no way to identify which module interrupt should be masked on RX3i. For RX7i this was handled by a table of values, but this table of values is invalid on RX3i. Instead the customer should simply turn off interrupts using the normal interrupt disabling mechanism as described in the user's manual.

Problems Resolved with this Release

None

Operational Notes

Bad Data Interrupt	To prevent continuous interrupts when the Bad Data Interrupt is enabled, you may want to temporarily set bit 8 in the LIER to 0 when a sync loss condition is detected. If your application is also using the Sync Loss Interrupt, you may also want to temporarily set bit 11 in the LIER to zero when the sync loss condition is detected. You can then re-enable the Bad Data Interrupt (and Sync Loss Interrupt if it was also disabled) when the sync loss condition has been corrected.
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Warnings Caution Notes as Used in this Publication

WARNING

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use.

In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

CAUTION

Caution notices are used where equipment might be damaged if care is not taken.

Note: Notes merely call attention to information that is especially significant to understanding and operating the equipment.

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