GE Rx7i PACsystem Series Service Manual

IC698CRE040

1. Description

The GE Fanuc / Emerson Automation IC698CRE040 is a PACSystem RX7i Processor module. This processor has 64MB RAM and 64MB non-volatile user memory, with typical scan rate of 0.024ms per 1000 Boolean contacts/coils. This processor has Two (2) serial communication, One (1) Station manager port, and Two (2) Ethernet interfaces.

2. Specifications

Specification	Value
Brand	**GE Fanuc / Emerson Automation**
Series	**RX7i PACsystem**
Part	**Number IC698CRE040**
Description	**Rx7i CPU**
Processor	**speed 1.8 GHz**
Serial	**port Two (2) Serial interface**
Power	**Requirements +5 VDC: 6.8 Amps nominal +12 VDC: 0.003 Amps nominal -12 VDC: 0.003 Amps nominal**
Ethernet	**Interface Two (2) Ethernet (RJ45) ports**
Ethernet	**Transmission Rate 10Mb/sec and 100Mb/sec**
Web-based	**data monitoring Up to 16 web server and FTP connections (combined)**
Number	**of EGD configuration-based pages 255**
Time	**of Day Clock accuracy Maximum drift of ±2 seconds per day**
Elapsed	**Time Clock (internal timing) accuracy ±0.01% maximum**
Memory	**64 MB**
Voltage	**5 Volts DC**
Current	**6.8 Amperes**
Communication	**RS 232, Ethernet, RS 486**
Processor	**Pentium M**
The	**IC698CRE040 is a GE Fanuc / Emerson Automation Central Processing Unit (CPU). This CPU supports configuration of high-availability or redundancy configuration. This module is part of the PACSystem RX7i Programmable Automation Controller (PAC) platform. This CPU unit features a**

3. Product Information

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Technical specifications for IC698CRE040

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Series RX7i PACsystem

Part Number IC698CRE040

Description Rx7i CPU

Processor speed 1.8 GHz

Serial port Two (2) Serial interface

Power Requirements +5 VDC: 6.8 Amps nominal +12 VDC: 0.003 Amps nominal -12 VDC: 0.003 Amps nominal

Ethernet Interface Two (2) Ethernet (RJ45) ports

Ethernet Transmission Rate 10Mb/sec and 100Mb/sec

Web-based data monitoring Up to 16 web server and FTP connections (combined)

Number of EGD configuration-based pages 255

Time of Day Clock accuracy Maximum drift of ±2 seconds per day

Elapsed Time Clock (internal timing) accuracy ±0.01% maximum

Memory 64 MB

Voltage 5 Volts DC

Current 6.8 Amperes

Communication RS 232, Ethernet, RS 486

Processor Pentium M

The IC698CRE040 is a GE Fanuc / Emerson Automation Central Processing Unit (CPU). This CPU supports configuration of high-availability or redundancy configuration. This module is part of the PACSystem RX7i Programmable Automation Controller (PAC) platform. This CPU unit features a relatively high allocation Random Access Memory(RAM) and non-volatile memory, both amounting to 64MB each. Additionally, it is equipped with a high-speed microprocessor with clock speed of 1.8 GHz and scan rate of 0.024ms per 1000 Boolean contacts/coils.

The IC698CRE040 is provided with embedded communication port such as Two (2) Serial communication ports supporting RS232 and RS485 communication standard and Two (2) RJ45 ports for Ethernet connectivity, supporting transmission rate of 10/100 Mbps half/full duplex with auto-sensing capability. This CPU is also provided with One (1) station manager port. The protocols supported by the serial ports are Modbus RTU Slave, SNP, Serial I/O.

In addition, the built-in Ethernet interfaces is capable of Data exchange using Ethernet Global Data (EGD), TCP/IP communication services using SRTP, Support for SRTP Channels, Modbus/TCP Server and Modbus/TCP Client, Full programming and configuration services, Time synchronization to SNTP timeserver on Ethernet network (when used with Release 5.00 or later CPU module). Up to 16 web server and FTP connections is supported by the Ethernet ports.

This CPU supports programing languages such as Ladder Diagram, C, Structured Text and Function Block Diagram. This CPU may be downloaded up to 512 Block with each block having a maximum size of 128KB.

The IC698CRE040 is configured using the Proficy Machine Edition application software or the Logic Developer programming software.

The GE Fanuc IC698CRE040 CPU is an Ethernet port-enabled CPU that is compatible with the Rx7i PACsystem. The CPU comes with a processing speed of 1.8 GHz and it has a memory of 64 MB. It operates with a voltage rating of +5 Volts DC and current rating of 6.8 Amps. It supports floating point data and fast operation. The CPU module is designed with 3 serial ports and it is compatible with different serial protocols, including the MODBUS RTU slave, SNP, and serial I/O protocols. For embedded communication, the IC698CRE040 CPU uses the RS-232, Ethernet, and the RS-485 interface. The CPU can be programmed using Proficy Machine Edition or Logic Developer programming software. It can handle machine control and material handling applications. It uses the VME 64 standard format for communicating with the I/O module and other modules. To connect other human-machine interface devices and programmer units, it can use the Ethernet ports or a serial port. The GE Fanuc IC698CRE040 CPU is installed with a Pentium M microprocessor with stand-by redundancy. The IC698CRE040 CPU can be used for monitoring data by using 16 web-servers and other FTP connections. The CPU comes with a built-in clock that is backed up with a battery. The IC698CRE040 CPU can be upgraded to the latest firmware version by using the RS 232 and 485 port. The CPU can detect low battery situations and alerts operator for different events. The CPU module has an open enclosure and requires to be installed in dry and free from airborne contaminants.