GE Rx7i PACsystem Series Service Manual

IC698CPE030

1. Description

The IC698CPE030 is a PACSystems RX7i controller. This is manufactured by Emerson Automation, formerly by GE Intelligent Platforms (GE IP). This controller mainly features Two (2) Ethernet communication ports; One (1) RS232 port; One (1) RS485 port and One (1) Station manager port. It has 600MHz Pentium M microprocessor and 64 MB RAM and 64 MB Flash memory.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**PACSystem RX7i**
Manufacturer	**GE Fanuc**
Part	**Number IC698CPE030**
Product	**Description Central Processing Unit**
Description	**Rx7i PACsystem CPU**
Communication	**ports Two (2) Ethernet communication ports; One (1) RS232 port; One (1) RS485 port and One (1) Station manager port**
Application	**Rx7i PLC System**
Random	**Access Memory (RAM) 64 MB**
Operating	**Voltage +5, +15, -12 Volt DC**
Flash	**Memory 64 MB**
Current	**Rating 3.4 Amps**
Discrete	**I/O memory 32 K**
Microprocessor	**600 MHz Pentium M**
Analog	**I/O memory 32 Kwords**
CPU	**Memory 64 Megabytes**
Compatible	**Memory storage SRAM, Flash**
User	**Memory 64 Megabytes**
Processor	**speed 600 MHz**
Max	**Program Block 512 Program Blocks**
Processor	**type Pentium M microprocessor**
Supported	**Operation Floating Point Maths**
Floating	**point Supported**
Programming	**Languages C, Ladder Diagram, Structured Text, and Function Block Diagram**
Ethernet	**data rate 10Mb/sec and 100Mb/sec**
Built-in	**Ports 2 Serial (RS-232, RS-485) 1 Ethernet (Auto 10/100, RJ45)**
FTP	**/ Webserver Supported; Up**

3. Product Information

The IC698CPE030 is a PACSystems RX7i controller. This is manufactured by Emerson Automation, formerly by GE Intelligent Platforms (GE IP). This controller mainly features Two (2) Ethernet communication ports; One (1) RS232 port; One (1) RS485 port and One (1) Station manager port. It has 600MHz Pentium M microprocessor and 64 MB RAM and 64 MB Flash memory.

Technical specifications for IC698CPE030

Brand GE Fanuc

Series PACSystem RX7i

Manufacturer GE Fanuc

Part Number IC698CPE030

Product Description Central Processing Unit

Description Rx7i PACsystem CPU

Communication ports Two (2) Ethernet communication ports; One (1) RS232 port; One (1) RS485 port and One (1) Station manager port

Application Rx7i PLC System

Random Access Memory (RAM) 64 MB

Operating Voltage +5, +15, -12 Volt DC

Flash Memory 64 MB

Current Rating 3.4 Amps

Discrete I/O memory 32 K

Microprocessor 600 MHz Pentium M

Analog I/O memory 32 Kwords

CPU Memory 64 Megabytes

Compatible Memory storage SRAM, Flash

User Memory 64 Megabytes

Processor speed 600 MHz

Max Program Block 512 Program Blocks

Processor type Pentium M microprocessor

Supported Operation Floating Point Maths

Floating point Supported

Programming Languages C, Ladder Diagram, Structured Text, and Function Block Diagram

Ethernet data rate 10Mb/sec and 100Mb/sec

Built-in Ports 2 Serial (RS-232, RS-485) 1 Ethernet (Auto 10/100, RJ45)

FTP / Webserver Supported; Up to 16 connections

Supported Protocols Ethernet: SRTP, Modbus TCP Server and Client, Ethernet Global Data (EGD); Serial: Modbus RTU Slave, SNP, Serial I/O.

Configuration Proficy Machine Edition Logic Developer PLC version 4.0 or later

Location Rx7i Rack

The IC698CPE030 is one of the most advanced Central Processing Unit (CPU) from the PACSystem RX7i of Programmable Automation Controllers (PAC). This CPU is designed to meet the modern automation, connectivity and integration requirements of the industry. It is formerly manufactured by GE Intelligent Platforms (GE IP) however with the recent acquisition by Emerson Automation, the PACSystem RX7i is now part of the latter. The IC698CPE030 processor is installed with a computer level microprocessor that is, 600MHz Pentium-M microprocessor with 64 MB of user memory and 64 MB of user flash memory. It exhibits Boolean execution speed of 0.069ms per 1000 Boolean contacts/coils. This CPU can accommodate up to 32 K bits of Discrete I/O and 32 K Words of Analog I/O. Up to 512 program blocks can be downloaded to this CPU wherein each program block can have a maximum of 128 KB memory. The IC698CPE030 also has Two (2) Ethernet communication ports that is capable of auto-sensing of network transmission speed and may be configured for half and full duplex operating mode. The built-in Webserver and File Transfer Protocol (FTP) functionality is accessible via these ethernet ports, allowing users to remotely monitor and configure the processor. Aside from the built-in Ethernet ports, this CPU also has One (1) RS232 port; One (1) RS485 port and One (1) Station manager port. These communication interfaces support SRTP, Modbus TCP Server and Client, Ethernet Global Data (EGD) for Ethernet based communication and Modbus RTU Slave, SNP, Serial I/O for serial communication.

The GE Fanuc IC698CPE030 PACSystem Rx7i Central Processing Unit is a Pentium processor for the GE Rx7i system. The IC698CPE030 CPU, like all Rx7i CPUs, is installed on an Rx7i I/O rack and it comes with the VME64 base architecture that accommodates both new and old VME embedded technology with a fast throughput rating. The IC698CPE030 CPU comes with a 600 MegaHertz Pentium M processor and a battery-backed 64-Megabyte processor memory along with a battery-backed 64-Megabyte user flash memory for application and data storage. The IC698CPE030 processor can perform floating point Math and Boolean Logic functions, and advanced user parameters can be programmed using the Ladder Diagram, Structured Text, Function Block Diagram, and C programming languages. The GE Fanuc IC698CPE030 CPU supports the Series 90-70 discrete and analog I/O modules, communication modules, the Series 90-70 supported VME modules, and a wide range of programmers and HMI modules. The IC698CPE030 CPU has a voltage rating of +5, +12, or -12 Volt DC, and a backplane current rating of 3.4 Amps at 5 Volts DC. The IC698CPE030 CPU has an isolated RS-485 serial port, an RS-232 serial port, and a dedicated RS-232 Ethernet station manager port. The IC698CPE030 CPU also has dual embedded Ethernet (10/100 MB) ports that provide Ethernet Global Data (EGD) data exchange, TCP/IP high-speed data transmission, support for the Modbus/TCP Server, Modbus/TCP Client, and SRTP Channel protocols, and it can communicate with programmers and HMI devices. The IC698CPE030 CPU is configured with the Proficy Machine Edition (ME) Logic Developer configuration software version 4.5 or later which provides an advanced application programming environment, and it supports data monitoring over the web via Web servers and FTP connections.