GE Series 90-70 Series Service Manual

IC697CGR772

1. Description

The IC697CGR772 is a Hot-standby, Dual Bus CPU module from the Series 90-70 Programmable Logic Controller (PLC) platform that is formerly manufactured by GE Fanuc, now under Emerson Automation. This CPU mainly features an embedded 80486DX4 microprocessor with a clock speed of 96 MHz and a Boolean execution time of 0.4 microseconds per Boolean function.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-70**
Manufacturer	**GE Fanuc (Former); Emerson Automation (Current)**
Part	**Number IC697CGR772**
Series	**Series 90-70**
Description	**CPU module**
Part	**Number IC697CPU771**
Current	**3.1 Amperes**
Product	**Description Hot-Standby, Dual Bus CPU**
Voltage	**5 Volts DC**
Processor	**type 80486DX4 microprocessor**
Elapsed	**time clock accuracy 0.01 % max.**
Discrete	**Input 2048**
Memory	**512 KB CMOS RAM**
Discrete	**output 2048**
Boolean	**function time 0.4 microseconds**
Analog	**I/O memory 8000**
Operating	**frequency 96 MHz**
Boolean	**Execution speed 0.4 microseconds per boolean function**
Scan	**time 5.9 milliseconds**
Floating	**Point math Supported**
Temperature	**0-50 Degrees Celsius**
Communication	**ports One (1) Rs232; Two (2) RS485**
Supported	**Protocols SNP**
LED	**indicators Module OK, RUN, EN, P1, P2, P3, MEM Protect**
Lithium	**Battery IC697ACC771**
Supported	**products IC660/IC661 and IC697 I/O products**
The	**IC697CGR772 is a Hot-standby, Dual Bus Central Processing Unit (CPU) module from the Series 90-70 platform of Programmable Log**

3. Product Information

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Technical specifications for IC697CGR772

Brand GE Fanuc

Series Series 90-70

Manufacturer GE Fanuc (Former); Emerson Automation (Current)

Part Number IC697CGR772

Series Series 90-70

Description CPU module

Part Number IC697CPU771

Current 3.1 Amperes

Product Description Hot-Standby, Dual Bus CPU

Voltage 5 Volts DC

Processor type 80486DX4 microprocessor

Elapsed time clock accuracy 0.01 % max.

Discrete Input 2048

Memory 512 KB CMOS RAM

Discrete output 2048

Boolean function time 0.4 microseconds

Analog I/O memory 8000

Operating frequency 96 MHz

Boolean Execution speed 0.4 microseconds per boolean function

Scan time 5.9 milliseconds

Floating Point math Supported

Temperature 0-50 Degrees Celsius

Communication ports One (1) Rs232; Two (2) RS485

Supported Protocols SNP

LED indicators Module OK, RUN, EN, P1, P2, P3, MEM Protect

Lithium Battery IC697ACC771

Supported products IC660/IC661 and IC697 I/O products

The IC697CGR772 is a Hot-standby, Dual Bus Central Processing Unit (CPU) module from the Series 90-70 platform of Programmable Logic Controller (PLC). This CPU module is formerly produced by GE Fanuc Automation, however, recently acquired by Emerson Automation. It is used for applications that require high-availability and fault tolerance systems as the IC697CGR772 when paired to another similar CPU exhibits bumpless transfer, automatic synchronization, redundant backup communication, one scan switching, and eliminates single point of failure. The IC697CGR772 CPU comes with an embedded 80486DX4 microprocessor with a clock speed of 96 MHz and Boolean execution time of 0.4 microseconds per Boolean function. The built-in memory of this CPU is capable of handling up to 2048 Discrete inputs; 2048 Discrete outputs and up to 8000 Analog I/Os along a 512KB Random Access Memory (RAM). It is compatible with all IC660/IC661 and IC697 I/O products for implementing a complete and highly flexible automation solution. It supports 32-bit floating-point math calculation. This CPU also comes with a memory protection switch that when enabled, prevents modification of the memory contents. The IC697CGR772 comes with multiple communication interfaces that support point-to-point and multi-drop connections. Specifically, it has One (1) RS232 port and Two (2) RS485 communication interfaces. All ports support GE SNP protocol. This hot-standby CPU comes with a battery-backed Random Access Memory (RAM) maintained by the IC697ACC701 Lithium battery. This Lithium battery can be monitored via the Module OK LED which will not remain at ON state after power-up when battery low is detected.

The IC697CGR772 module is a dual bus CPU module by GE Fanuc. It has a running frequency of 96 MHz. It supports floating-point operations and handle complex applications. The CPU is equipped with an 80486 DX4 microprocessor that supports up to 8000 analog I/O. It can compute a single boolean function in 0.4 microseconds. The IC697CGR772 module uses a battery-backed CMOS RAM with a capacity of 512 KB. The replaceable lithium-ion battery known as the IC697ACC701 battery in the module is also used to maintain the date and time of the module. The module is fully compatible with the IC660 and IC661 devices by GE Fanuc. The CPU features a manual switching feature that enables it to change between the communication modules. The front section of the module is equipped with 7 LED indicators for different status and event updates. The IC697CGR772 CPU module has a scan time of 5.9 milliseconds. The operators can easily change the mode of operation by using the 3-position switch. The CPU can be easily connected to a personal computer for configuration by using the 3 ports. Two of the ports are RS 485 compatible and they are available on the front side of the module. It can be easily programmed from the MS-DOS program in the Windows operating system. For the network connections, the module comes with an RJ 45 port. The IC697CGR772 CPU module should be operated in a temperature range between 0 and 50 degrees Celsius. The module runs with a current rating of 3.1 Amps and it has a voltage rating of 5 Volts DC. The elapsed time clock accuracy is a maximum of 0.01%.