GE Series 90-30 Series Service Manual

IC693CPU313

1. Description

The IC693CPU313 is a Series 90-30 component that is manufactured by GE Fanuc. This is a 5-slot Embedded CPU baseplate. This baseplate hosts the non-CPU or I/O slots, and Power supply slots. The embedded CPU is of 80188 processor with clock speed of 10 MHz, typical scan rate of 0.6 milliseconds per 1K of logic (boolean contacts) and maximum user program memory of 12Kbytes. It has One (1) serial port that support SNP slave and SNP-X slave protocols.

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc**
Series	**Series 90-30**
Product	**Description Embedded CPU baseplate**
Part	**Number IC693CPU313**
No.	**of I/O slots Five (5)**
Product	**Type Baseplate with Embedded CPU**
No.	**of Power supply slots One (1)**
Number	**of Slots 5**
Expansion	**baseplate slot None**
CPU	**Type Turbo CPU**
User	**memory 12 Kbytes**
Operating	**Temperature 32 to 140 degrees Fahrenheit**
Processor	**type 80188**
Number	**of Ports 1**
Typical	**scan rate 0.6 ms per 1K of Boolean logic**
Processor	**Type 80188 Processor**
Processor	**speeds 10 MHz**
Processor	**Speed 10 MegaHertz**
Expandable	**None**
Product	**Lifecycle Status* Discontinued/Obsolete**
Discrete	**Input Points - %I 160 (maximum - combined inputs + outputs)**
Discrete	**Output Points - %Q 320 (maximum - combined inputs + outputs)**
Analog	**Inputs - %AI 64 words**
Analog	**Outputs - %AQ 32 words**
Built-in	**Serial Ports 1 (uses connector on PLC power supply). Supports SNP slave and SNP-X slave protocols**
Current	**load: 410 mA**
Bus	**voltage: +5VDC**
The	**IC693CPU313 is a baseplate with embedded turbo CPU from GE Fanuc'**

3. Product Information

The IC693CPU313 is a Series 90-30 component that is manufactured by GE Fanuc. This is a 5-slot Embedded CPU baseplate. This baseplate hosts the non-CPU or I/O slots, and Power supply slots. The embedded CPU is of 80188 processor with clock speed of 10 MHz, typical scan rate of 0.6 milliseconds per 1K of logic (boolean contacts) and maximum user program memory of 12Kbytes. It has One (1) serial port that support SNP slave and SNP-X slave protocols.

Technical specifications for IC693CPU313

Manufacturer GE Fanuc

Series Series 90-30

Product Description Embedded CPU baseplate

Part Number IC693CPU313

No. of I/O slots Five (5)

Product Type Baseplate with Embedded CPU

No. of Power supply slots One (1)

Number of Slots 5

Expansion baseplate slot None

CPU Type Turbo CPU

User memory 12 Kbytes

Operating Temperature 32 to 140 degrees Fahrenheit

Processor type 80188

Number of Ports 1

Typical scan rate 0.6 ms per 1K of Boolean logic

Processor Type 80188 Processor

Processor speeds 10 MHz

Processor Speed 10 MegaHertz

Expandable None

Product Lifecycle Status* Discontinued/Obsolete

Discrete Input Points - %I 160 (maximum - combined inputs + outputs)

Discrete Output Points - %Q 320 (maximum - combined inputs + outputs)

Analog Inputs - %AI 64 words

Analog Outputs - %AQ 32 words

Built-in Serial Ports 1 (uses connector on PLC power supply). Supports SNP slave and SNP-X slave protocols

Current load: 410 mA

Bus voltage: +5VDC

The IC693CPU313 is a baseplate with embedded turbo CPU from GE Fanuc’s series 90-30 Programmable Logic Controller (PLC) platform. The CPU embedded to this module is classified as Turbo CPU with typical scan rate of 0.6 ms per 1K of Boolean logic. Additionally, the IC693CPU313 has maxim user memory of 12KB (6Kbytes before release 7). The IC693CPU313 processor is 80188 with processing speed of 10 MegaHertz. It supports 160 (maximum - combined inputs + outputs) %I input points and 160 (maximum - combined outputs + inputs) %Q output points. It is also capable of accommodating 64 Words for analog input and 32 Words for analog output. The IC693CPU313 is a non-expandable baseplate with CPU and does not support PCM and CCM modules. It accommodates up to Five (5) I/O slots only and provided with a built-in serial port supporting SNP and SNP-X slave protocols. This unit supports shift register instructions as well as timer and counter instructions. The IC693CPU313 has load power supply of 430 MA @ 5VDC supply voltage. The power supply hosts the battery that is used to back-up the RAM contents. Additionally, a super capacitor or a high-charge capacitor is installed within the baseplate that provides another layer of memory back-up to the RAM. This capacitor takes over when the Power supply is removed or when input supply power to the baseplate is cut-off. Optional EPROM and EEPROM may also be used for a more secured data storage that does not require energy to restore its contents.

The GE Fanuc IC693CPU313 baseplate is a 5-slot baseplate in the GE Series 90-30 product line with a built-in CPU. Most GE Series 90-30 baseplates are built to accommodate separate CPU modules, but the IC693CPU313 baseplate comes with its Turbo CPU module embedded in it. This baseplate can be used to create a variety of Series 90-30 PLC or programmable logic controller systems by connecting to other GE Series 90-30 PLC components such as option modules and different kinds of expansion and remote baseplates. However, it is not compatible with CCM and PCM devices. The processor in the embedded CPU is an 80188 processor that operates at a speed of 10 MegaHertz. The maximum user program memory capacity is 6 KB for for the baseplates that were manufactured prior to Release 7 and it is 12 KB for the baseplates that were manufactured in Release 7 and beyond. The GE Fanuc Series 90-30 IC693CPU313 5-slot baseplate with an embedded Turbo CPU operates a temperature between 32 and 140 degrees Fahrenheit or 0 and 60 degrees Celsius. It comes with 1 port that supports the SNP and SNP-X slave protocols and that uses a connector that is found on the PLC power supply. In addition to the 5 slots that host different option modules, the IC693CPU313 baseplate has an extra slot on the left edge that is not numbered like the other slots and that is only used for the power supply module. The IC693CPU313 baseplate supports RAM and it can also accommodate EPROM and EEPROM for specific applications.