MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE 90-30 SERIES PLC

IC693CPU350

CPU 350 CONTROLLER

Used with the applicable Series 90-30 controllers configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GE official manufacturer documentation

June 19, 2002
GFK-1512M

IMPORTANT PRODUCT INFORMATION

READ THIS INFORMATION FIRST

Product: IC693 CPU Modules with Firmware Release 10.60

IC693CPU350-CG
IC693CPU360-CH
IC693CPU363-BF

Introduction

This document contains information that is not available in any other publication; therefore, we recommend you save it for future reference. This document discusses firmware release 10.60, which fixes the problems listed in "Problems Resolved by this Release" (page 4).

No new features are added by this release.

Hardware Identification

The following table shows the revision level of the circuit boards used in the current version of these CPUs.

CPU Catalog Number	Circuit Board ID	Circuit Board Version
IC693CPU350-CG	CX3A1 or CX3B1	44A739579-G01R04 or later 44A749514-G01R00 or later
IC693CPU360-CH	CX3A1 CX3B1	44A739579-G01R04 or later 44A749514-G01R00 or later
IC693CPU363-BF	CX3A1	44A739579-G01R05 or later

Firmware Upgrade Kits

If you wish to upgrade an existing CPU350 or CPU360 to firmware version 10.00, you may purchase the applicable kit identified in the following table. All previous versions are capable of being upgraded.

Firmware Upgrade Kit Catalog Numbers	
CPU Catalog Number	**Firmware Upgrade Kit Catalog Numbers**
IC693CPU350-(all versions)	44A747145-G06
IC693CPU360-(all versions)	44A747148-G07
IC693CPU363-BF	44A747766-G05

Firmware Identification

CPU Catalog Number	Motherboard Firmware Version	Daughterboard Firmware Version
IC693CPU350-CG	Main: R10.60 (38A1) Boot: R9.00 (33A1)	N/A
IC693CPU360-CH	Main: R10.60 (38A1) Boot: R9.00 (33A1)	N/A
IC693CPU363-BF	Main: R10.60 (38A1) Boot: R9.00 (33A1)	Main: R10.00 (49A1) Boot: R2.00 (30A1)

Firmware Upgrade Hardware Requirements

Note: The Model 350 and 360 CPU operating firmware is stored in FLASH memory. The firmware upgrade is provided on a floppy disk and must be serially downloaded from a Personal Computer. An IBM AT personal computer or better PC with a minimum 640K of RAM, one 3.5" floppy drive, MS-DOS version 3.3 or later (or Windows 95 or later), a hard drive, and one RS-232 serial port is required. In addition, a serial cable and RS-232/RS-485 converter are required. The following serial cable/converter kit is available from GE Fanuc:

IC690ACC901 Mini Converter (RS-232/RS-485) Kit with serial cable

Functional Compatibility

- CIMPLICTY Machine Edition PLC Logic Developer version 2.11 or later, or VersaPro version 1.1 or later is required to utilize the features introduced in release 10.00 firmware.
- PLC Logic Developer, VersaPro version 2.00 or later, or Control software version 2.00 or later is required for C programming.
- Version 4.00 or later of the C toolkit must be used for C programming.
- Control software version 2.00 or later must be used to take advantage of Sequential Function Chart (SFC) subroutines.
- Logicmaster software version 9.02 or later must be used to take advantage of the features introduced in firmware release 9.00.

IC693CPU350 Data

CPU Type	Single slot CPU module
Total Baseplates per System	8 (CPU baseplate + 7 expansion and/or remote)
Load Required from Power Supply	670 milliamps from +5 VDC supply
Processor Speed	25 MegaHertz
Processor Type	80386EX
Typical Scan Rate	.22 milliseconds per 1K of logic (Boolean contacts)
User Program Memory (maximum)	32K Bytes (not configurable)
Discrete Input Points - %I	2,048
Discrete Output Points - %Q	2,048
Discrete Global Memory - %G	1,280 bits
Internal Coils - %M	4,096 bits
Output (Temporary) Coils - %T	256 bits
System Status References - %S	128 bits (%S, %SA, %SB, %SC - 32 bits each)
Register Memory - %R	9,999 words
Analog Inputs - %AI	2,048 words
Analog Outputs - %AQ	512 words
System Registers (for reference table viewing only; cannot be referenced in user logic program)	28 words (%SR)
Timers/Counters	>2,000
Shift Registers	Yes
Built-in Serial Port(s)	1 (uses connector on PLC power supply). Supports SNP, SNP-X slave protocols. Requires CMM module for SNP/SNP-X master, CCM, or RTU (slave) protocol support. Requires PCM module for RTU master support.
Communications	*LAN* – Supports multidrop. Also supports Ethernet, FIP, Profibus, GBC, GCM, and GCM+ option modules.
Override	Yes
Battery Backed Clock	Yes
Interrupts	Supports the periodic subroutine feature.
Type of Memory Storage	RAM and Flash
PCM/CCM Compatibility	Yes
Floating Point Math Support	Yes, firmware-based in firmware releases 9.0 and later.