

IMPORTANT PRODUCT INFORMATION

READ THIS INFORMATION FIRST

Product: IC693CPU374 CPU Module with Ethernet Interface

IC693CPU374-BG (and later) with CPU Firmware Release 11.10

This document contains information that is not available in any other publication; therefore, we recommend you save it for future reference.

This release of the Series 90™-30 PLC CPU374 is a maintenance release that addresses several issues in CPU and Ethernet TCP/IP firmware. See page 3 for details.

Hardware Identification

The following table shows the revision level of the circuit boards used in this version of the IC693CPU374.

<i>CPU Model (Version)</i>	<i>Circuit Board ID</i>
IC693CPU374-BG and later	CY3A1 (CPU)
	E35A1 (Ethernet)

Firmware Identification

CPU Catalog Number	<i>Revision</i>	
	CPU Firmware	Ethernet Daughterboard Firmware
IC693CPU374-BG and later	Main: 11.10 (45A1) Boot: 11.00 (10A2)	Main: 1.02 (03A1) Boot: 1.00 (15A2)

Note: The new firmware is compatible with all previous firmware and hardware versions of the IC693CPU374.

Firmware Upgrade

To upgrade a CPU374 to the latest firmware version (11.10), you must purchase the field upgrade kit 44A751579-G05 or download it at no charge from the web (<http://www.gefanuc.com/support/plc/rs9030.htm>). Firmware upgrades require the IC690ACC901 Miniconverter and Cable Kit.

Documentation

GFK- 0356, *Installation and Hardware Manual*

GFK-0467, *PLC CPU Instruction Set Reference Manual*

GFK-1541, *TCP/IP Ethernet Communications for the Series 90 PLC User's Manual*,

GFK-1186, *TCP/IP Ethernet Communications Station Manager Manual*

GFK-2123G

IC693CPU374 Data

Controller Type	Single slot CPU module with embedded Ethernet Interface
Processor	
Processor Speed	133 MHz
Processor Type	Embedded 586
Execution Time (Boolean Operation)	0.15 μ sec per boolean instruction
Type of Memory Storage	RAM and Flash
Memory	
User Memory (total)	240KB (245,760) Bytes Note: Actual size of available user program memory depends on the amounts configured for %R, %AI, and %AQ configurable word memory types.
Discrete Input Points - %I	2,048 (fixed)
Discrete Output Points - %Q	2,048 (fixed)
Discrete Global Memory - %G	1,280 bits (fixed)
Internal Coils - %M	4,096 bits (fixed)
Output (Temporary) Coils - %T	256 bits (fixed)
System Status References - %S	128 bits (%S, %SA, %SB, %SC - 32 bits each) (fixed)
Register Memory - %R	Configurable 128 to 32,640 words
Analog Inputs - %AI	Configurable 128 to 32,640 words
Analog Outputs - %AQ	Configurable 128 to 32,640 words
System Registers - %SR	28 words (fixed)
Timers/Counters	>2,000 (depends on available user memory)
Hardware Support	
Battery Backed Clock	Yes
Battery Back Up (Number of months with no power)	1.2 months for internal battery (installed in the power supply) 15 months with external battery (IC693ACC302)
Load Required from Power Supply	7.4 watts of 5VDC. High Capacity power supplies recommended.
Hand Held Programmer	CPU374 does not support Hand Held Programmer
EZ Program Store Device	Yes
Total Baseplates per System	8 (CPU baseplate + 7 expansion and/or remote)
Software Support	
Interrupt Support	Supports the periodic subroutine feature.
Communications and Programmable Coprocessor Compatibility	Yes
Override	Yes
Floating Point Math	Yes, Hardware Floating Point Math
Programming Support	VersaPro 2.03 or later. CIMPLICITY Machine Edition Logic Developer 2.60 or later. Control software version 2.50 or later.
Communications Support	
Built-in Serial Ports	No serial ports on CPU374. Supports RS-485 port on power supply.
Protocol Support	SNP and SNPX on power supply RS-485 port
Built-in Ethernet Communications	Ethernet (built-in) – 10/100 base-T/TX Ethernet Switch
Number of Ethernet Ports	Two, both are 10/100baseT/TX ports with auto sensing. RJ-45 connection
Number of IP Addresses	One
Protocols	SRTP and Ethernet Global Data (EGD). No channel support.
Web Server Support	None
Environmental and Agency Specifications	
Operating Temperature	0 to 60°C (32 to 140°F) ambient
Storage Temperature	-40°C to +85°C
Agency Approvals	UL508, C-UL (Class I, DIV II, A, B, C, D), CE Mark
Low Temperature (LT) Testing	Yes. The CPU374 is available for -40° to 60°C operation.