

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*

device, the timeout value should be increased in the programming software being used. See the User's Manual for the programming software for more details.

Ethernet Flash Test Failure

The Ethernet daughter board continually tests the integrity of its flash memory. In the extremely unlikely event that corrupted flash is detected, a "Module software corrupted; requesting reload" fault is posted to the PLC Fault table, and the daughter board enters firmware loader mode. However, attempting to reload the firmware always fails when a hard failure of a flash memory device has occurred.

Invalid Ethernet Restart Event

After power is applied, the restart event (event 1H) in the Ethernet Station Manager exception log may occasionally contain 000cH in entry 3, erroneously indicating that a time-out of the Ethernet watchdog timer occurred. This condition does not produce a PLC fault or turn off the Ethernet STAT LED, and it has no effect on subsequent operation. It is unlikely to occur when a power supply recommended in "Power Supply Compatibility and Requirements" on page 2 of this document is used. Note that an actual watchdog time-out produces a "Reset of daughter board" fault in the PLC Fault table.

YATS32 SNTP Server Configuration

Users of the YATS32 SNTP server should either configure the server for broadcast mode or multicast mode, but not for both. If the server is configured for both modes, two time messages will be sent to the PLC either simultaneously, or within a short period of time.

First PING Response Lost after Restart of Ethernet Interface

Immediately after restarting the Ethernet Interface, the first response to a PING large enough to require more than one IP packet (1466 bytes or larger) is not generated.

Multiple Zero Period EGD Exchanges May Not Produce Similar Numbers of Samples

If more than one EGD produced exchange is configured for a production period of zero, the exchanges may not produce similar numbers of samples. Due to the way that scheduling occurs when multiple exchanges are scheduled "as fast as possible," some zero period exchanges may produce significantly more samples than others.

EGD Performance Information

Users requiring detailed EGD performance information should contact their Application Engineer and ask about the EGD Performance Application Note for the CPU374.

Multicast Data Not Filtered

The CPU374 does not do hardware filtering of multicast data over Ethernet. This means that extraneous multicast messages on the network add an additional load on the CPU374 PLC, and may significantly degrade performance. Sufficient load can cause the CPU374 to reset its communication processor.

Changing IP Address While SRTP Connection Open May Generate Log Events

SRTP connections established to the client are not terminated gracefully when the CPU374's IP address is changed. SRTP channels report either a 9690H or 0190H status, and possibly remain open until the connections are terminated as a result of client timeouts.

Heavy Load Can Block Station Manager

A heavy EGD or SRTP load can block Station Manager operation.