GE IC697CPX772

01 Function and selected configuration

Product function

GE IC697CPX772 combines floating-point execution with configurable program and data storage, while separate operating-mode and memory-protection controls support managed changes to an installed PLC application.

Selected configuration

96 MHz CPU with 512 Kbyte RAM, 256 Kbyte user flash and three serial ports. Battery-backed CMOS RAM holds the active program, configuration and register data. Optional user flash storage is separate from operating-system firmware flash, so firmware update and user-program retention are different tasks. The battery also maintains the calendar clock when rack power is removed.

Functional path

Program / configuration	96 MHz CPU	VME C.1 backplane	Configured I/O

Processor	96 MHz 80486DX4; 0.4 µs per Boolean function
User storage	512 Kbyte RAM and 256 Kbyte nonvolatile flash
Serial ports	One RS-232 and two RS-485-compatible interfaces

Port 1 is RS-232 compatible, port 2 is optocoupler-isolated RS-485 compatible and port 3 is nonisolated RS-485 compatible. Firmware release affects port capabilities: release 8.00 adds program load/store and datagrams on ports 1 and 2. The RUN/STOP selector and memory-protect keyswitch must be coordinated with the approved programming and output-enable procedure.

IC697CPX772 / Technical operating envelope

02 Technical operating envelope

Microprocessor	80486DX4, 96 MHz
Boolean execution	0.4 µs per function
User RAM	512 Kbyte, battery-backed
User flash memory	256 Kbyte, nonvolatile
Discrete I/O capacity	2K total, any input/output mix
Analog I/O capacity	Up to 8K
Port 1	RS-232, 6-pin RJ11
Port 2	RS-485 compatible, isolated
Port 3	RS-485 compatible, nonisolated
5 V bus current	3.1 A nominal
Operating temperature	0 to 60 °C
Battery retention	6 months nominal without power

The 0.4 µs figure is per Boolean function, not the total application scan. Include communication, I/O and program structure in timing assessment. The CPU draws 3.1 A nominal from the 5 V bus; review power-supply thermal derating above 50 °C.

IC697CPX772 / System integration and applications

03 System integration and applications

Machine sequencing

Execute the configured discrete control program while retaining the intended RUN/STOP and output-enable behavior.

Process calculations

Use supported floating-point operations and analog I/O resources for the installed process-control program.

Material handling

Coordinate configured IC697 I/O and option modules across the approved rack and bus architecture.

Serial device integration

Allocate the three serial interfaces according to electrical isolation, protocol support and installed firmware.

System and supply context

The CPU is the execution and configuration controller in an IC697 rack system. I/O modules, bus controllers, communication modules and programming tools remain separate components.

Application boundary

Use the CPU within an engineered Series 90-70 application; memory capacity, scan demand and firmware-dependent services must be assessed for the actual project.

Is the 0.4 µs IC697CPX772 rating a complete scan time?

No. It is the execution time per Boolean function. The real application scan also depends on the instruction mix, I/O processing, communications and program organization.

IC697CPX772 / Engineering selection decisions

04 Engineering selection decisions

Does IC697CPX772 have 512 Kbyte of flash memory?

No. It has 512 Kbyte of battery-backed user RAM and 256 Kbyte of nonvolatile user flash. Treat these as separate storage resources when planning program retention.

Which IC697CPX772 serial port provides isolation?

Port 2 is optocoupler-isolated and RS-485 compatible. Port 3 is also RS-485 compatible but is not isolated; port 1 uses RS-232.

Can IC697CPX772 connect directly to an Ethernet programmer?

Ethernet programming requires a separate compatible Ethernet interface, such as the specified IC697CMM741 or IC697CMM742 arrangement, with its network address configured.

Does IC697CPX772 memory protection block every programming path?

The protected keyswitch position restricts changes through remote programming paths, but parallel programming through the bus transmitter remains possible. Do not treat the keyswitch as complete access isolation.

Identify port isolation	Do not treat port 3 as isolated or assume all three ports have identical capabilities.
Check power derating	Budget 3.1 A nominal at 5 V and review supply output at high ambient temperature.

IC697CPX772 / Configuration boundary and references

05 Configuration boundary and references

Lifecycle and support

The current manufacturing and OEM support stages for IC697CPX772 require confirmation from GE. Apter Power availability is confirmed separately.

Replacement assessment

Compare application memory usage, firmware, serial-port functions and the complete rack configuration. Retain a tested program backup and the configured output behavior before exchanging the CPU.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains configuration and selection boundaries. The independent installation guide organizes preparation, connection, testing and handover. It does not replace the applicable manufacturer installation instructions.

Technical basis

GE Fanuc 96 MHz CPU, GFK-1429F, in GFK-0600F.

Related product navigation

- GE IC697MEM715
- GE IC697CPU782
- GE IC697MDL940

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries