Error Checking and Correction

The redundancy CPU, IC698CRE020, is shipped with error checking and correction (ECC) enabled. Enabling ECC results in slightly slower system performance, primarily during power-up, because it uses an extra 8 bits that must be initialized. If you upgrade the firmware on a non-redundancy CPU model IC698CPE020 to support redundancy, you must set the ECC jumper to the enabled state as described in the installation instructions provided with the upgrade kit. This feature is not available for other CPUs in the PACSystems family

For details on ECC, refer to the *PACSystems Hot Standby CPU Redundancy User's Guide,* GFK-2308.

Specifications

For environmental specifications, see "RX7i General Specifications" in Appendix A of the *RX7i Installation Manual,* GFK-2223.

IC698CPE010, IC698CPE020, and IC698CRE020	
Battery: Memory retention	5 years at 20°C (68°F) 40 days nominal without applied power
Program storage	Up to 10 Mbytes of battery-backed RAM 10 Mbytes of non-volatile flash user memory
Current required from 5V bus	CPE010: 3.2 Amps nominal CPE020, CRE020: 4.5 Amps nominal
Operating Temperature	CPE010: 0 to 50°C (32°F to 122°F 0 to 60°C (32°F to 140°F) with fan tray CPE020, CRE020: 0 to 60°C (32°F to 140°F), fan tray required
Floating point	Yes

Boolean execution speed, typical
          CPE010
          CPE020
	0.195ms per 1000 Boolean contacts/coils
	0.14ms per 1000 Boolean contacts/coils

Time of Day Clock accuracy	Maximum drift of 9 seconds per day
Elapsed Time Clock (internal timing) accuracy	0.01% maximum
Embedded communications	RS-232, RS-485, Ethernet interface
Serial Protocols supported	Modbus RTU Slave, SNP, Serial I/O To determine availability for a given firmware version, please refer to the *Important Product Information* document provided with the CPU.
Ethernet Ports	Embedded auto-sensing 10/100 Mbps half/full duplex Ethernet interface
VME Compatibility	System designed to support the VME64 standard ANSI/VITA 1
Program blocks	Up to 512 program blocks. Maximum size for a block is 128KB.
Memory (For a detailed listing of memory areas, refer to chapter 7.)	*%I and %Q:* 32Kbits for discrete *%AI and %AQ:* configurable up to 32Kwords *%W:* configurable up to the maximum available user RAM *Symbolic:* configurable up to 10 Mbytes
Error Checking and Correction	CRE020 only.

IC698CPE010, IC698CPE020, and IC698CRE020	
Ethernet Interface Specifications	
Web-based data monitoring	Up to 16 web server and FTP connections (combined)
Ethernet data rate	10Mb/sec and 100Mb/sec
Physical interface	10BaseT RJ45
WinLoader support	Yes
Number of EGD configuration-based pages	255
Time synchronization	SNTP
Selective consumption of EGD	Yes
Load EGD configuration from PLC to programmer	Yes
Remote Station Manager over UDP	Yes
Local Station Manager (RS-232)	Dedicated RS-232 port
Configurable Advanced User Parameters	Yes