

## 4 Experion-CEE-based Control Processors

### 4.1 C200/C200E Control Processor

The C200 has been available from the very first release of Experion. The C200 control processor is mounted into a standard Series-A chassis assembly. The C200 occupies two physical slot positions in the chassis. The chassis-A power supply provides power for all modules mounted in the chassis.

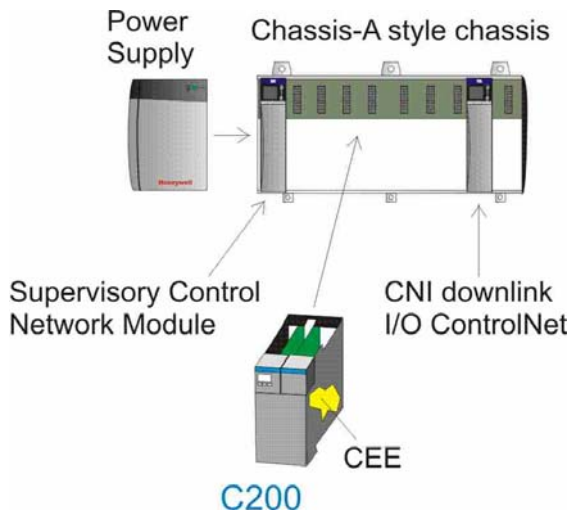


Figure 4-1 C200 Controller

The C200 can be implemented in a single or fully redundant configuration. In a redundant configuration two C200 processors are mounted into two different chassis assemblies with an identical complement of modules. An RM (Redundancy Module) is mounted in each chassis to manage redundancy synchronization and the automatic swap between the primary and backup C200. Data is continuously synchronized between C200's with a fiber-optic cable that connects the RM's.

The CEE is loaded into the C200 memory providing the execution platform for the comprehensive set of automatic control, logic, data acquisition, and

calculation function blocks (see examples in Table 3-1). Using the Honeywell **Control Builder** (a graphical configuration tool) the user creates and downloads the control strategy to be executed by the C200 processor. Control Builder is also used to configure all hardware connected to the C200 (I/O modules and gateways to smart serial networks).

The C200 is interfaced to the Supervisory Control Network using one of the available network interface modules (see section 2).

The C200E controller is introduced with Experion PKS release 400. It contains all of the existing functionality in the C200 controller, and adds additional memory and functionality. The C200E supports the full S88 batch standard and the power function blocks that were introduced in Experion PKS R310.

For C200/C200E details refer to Specification Doc [EP03-300-rrr](#), [EP03-400-rrr](#), and [EP03-330-rrr](#).

**I/O Connection:** The C200/C200E (and its control strategy) are connected to I/O modules (and real field devices) through the CNI down link module and the I/O ControlNet media. The following I/O families and their associated modules can be connected to the C200/C200E:

- CIOM-A (Chassis-A I/O Modules)      See Section 6.1 & 6.2
- RIOM-A (Rail-A I/O Modules)      See Section 6.1 & 6.2
- RIOM-H (Rail-H I/O Modules)      See Section 6.1 & 6.2
- PMIO (Process Manager I/O)      See Section 6.1 & 6.4