

Summary of Crestron CP2E architectural specifications are as follows.  
Minimum control system requirements:

- Control System shall utilize a Motorola Coldfire processor at no less than 257 MIPS.
- Control System shall include [3] RS-232/422/485 Ports.
- Control System shall include [8] IR/Serial Ports.
- Control System shall include [8] Isolated Relay Ports
- Control System shall include [8] I/O Ports.
- Control System shall include [1] Cresnet Port.
- Control System shall be fully compatible with Crestron RoomView multi-system management software and other Crestron e-Control Power Applications (i.e. e-Outlook, e-PowerPoint, etc.).
- Control System shall include a 10/100 BaseT Ethernet Port that supports all of the following features:
  - ü TCP/IP Communications
  - ü DHCP and DNS Support
  - ü 802.11b and Bluetooth Compatibility
  - ü Native Email Client
  - ü Remote Diagnostics
  - ü Remote Program Loading and Administration
  - ü Built-In Web Server
  - ü FAT32 File System for easy data management
  - ü SSL security plug in
  - ü PDA Integration and Control, XPanel PDA - Pocket PC 2002
  - ü WebTablet Integration and Control – Microsoft Tablet PC
  - ü Self Generating Executable GUI, XPanel EXE – Microsoft Family of OS
  - ü Self Generating ActiveX powered IE Integration and Control, XPanel IE
  - ü Self Generating Java powered Web Integration and Control
- Control System Processor shall utilize a real time, event driven, multi-tasking, multi-threaded operating system with a dual bus architecture.
- High speed processor shall communicate directly with Ethernet, control ports and proprietary control network utilizing high-speed, parallel bus infrastructure. Control processors that communicate via a serial bus shall not be accepted.
- Control processor shall contain 36 MB of memory.
- Control System processor shall utilize a FAT32 file structure.

- Support internal communications speed via two, independent communications busses. First control bus speed shall be at least 40 mb/s, second control bus speed shall be at least 300 mb/s.
- Full API (Applications Interface) directly to control system via TCP/IP for integration with Visual Basic, C++, Java, etc. applications. API support through included Crestron ActiveX module and/or Crestron Dynamic Link Library (.DLL).
- Patent pending Network Analyzer to continuously monitor the integrity of the Cresnet network for wiring faults, marginal communication performance, network errors – all information is viewable.
- Support RS-485 token passing network with data communication for a minimum distance of 5000 feet.
- Allow proprietary network expansion via Ethernet or RS-232 ports, which can allow for high-speed network acceleration.
- Support a minimum of 253 proprietary network devices simultaneously.
- Control system shall support object-oriented logic based programming language and a C-like language programming language. Both programming types are supported to run simultaneously and integral to each other.
- Control system manufacture shall supply Windows-based graphical programming software for drag and drop object oriented programming for the control system operation.
- Control system manufacture shall provide Windows-based graphical programming software, which is self-documenting in that it generates a symbolic flow diagram printout from the system program.
- The control system shall support a variety of wireless communication modes, including one-way and two-way radio frequency and infrared transmission.