Based on heritage Moog controllers, the robust architecture of the Control Electronics Unit (CEU) is derived from flight hardware designs with common solutions for multiple applications. Existing three-card or five-card slot enclosures can be used to accommodate and provide the following controller applications:

- Electromechanical (EM) Actuation
- Electric Power Subsystem Control
- Main Engine Fluid Control
- Electrohydraulic (EH) Actuation
- Hydraulic Power Subsystem Control
- Propellant Management System Control
- Electrohydrostatic (EHA) Actuation
- Power Distribution
- Roll Control System Control
- Communication Converter
- Battery Management Control

The CEU is also extensible to the following with new circuit card assemblies (CCAs):

- Flight Computer
- Solid Motor Ignition and Staging Control
- Stage Interface Unit
- Data Acquisition Package
- Roll Control System Control
- Propellant Management System Control
- Main Engine Fluid Control
Modular Control Electronics Unit

Logic Processing Unit Card
• Large FPGA for logic implementation
• 4 LVDT/RSVR Interfaces
• RS-422 Comm. Interface

Communication Card
• 4 RS-422 Comm. Interfaces
• 2 Analog Comm. Interface
• Telemetry Only RS-422
• 3 Cross Channel Data Links
• 1 MIL-STD-1553B Redundant Comm. Interface
• 16 Generic Digital Inputs
• 8 Generic Digital Outputs
• EEPROM for servo-gain storage and other uses

Power Stage Interface Card
• 2 Channels of 3-phase motor bridge gate drivers
• 2 Channel of 3-phase motor current sense interface
• Bus voltage and current sense interface
• Power Stage Built-in-Test Interface

Fluid Sensors and Controls Interface Card
• 8 Pressure Sensor Interfaces
• 8 Temperature Sensor Interface
• 4 Solenoid Drivers
• 2 Servovalve Drivers

Communication Card
• 4 RS-422 Comm. Interfaces
• 2 Analog Comm. Interface
• Telemetry Only RS-422
• 3 Cross Channel Data Links
• 1 MIL-STD-1553B Redundant Comm. Interface
• 16 Generic Digital Inputs
• 8 Generic Digital Outputs
• EEPROM for servo-gain storage and other uses

Power Stage Interface Card
• 2 Channels of 3-phase motor bridge gate drivers
• 2 Channel of 3-phase motor current sense interface
• Bus voltage and current sense interface
• Power Stage Built-in-Test Interface

Low Voltage Power Supply
• Filtered 28V Out
• Array of Low Level Voltages to Support other CCAs
• Isolated Voltages as needed to support grounding needs

All Modular Control Electronics Units are compatible with the Moog Modular Linear Electromechanical Actuators and Remote Power Stage packages.