Q&A - What can Axiomatic's standard CAN products offer me?

Axiomatic has a wide range of electronic control units (ECUs) for many standard electrical and electrohydraulic applications. All ECUs have different types and combinations of inputs and outputs from the others. In collaboration with your engineers, we can help you to select the best ECU that will cover the requirements of your application.

By using Axiomatic's CAN products, if a single controller does not have the necessary I/O type and count, two or more controllers could easily be grouped together in a network to meet the application's needs.

Our standard "off-the-shelf" modules come pre-programmed with application code that will cover a wide range of typical applications for the I/O combination on the ECU. Each CAN module has a large number of configurable parameters (setpoints) that allow the user to set up the ECU for the desired behaviour. Our standard products are all well documented, with comprehensive User Manuals that describe the various control and response options, as well as details on how to configure the ECU.

In addition to standard control logic, Axiomatic CAN controllers have the capability to generate Emergency Messages (CANopen) or Diagnostic Messages (J1939-81) when faults are detected by the ECU. CANopen products also support all required Communication Objects to allow them to be connected to an existing CANopen network without requiring extra code. J1939 products support the requirements outlined in the Data Link Layer (J1939-21) and Network Management (J1939-81) standards to allow them to be connected to an existing J1939 network without requiring extra code.

The parameters in our CANopen products can be read or written through any standard CANopen tool that can access an ECU's Object Dictionary. In addition to the User Manual, we also provide Electronic Data Sheets (EDS) with all our CANopen ECUs, as per the standard "CiA DSP 306 V1.3, Electronic Data Sheet Specification for CANopen (EDS)."

The setpoints in our J1939 products can be read and written using Axiomatic's Electronic Assistant (EA). EA provides a coherent, intuitive and consistent means by which the ECUs setpoints can be accessed. The EA is under continuous development. Check back often to see what new features and benefits Axiomatic EA can provide to make network management faster and more efficient.

Once the parameter setting for an ECU have been established, Axiomatic will factory program the ECU with the desired setpoints on all subsequent shipments. Axiomatic Engineers are always available for consultation on how to configure the standard products for a given application.

Note: If the I/O for the ECU is correct, but the standard code cannot accommodate your needs, we will work with you to rapidly develop custom application software. See our OEM Design and Build page for more details.