

**Features:**

- 1 Digital signal input up to +Vps (ignition switch)
- 2 Digital outputs up to 4A
- 1 CAN port (SAE J1939)
- Operational 8...36 Vdc (12 Vdc or 24 Vdc)
- Up to 125° C operation
- Integrated TE Deutsch 8-pin connector
- Compact, fully sealed enclosure, IP67
- Meets the surge requirements of SAE J1445
- Safety Critical Microprocessor
- Designed for EMC compliance
- Configure with Axiomatic Electronic Assistant



**Applications:**

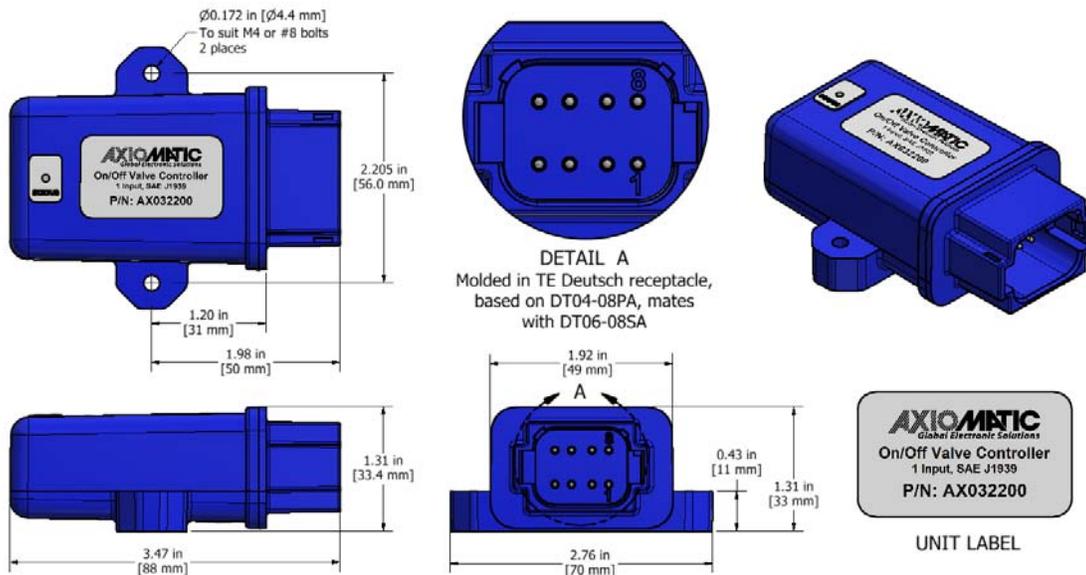
- Ignition switch operated valve controller for on/off valves

**Ordering Part Numbers:**

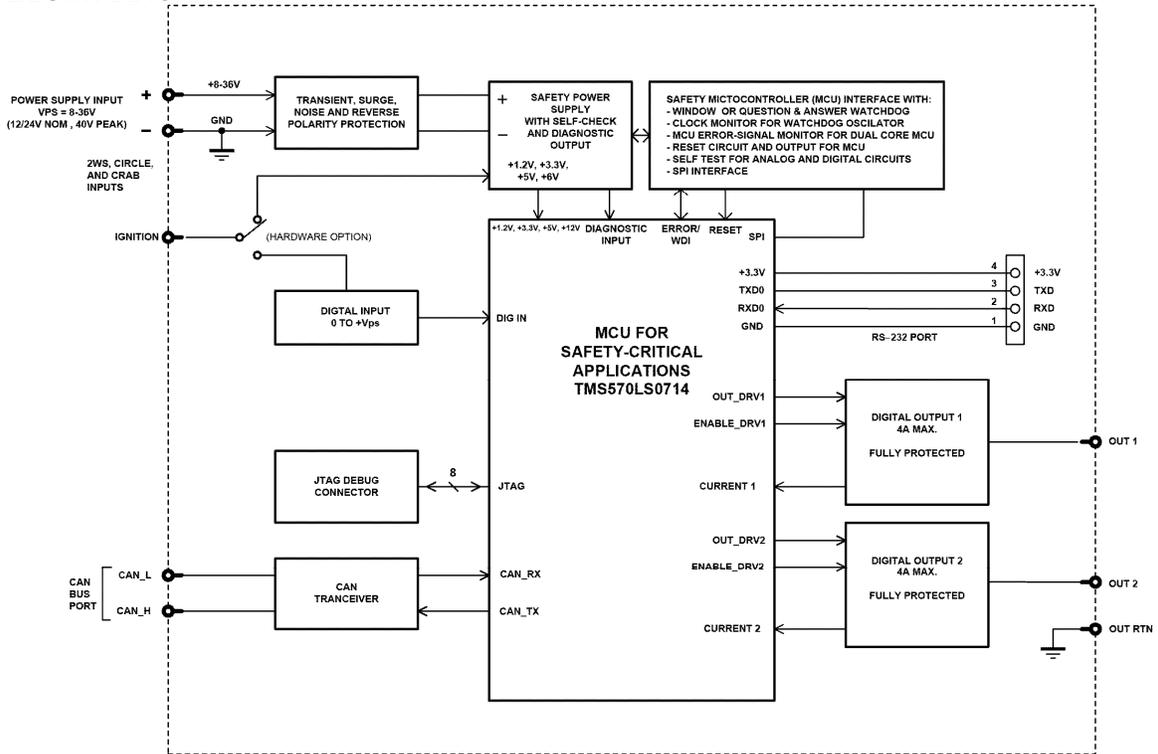
1 Digital Input, 2 Digital Outputs Valve Controller, SAE J1939 with auto-baud-rate detect - P/N: **AX032200**  
 1 Digital Input, 2 Digital Outputs Valve Controller, CANopen® - P/N: **AX032201**

Accessories:

Configuration Tool: Electronic Assistant P/N: **AX070502**  
 Mating Plug KIT: **AX070112**



## BLOCK DIAGRAM



## Technical Specifications:

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described <https://www.axiomatic.com/service/>.

### Power

Power Supply Input - Nominal	12 V or 24 Vdc nominal; 8...36 Vdc The minimum allowable supply voltage for the power pin is 7 Vdc.
Surge Protection	Meets the surge requirements of SAE J1445
Reverse Polarity Protection	Provided up to 60V
Undervoltage Protection	Provided at 5V
Overvoltage Protection	Provided at 38V

### Input

Input	1 ignition signal input 0 to +Vps  Optional input configuration as one digital input with 10K pull-up or pull-down 0 to +Vps amplitude
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### Outputs

Digital Outputs	2 digital outputs (up to 4A sourcing) High Side Current sensing, grounded load Overcurrent protected against shorts to GND or +Supply Digital On/Off: sourcing from power supply or off Load at supply voltage must not draw more than 4A.
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### Control Software

Software Platform	Pre-programmed with standard logic. Refer to the user manual.
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## General Specifications

Memory	TMS570LS0714; 32-bit, 1024 Kbytes Flash Program Memory																				
CAN Port	1 CAN (SAE J1939)																				
Quiescent Current Draw	122.50 mA @12Vdc; 71.80 mA @ 24Vdc Typical																				
Operating Conditions	-40 to 125°C (-40 to 257°F)																				
Weight	0.15 lb. (0.068 kg) preliminary																				
Protection Rating	IP67																				
Vibration	MIL-STD-202G, Test 204D and 214A (Sine and Random) 10 g peak (Sine); 7.86 Grms peak (Random)																				
Shock	MIL-STD-202G, Test 213B, 50 g																				
Enclosure and Dimensions	Molded Enclosure, integral connector Nylon 6/6, 30% glass Ultrasonically welded 3.47 x 2.75 x 1.31 inches (88.2 x 70.0 x 33.3 mm) L x W x H including integral connector  Refer to Figure 1.0, dimensional drawing.																				
Electrical Connections	Integral TE Deutsch 8 pin receptacle (P/N: DT04-08PA) 18 AWG wire is recommended. <table border="1" data-bbox="597 726 1024 995"> <thead> <tr> <th colspan="2">CAN and I/O Connector</th> </tr> <tr> <th>Pin #</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CAN_H</td> </tr> <tr> <td>2</td> <td>CAN_L</td> </tr> <tr> <td>3</td> <td>Output GND</td> </tr> <tr> <td>4</td> <td>Input</td> </tr> <tr> <td>5</td> <td>Output 1</td> </tr> <tr> <td>6</td> <td>BATT +</td> </tr> <tr> <td>7</td> <td>BATT -</td> </tr> <tr> <td>8</td> <td>Output 2</td> </tr> </tbody> </table>	CAN and I/O Connector		Pin #	Description	1	CAN_H	2	CAN_L	3	Output GND	4	Input	5	Output 1	6	BATT +	7	BATT -	8	Output 2
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Mating Plug Kit	A mating plug kit is available. Ordering P/N: <b>AX070112</b> is comprised of 1 DT06-08SA, 1 W8S, 8 0462-201-16141, and 3 114017.																				
User Interface, Reflashing	Axiomatic Electronic Assistant <b>AX070502</b>																				

**Notes:**

CANopen® is a registered community trademark of CAN in Automation e.V.

Form: TDAX032200-03/29/22