

Features:

- 1 Digital signal input up to +Vps (ignition switch)
- 2 Digital outputs up to 4A
- 1 **isolated** 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**

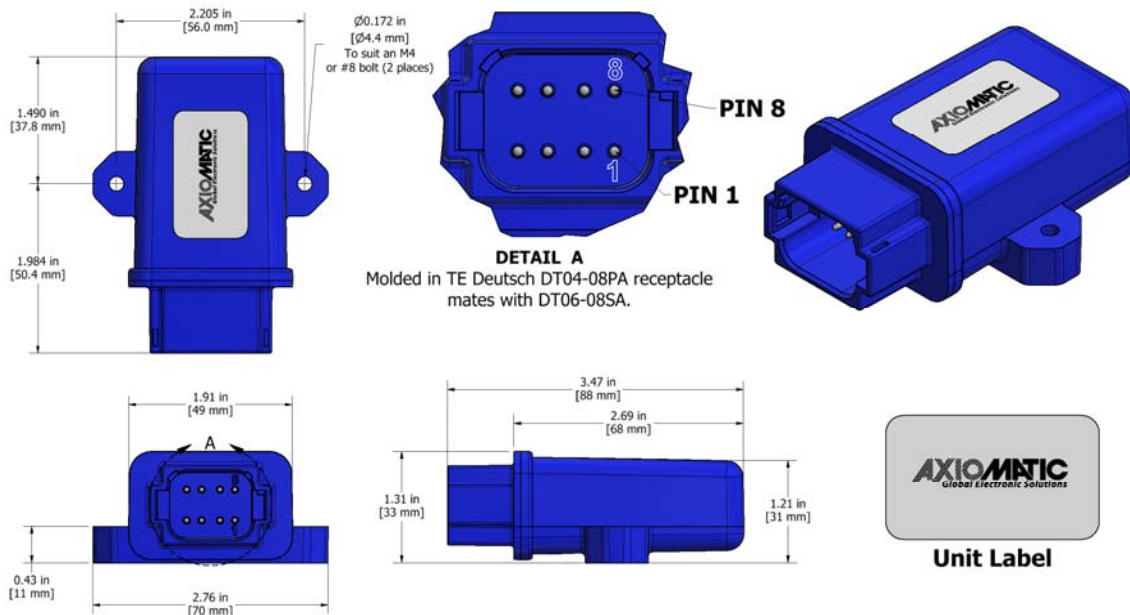
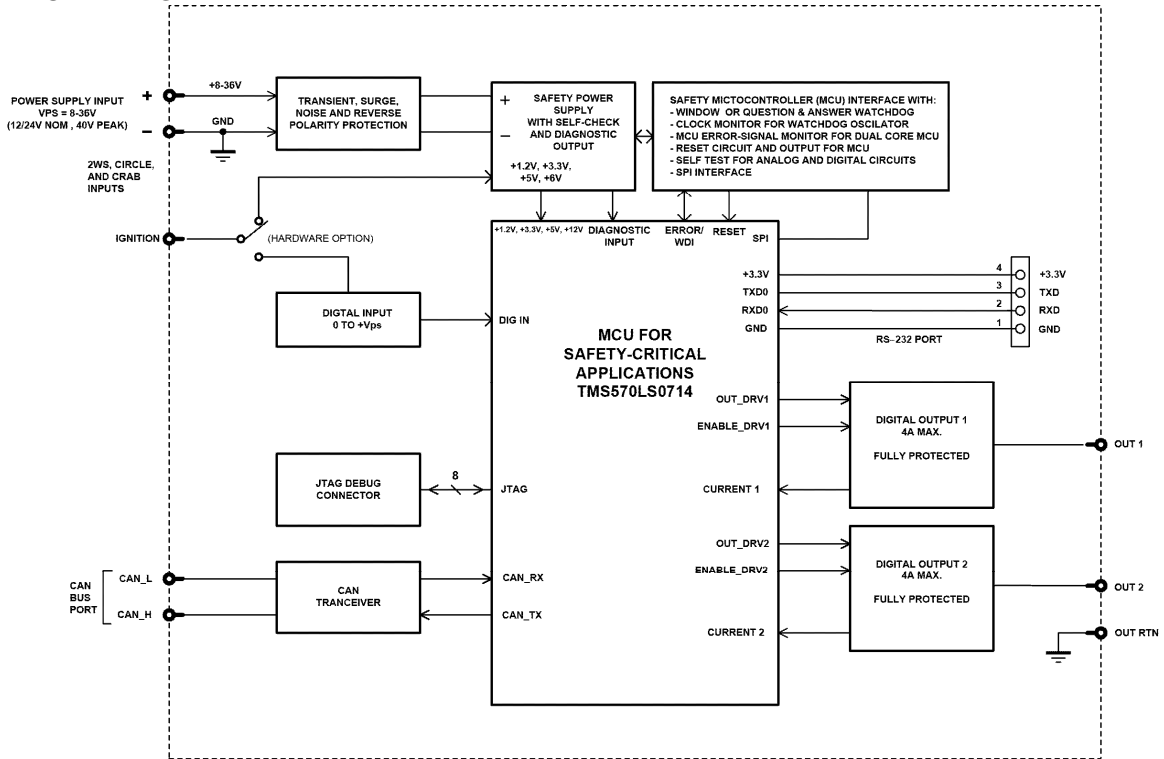


Figure 1.0 – Dimensional Drawing

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 on www.axiomatic.com/service.html.

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 XXV
Undervoltage Protection	Provided at XXV
Overvoltage Protection	Provided at XXV

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 SAFETY MICTOCONTROLLER (MCU) INTERFACE WITH: - WINDOW OR QUESTION & ANSWER WATCHDOG - CLOCK MONITOR FOR WATCHDOG OSCILATOR - MCU ERROR-SIGNAL MONITOR FOR DUAL CORE MCU - RESET CIRCUIT AND OUTPUT FOR MCU - SELF TEST FOR ANALOG AND DIGITAL CIRCUITS - SPI INTERFACE																				
CAN Port	1 CAN (SAE J1939)																				
Quiescent Current Draw	Typical TBAmA @12Vdc; TBAmA @ 24Vdc																				
Response Time	TBA mSec. 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="597 951 1024 1220" style="margin-left: 20px;"> <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>Input 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	Input 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: AX070112 is comprised of 1 DT06-08SA, 1 W8S, 8 0462-201-16141, and 3 114017.																				
User Interface, Reflashing	Axiomatic Electronic Assistant AX070502																				

Notes:

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

Form: TDAX032200-01/20/20