

# TECHNICAL DATASHEET #TDAX140603 LIN-CAN Protocol Converter, CANopen®

P/N: AX140603

# Features:

- Data exchange between a LIN network and a CAN network (CANopen®)
- 1 CAN port (CANopen®)
- 1 LIN single pin port (LIN 2.2)
- Operational from 9 to 32 Vdc (12 Vdc or 24 Vdc nominal)
- Integrated 6-pin connector (equivalent to a TE Deutsch P/N)
- Fully sealed enclosure with a rugged IP67 protection rating
- Meets the surge requirements of SAE J1445
- Designed for EMC compliance
- Compact size
- User configurable via standard CANopen® tools, EDS provided

# Applications:

- Mobile (Off-Highway) Equipment
- Agricultural Equipment

# **Ordering Part Numbers:**

Protocol Converter, 1 LIN, 1 CANopen® - P/N: **AX140603** EDS File

Protocol Converter, 1 LIN, 1 SAE J1939 - P/N: AX140600

Protocol Converter, 1 LIN, 1 SAE J1939, Extended - P/N: AX140600-03

Accessories:

Mating Plug KIT: AX070119

#### **BLOCK DIAGRAM**

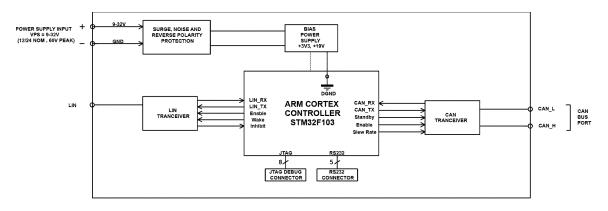


Figure 1.0 - Block Diagram

**Technical Specifications:**Technical specifications are typical at nominal input voltage and 25 degrees C unless otherwise specified.

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 <a href="https://www.axiomatic.com/service/">https://www.axiomatic.com/service/</a>.

### **Power**

Power Supply Input - Nominal	12 V or 24 Vdc nominal; 932 Vdc
Surge Protection	Meets the surge requirements of SAE J1445
Reverse Polarity Protection	Provided

# **Control Software**

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# **General Specifications**

General Specifications	
Memory	STM32F205 32-bit, 512 Kbytes Flash Program Memory
LIN Port	1 LIN (LIN 2.2)
CAN Port	1 CAN (CANopen®)
Power Supply Current	32mA @ 24Vdc, 40mA @ 12Vdc
Operating Conditions	-40 to 85°C (-40 to 185°F)
Weight	0.15 lb. (0.068 kg)
Protection Rating	IP67
Vibration	Random Vibration: 7.68 Grms peak Sinusoidal Component: 10 g peak Based on MIL-STD-202G, Methods 204G and 214A
Shock	50 g half sine pulse, 9ms per axis Based on MIL-STD-202G, Method 213B, Test Condition A
Enclosure and Dimensions	Plastic Enclosure, Nylon 6-6 with 30% glass fill Integral TE Deutsch type connector Refer to dimensional drawing (Figure 2.0).
Electrical Connections	6-pin connector (equivalent TE Deutsch P/N: DT04-6P) A mating plug kit is available as Axiomatic P/N: <b>AX070119</b> .
	CAN and I/O Connector
	Pin # Description
	1 CAN_SH
	2 CAN_L
	3 CAN_H
	4 LIN
	5   BATT+ 6   BATT-
Software Reflashing	The Axiomatic Electronic Assistant KIT, P/Ns: <b>AX070502</b> or <b>AX070506K</b>
User Interface	EDS file is downloaded from axiomatic.com. Go to the log-in tab and enter the password. (Contact <a href="mailto:sales@axiomatic.com">sales@axiomatic.com</a> for the password.)
	Configurable with standard CANopen® tools

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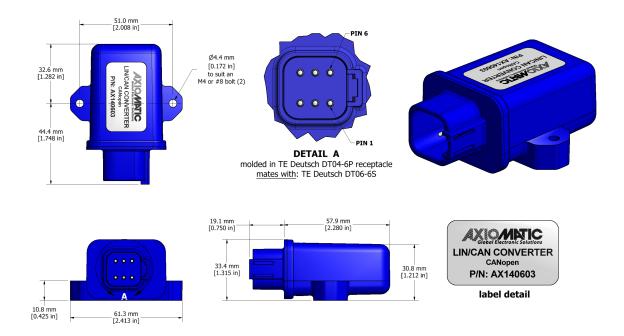


Figure 2.0 – Dimensional Drawing

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

Form: TDAX140603-06/29/23

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