LIN-CAN Protocol Converter with PWM Output
SAE J1939
Configurable with the Axiomatic Electronic Assistant
P/N: AX140610

Features
- Data exchange between a LIN and a CAN network
- PWM output to interface to an LED, Sound Annunciator or other devices
- 1 CAN port (SAE J1939) (CANopen® model available.)
- 1 LIN single pin port (LIN 2.2)
- Operational from 9 to 32 Vdc (12 or 24 Vdc nominal)
- Fully sealed enclosure
- Rugged IP67 protection rating
- Compact size
- Designed for EMC compliance
- Integrated 8-pin connector (equivalent to TE Deutsch)
- User configurable using the Axiomatic Electronic Assistant

Applications
- Mobile (Off-Highway) Equipment
- Agricultural Equipment
- Trucks (Commercial Vehicles)

Ordering Part Numbers

Protocol Converter, 1 LIN, 1 SAE J1939 with Auto-Baud-Rate Detection - P/N: **AX140610**
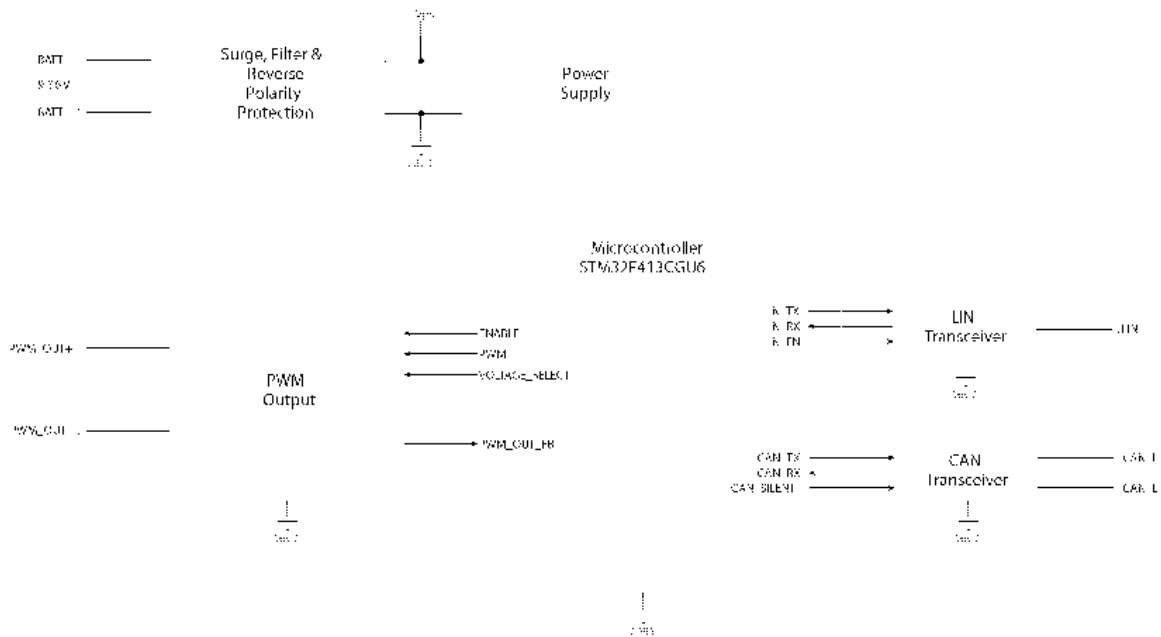
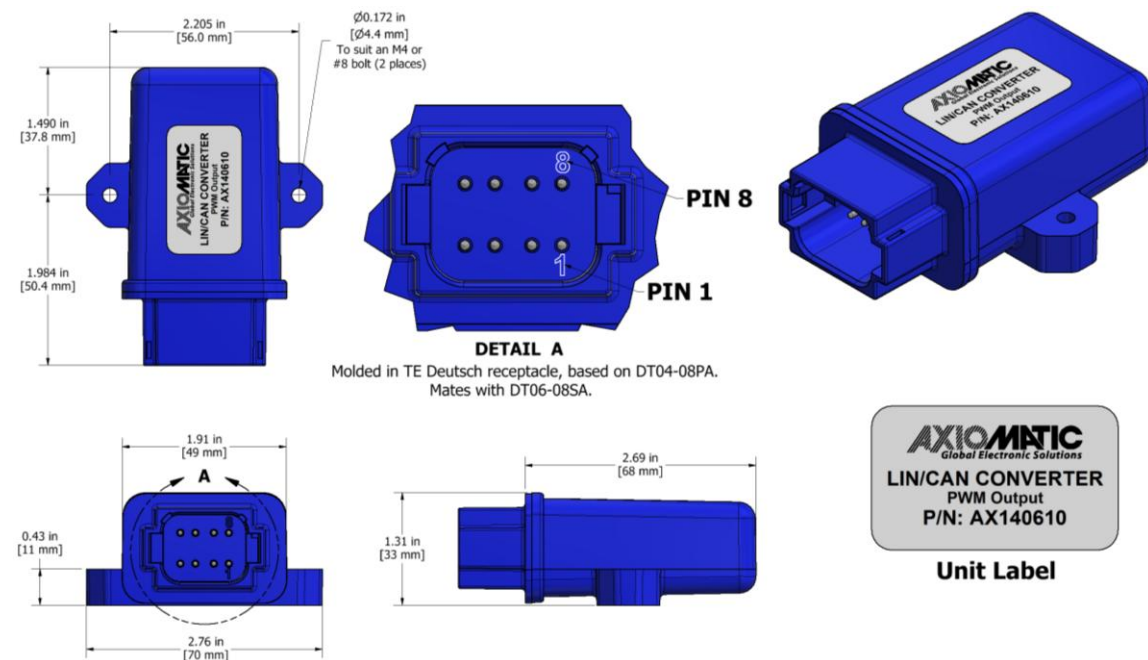Protocol Converter, 1 LIN, 1 CANopen® – P/N: **AX140611**

Accessories:
Mating Plug KIT: **AX070112**
Axiomatic Electronic Assistant Configuration Tool KIT - P/N: **AX070502** or **AX070506K**

Block Diagram

Dimensional Drawing

Ø0.172 in
[Ø4.4 mm]
To suit an M4 or
#8 bolt (2 places)

2.205 in
[56.0 mm]

1.490 in
[37.8 mm]

1.984 in
[50.4 mm]

PIN 8

PIN 1

DETAIL A
Molded in TE Deutsch receptacle, based on DT04-08PA.
Mates with DT06-08SA.

1.91 in
[49 mm]

0.43 in
[11 mm]

2.76 in
[70 mm]

2.69 in
[68 mm]

1.31 in
[33 mm]

AXIOMATIC
Global Electronic Solutions

LIN/CAN CONVERTER
PWM Output
P/N: AX140610

Unit Label

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 Limitations & Return Materials Process as described on https://www.axiomatic.com/service/.

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

Power

Power Supply Input	12 V or 24 Vdc nominal; 9…32 Vdc
Quiescent Current	40 mA @ 12 V; 30 mA @ 24 V
Surge Protection	Provided
Reverse Polarity Protection	Provided up to -32 V
Undervoltage Protection	Undervoltage hardware shutdown at 6 V
Overvoltage Protection	Overvoltage hardware shutdown at 44.9 V

Output

PWM Output	One Output configurable as PWM/Frequency or Digital PWM Signal, Frequency Signal, or Mixed Output: - 1 Hz to 20 kHz - 0-100% Duty Cycle (User configurable) - 5 V or 12 V amplitude - Push pull output - Maximum load is 50 mA (at 5 V) or 30 mA (at 12 V). - Over-current protection (50 mA) Digital Level: - Digital On/Off - 5 V or 12 V Amplitude - Maximum load is 50 mA (at 5 V) or 30 mA (at 12 V)
Output Accuracy	PWM Signal: ±0.5% Frequency Signal: ±0.1%
Output Feedback Accuracy	PWM Signal: ±0.5% Frequency Signal: ±0.5%

General Specifications

Microcontroller	STM32F413CGU6 32-bit, 1 Mbyte Flash Program Memory
Control Logic	Refer to the User Manual.
LIN Port	1 LIN (LIN 2.2)
CAN Port	1 CAN (SAE J1939) Supported baud rates: 250 kbit/s, 500 kbit/s, 667 kbit/s, and 1 Mbit/s with auto-baud-rate-detection CANopen® model: AX140611
User Interface	Axiomatic Electronic Assistant Kit - P/N: **AX070502** or **AX070506K**
Operating Conditions	-40 to 85 °C (-40 to 185 °F)
Weight	0.143 lb. (0.065 kg)
Protection Rating	IP67
Vibration	MIL-STD-202H, method 204D, test condition C 10g peak (Sine component) MIL-STD-202H, method 214A, test condition I/B 7.56 Grms (Random component)
Shock	MIL-STD-202H, method 213B, test condition A 50g peak
Enclosure and Dimensions	Plastic Enclosure, Nylon 6-6 with 30% glass fill Integral TE Deutsch type connector Refer to dimensional drawing.
Electrical Connections	8-pin connector (equivalent to TE Deutsch P/N: DT04-08PA) | Pin	Description
1	PWM Output -
2	CAN L
3	Not Used
4	Battery -
5	Battery +
6	LIN
7	CAN H
8	PWM Output+	
Mating Plug Kit	A mating plug kit is available from Axiomatic under P/N: **AX070112** (includes 1x DT06-08SA, 1x W8S, 8x 0462-201-16141, and 6x 114017).

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Form: TDAX140610-04/29/2025