Kvaser M.2 PCIe 4xCAN

EAN: 73-30130-01333-9

Kvaser M.2 PCIe 4xCAN is a highly-integrated embedded CAN board that adds four high speed CAN/CAN FD channels to any host computer with PCI Express connectivity and an available B or M keyed M.2 slot.

This CAN interface board has a particularly compact footprint, thanks to an M.2 card size of 22 x 80 mm and industry-leading height of just 2 mm. Unique to the Kvaser M.2 PCIe 4xCAN is that the CAN transceivers are distributed (off-board), allowing them to be located closer to the CAN networks themselves. This layout maximises signal quality and integrity.

With a timestamp resolution of just 1 μs and a maximum message rate of 20000 msg/s per channel, plus advanced features such as silent mode, error frame detection and generation, this advanced board with distributed CAN transceivers can be integrated in a wide range of embedded systems.

Major Features

- B+M keyed M.2 PCI Express CAN interface with four channels.

- Distributed CAN modules minimise the signal integrity impact when connected to CAN-bus systems.

- Each channel is individually isolated, ensuring optimal galvanic isolation.

- Supports CAN FD, up to 8 Mbit/s.

- Quick and easy plug-and-play installation.

- Supports both 11-bit (CAN 2.0A) and 29-bit (CAN 2.0B active) identifiers.

- Supports silent mode for analysis tools – listen to the bus without interfering.

- Supports simultaneous usage of multiple Kvaser interfaces and SocketCAN.

- Kvaser's free of charge CANLIB SDK can be used to develop software for these boards.

- High-speed CAN connection (compliant with ISO 11898-2), up to 1 Mbit/s.

- Meets the standard industrial temperature range of -40 to 85 °C.

- Compatible with J1939, CANopen, NMEA 2000® and DeviceNet. Higher layer protocol translation handled by the user's application. For software support please see our Technical Associates products and our Software Download page (www.kvaser.com).

Software

Documentation, Kvaser CANlib SDK and drivers can be downloaded for free at www.kvaser.com/downloads.

Kvaser CANlib SDK is a free resource that includes everything you need to develop software for the Kvaser CAN interfaces. Includes full documentation and many program samples, written in C, C++, C#, Delphi, Visual Basic, Python and t programming language.

Kvaser CAN hardware is built around the same common software API. Applications developed using one device type will run without modification on other device types.

Technical data

Bus Interface	PCIe x1
CAN Bit Rate	20 kbit/s to 1 Mbit/s
CAN Channels	4
CAN FD	Up to 8 Mbit/s
CAN Transceivers	MCP2561FD (Compliant with ISO 11898-2)
Certifications	CE, RoHS
Connector	9-pin D-SUB
Dimensions M.2 card	22 x 80 mm
Error Frame Detection	Yes
Error Frame Generation	Yes
Galvanic Isolation	Yes
Operating Systems	Windows, Linux
Operating Temperature Range	-40 °C to +85 °C
Power Consumtion	Typically 770 mA at 3.3 V
Silent Mode	Yes
Timestamp Resolution	1 µs
Weight	42 g (including CAN modules and cables)