













# Your Gateway to Efficient Connectivity

The Kvaser Mini PCIe 1xCAN is a highly integrated CAN board that enables CAN/CAN FD functionality to be added to any standard computer. Successor to the Kvaser Mini PCI Express HS (00688-1), this version supports CAN FD up to 8 Mbit/s and has a high timestamp resolution of 1  $\mu$ s, a wide CAN bitrate of 20 kbit/s to 1 Mbit/s and an exceptionally high message rate of 20,000 msg/s.

A key feature of the Kvaser Mini PCIe 1xCAN is that it connects to a computer via USB2.0 in a Mini PCI Express socket, a useful advantage when there are competing peripherals for the PCI Express lane. The Mini PCI Express 1xCAN (01420-6) should be selected when it is necessary to use the PCIe lanes within the Mini PCI Express socket for communication.

This board uses new generation SIC transceivers, improving signal quality at higher bitrates and reducing signal ringing, a common issue in high-speed networks like CAN FD.

### **Warranty**

2-Year warranty. See our general conditions and policies for details.

#### Support

Free support for all products by contacting support@kvaser.com

#### III EAN

73-30130-01368-1



# Kvaser Mini PCle 1xCAN (USB)

## **Major Features**

- Supports CAN FD, up to 8 Mbit/s (with correct physical layer implementation).
- Quick and easy plug-and-play installation.
- Equipped with an SIC transceiver.
- Supports both 11-bit (CAN 2.0A) and 29-bit (CAN 2.0B active) identifiers.
- Compatible with applications written for other Kvaser CAN hardware with Kvaser CANlib.
- High-speed CAN connection (compliant with ISO 11898-2), up to 1 Mbit/s.
- Supports simultaneous usage of multiple Kvaser interfaces.
- Supports silent mode for analysis tools listen to the bus without interfering.
- Includes 1 channel breakout cable.
- 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).

#### Support

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

Kvaser 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* script 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	
CAN Bit Rate	20 kbit/s to 1 Mbit/s
CAN Channels	1
CAN FD Bit Rate	Up to 8 Mbit/s
CAN Transceivers	MCP2561FD (compliant with ISO 11898-2)
Certifications	CE, RoHS
Connector	Molex 53780
Dimensions M.2 card	51 x 30 x 5 mm
Error Frame Detection	Yes
Error Frame Generation	Yes
Galvanic Isolation	Yes
Operating Systems	Linux, Windows <sup>1</sup>
Power Consumtion	Typically 180 mA at 3.3 V
Silent Mode	Yes
Temperature Range	-40 to +85 °C
Timestamp Resolution	1 μs
Weight	5 g (13 g including cable)

<sup>&</sup>lt;sup>1</sup> Windows 7, 8, 10 (IA-32 and x86-64) Windows 11 (x86-64)