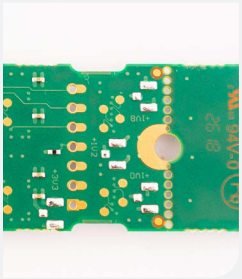
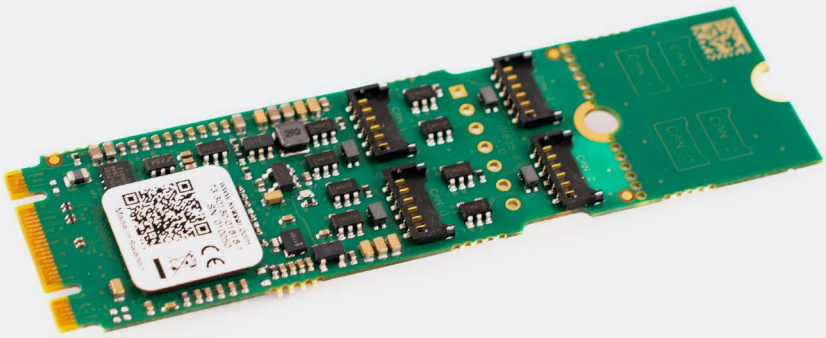
KVASER
Advancing connectivity

Kvaser M.2 PCIe xCAN

Learn more about this product







Kvaser M.2 PCIe xCAN Embedded Controller Card

Kvaser M.2 PCIe xCAN is a highly-integrated embedded controller card that adds up to 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 controller card has an exceptionally compact footprint, as it supports adjustable M.2 lengths. The card measures 22 × 80 mm and can also be configured as 22 × 60 mm for even tighter integrations. Its industry-leading height is just 2 mm.

Its CAN transceivers are implemented as separate off-board modules (EAN: 73-30130-01821-1) enabling flexible placement close to the CAN networks for improved signal integrity while also facilitating easier EMC zone boundary management.

With 1 µs timestamp resolution, up to 20,000 messages/s per channel, and features such as silent mode and error frame detection/generation, it is designed for advanced embedded systems.

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

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

EAN
73-30130-01818-1

Ref. No. 98453-0 v. 2.0

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Kvaser M.2 PCIe xCAN

Major Features

- B+M keyed M.2 PCI Express CAN interface with up to four channels.
- Breakable to fit in both 60 and 80 mm slots.
- Flexibility to select from 1 up to 4 channels, depending on current installation and needs,
  (CAN modules sold separately, EAN: 73-30130-01821-1)
- Distributed CAN modules minimise the signal integrity impact when connected to CAN-bus systems.
- Facilitates easier EMC zone boundary management.
- Supports CAN FD, up to 8 Mbit/s.
- 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.
- Quick and easy plug-and-play installation.
- 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.
- 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).

Technical Data

CAN Bit Rate	20 kbit/s to 1 Mbit/s
CAN Channels	Capacity up to 4
CAN Controller	Yes
CAN FD Bit Rate	Up to 8 Mbit/s
Dimensions	22 x 80 mm (breakable to 22 x 60 mm)
Error Frame Detection	Yes
Error Frame Generation	Yes
Galvanic Isolation	Yes, in combination with Kvaser Flex DB9 (73-30130-01821-1)
Host interface	PCIe x1 in an M.2-slot (B or M keyed)
Max message rate	20 000 msg/s per channel
Operating Systems	Linux, Windows [1]
Power Consumtion	Typically 770 mA at 3.3 V
Regulatory Compliance	CE, FCC
Silent Mode	Yes
Temperature Range	-40 to +85 °C
Timestamp Resolution	1 µs
Weight	4.8 g

[1] Windows 10 (IA-32 and x86-64)
Windows 11 (x86-64)

Support

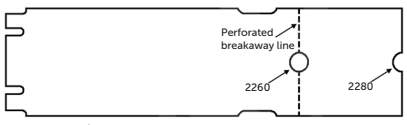
Documentation, Kvaser SDK and drivers can be downloaded for free at www.kvaser.com/downloads.

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.



Kvaser M.2 PCIe xCAN (01818-1) combined with four Kvaser Flex DB9 (01821-1)



Breakaway section of Kvaser M.2 PCIe xCAN

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