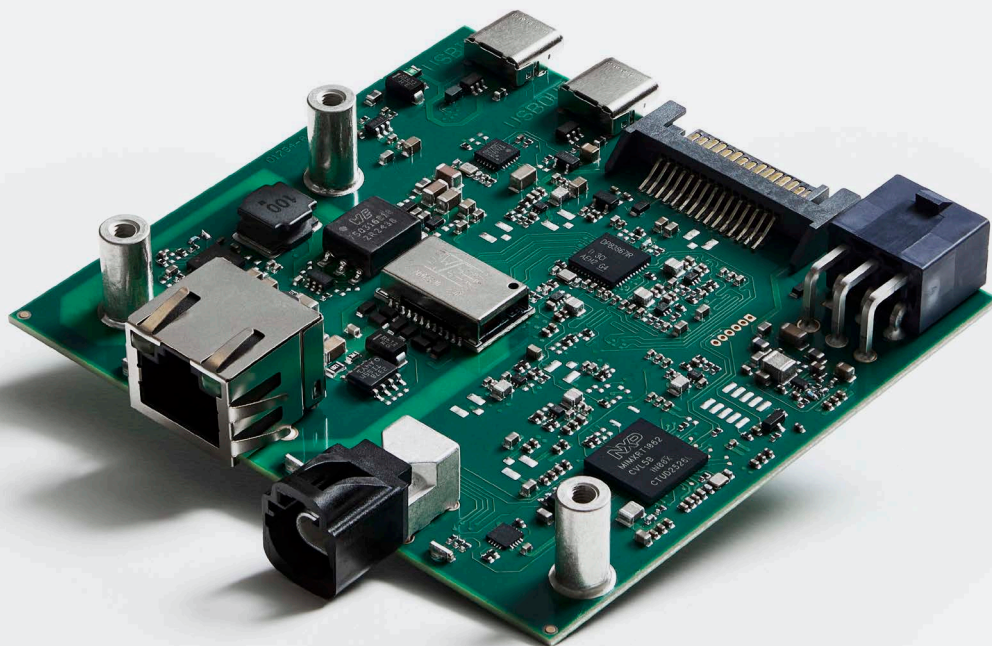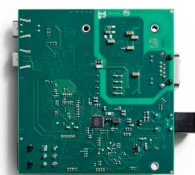# Kvaser Arcus 100/1000BASE-T1 H-MTD

See more products

Your reliable connection to Automotive Ethernet networks

Kvaser Arcus 100/1000BASE-T1 H-MTD is a high-performance Automotive Ethernet media converter designed to simplify access to vehicle networks. It provides fast, stable, and secure full-duplex conversion between Automotive Ethernet 100/1000BASE-T1 and Standard Ethernet 100/1000BASE-T, making it suitable for lab testing, in-vehicle development, and system start-up workflows. Its transparent back-to-back PHY architecture enables deeper link-level insight and precise analysis of physical-layer behavior during development and validation.

Designed for simple integration into embedded computers, it can also be installed in standard computers using the Kvaser ATX Bracket for Arcus 100/1000BASE-T1 H-MTD (EAN 73-30130-01811-2).

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

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

EAN
73-30130-01810-5

Major Features

- Monitor Automotive Ethernet traffic from a data logger or test PC during vehicle development and testing

- Flash ECUs over Automotive Ethernet, IP/Ethernet-based protocols, by connecting a vehicle network to a development PC

- Access link-level information for debugging tasks using PHY-exposed parameters such as link status, speed, and signal quality

- Transmit crafted Ethernet frames for testing ECU behavior, link robustness, and protocol handling

- Evaluate secure communication behavior by observing MAC-layer characteristics and checking resilience to invalid or unexpected traffic

- Verify cable integrity using SQI (Signal Quality Index), BER (Bit Error Rate), and built-in cable diagnostics to detect shorts, opens, and pair mismatches

- Supports testing of partial networks by allowing a PC application to emulate expected link activity when an ECU is not present

- Check early-boot communication sequences between ECUs and bootloaders during initial system start-up

- Intuitive API and GUI for adjusting PHY settings and configurations via USB

- Designed to meet the requirements of the Cyber Resilience Act (CRA) as well as Open Alliance recommendations
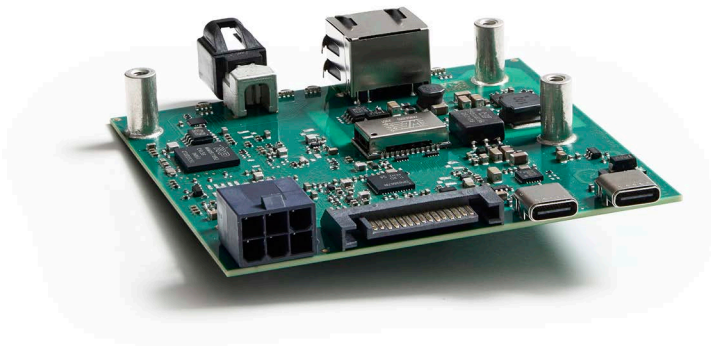
⬡ Technical Data

Dimensions	81 x 85 x 20 mm
Ethernet Channel 1	100/1000BASE-T, RJ45 8p8
Ethernet Channel 2	100/1000BASE-T1, H-MTD Key Z
Operating Temperature	-40 to +85 °C
Power input	PoE, USB-C, ATX, SATA
Regulatory Compliance	CE, FCC
Relative humidity	-40 to +85 °C
USB IN	USB 2.0 Type-C
USB OUT	USB 2.0 Type-C
Weight	50 g

Technical Data
Future Features

Bit Error Rate Analysis	Yes
Cable Tester (T1 PHY)[1]	Yes
Packet Generator	Yes
Signal Quality Indicator	Yes
TC10 Compliance (T1 PHY)	Yes

[1] Detects short/open conditions, mismatched pairs, and improper pinouts using the built-in cable tester.