



Data Sheet

MDILink QX035 CSI2 TAP

Measurement Data Interface

4 channel FPGA based measurement data interface with four CSI2 ports for lossless raw data acquisition in ADAS and AD environments.

With the MDILink you get a CSI2 measurement data converter that allows a smooth transition from the development stage and validation results to series production. MDILink is part of the b-plus AVETO Toolbox, see www.b-plus.com for more details.

Highlights

- Optimized for high bandwidth data throughput
- Up to 4,28 Gbit/s for each camera
- 2x 10 Gb Ethernet downstream ports
- Time synchronization IEEE 1588 PTP and gPTP
- Modular design
- Flexible FPGA SoC architecture
- Configuration via web interface
- Built in Data Generator
- Full transparent TAP in mode
- Robust design for rough environment



MDILink QX035 CSI2



Features

Interfaces

CSI2	2x in 2x out	
Connector	iPass+ HD	mini-SAS HD SFF-8643
Backchannel	I2C backchannel communication and logging	host to sensor and MDILink to sensor
Downstream	2x 10Gb Ethernet, M12 connector	configurable channel assignment
Management port	1Gb Ethernet, M12 connector	
time synchronization	IEEE 1588 PTP and 802.1AS gPTP	
tap mode	full transparent TAP mode	
Data-format	ASAM CMP* b-plus RX-API	
Architecture	FPGA SoC	

Specifications

Electrical Specification

Supply Voltage	wide range 8 - 32 V	6,5 V crank safe
Power consumption	typ. 15 W external power on (ignition) control	Up to 25 W

Environment Specification

operation Temperature	-25 °C to +70 °C
non operation	-40 °C to +85 °C
Relative Air Humidity	maximum 90 %, non-condensing

Mechanical Specification

Dimensions	159,7 mm (W) x 140 mm (D) x 38 mm (H)	without connectors
Weight	approx. 0,8 kg	

Certification CE, RoHS, REACH

Order Information

Name	Part Number	Description
MDILink QX035 1CCT1CCT-2	B21671-MDI-001-0004	Measurement Data Interface 2 channel CSI2 TAP to 2x 10GbE, including cables for power and Ethernet

Order Information accesories

Name	Part Number	Description
mini-SAS cable	A1003781	mini-SAS cable, SFF-8087 > SFF-8643, for MDILink to sensor board connection, 0.5 m length
Network cable M12	2001931	Network cable M12-X male plug 8-pin to RJ45 2 m
Power Cable	2001932	Open end power cable w/ M12-A female plug 2 m, 5 wires, 0.75 mm