



Data Sheet

MDILink QX035 GMSL2 4EP

Measurement Data Interface

4 channel FPGA based measurement data Interface with GMSL2 deserializer for lossless raw data acquisition in ADAS and AD environment

With the MDILink you get a SerDes 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

- 4 Channel GMSL2
- Time synchronization IEEE 1588 PTP and gPTP
- 2x 10 Gb Ethernet downstream ports
- Modular Design
- Flexible FPGA SoC architecture
- Configuration via web interface
- Optimized for high bandwidth data throughput
- Robust design for rough environment



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Features

Interfaces

GMSL2	4x serial link in Rx	Deserializer MAX96716
Connector	Fakra	
	power over coax	external supply
Backchannel	I2C backchannel communication and logging	
Internal	MIPI CSI2, 4 channel	
Downstream	2x 10 Gb Ethernet, M12 connector	configurable channel assignment
Management	1 Gb Ethernet, M12 connector	configuration via website
time synchronization	IEEE 1588 PTP and 802.1AS gPTP	
Data-format	ASAM CMP* b-plus RX-API	
Architecture	FPGA SoC	

Specifications

Electrical Specification

Supply Voltage	wide range 8 - 32V	6,5 V crank safe
Power consumption	typ. 15 W	Up to 25 W
	external power on (ignition) control	
Power over Coax	6 – 15 V max. 300 mA	external supply, separate for channel 0 and channel 1

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) x38 mm (H)	mounting, without connectors
Weight	approx. 0,8kg	

Certification CE, FCC, RoHS, REACH

Order Information

Name	Part Number	Description
MDILink QX035-27CE27CE-2	B21671-MDI-001-0016	Measurement Data Interface (LVDS, SerDes) 4x GMSL2 to 2x 10GbE, Including cables for power supply and Ethernet

Order Information Accessoires

Name	Part Number	Description
Network cable M12	2001931	Network cable M12-X male plug 8-pin to RJ45 2m
Power Cable	2001932	Open end power cable w/ M12-A female plug 2m, 5 wires, 0.75mm ²
Power cable PoC supply	2001934	Open end power cable w/ M12-A female plug 3m, 4 wires, 0.5mm ²