

USB module with USB 2.0 functionality and latest USB charging technology PD 3.0

Our USPs

- › Small, robust design according to OEM requirements
- › Very good efficiency with high operating temperature range up to max. +85 °C
- › Charging functionality according to USB Type-C Specification with max. 27 W
- › Additional USB 2.0 functionality
- › Additional power supply possible via V_{conn}



Your Advantages

- › Module according to common automotive standards
- › Full functionality up to an ambient temperature of +55 °C @ 27 W output power
- › Integrated short-circuit protection to V_{bus} / V_{bat} on all used connector pins incl. GND pin
- › USB 2.0 signal re-synchronization
- › Apple CarPlay / Android Auto capable
- › Overvoltage protection

Technical Information

Electrical

V_{Supply}	9 V – 18 V
V_{bus}	4.75 V – 5.5 V (Type-C Standard)
Supported PDOs	5 V @ 3 A / 9 V @ 3 A / 15 V @ 1.8 A / 20 V @ 1.35 A PPS: 3.3 V – 11.0 V @ 3 A
Output current V_{bus}	max. 3 A
Output power V_{conn}	max. 100 mW

Mechanical

Dimensions l x w x h	approx. 70 mm x 40 mm x 26 mm
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Environmental

Operating temperature range	-40 °C bis +85 °C
Tested according to	LV 124

Requirements

Single USB Type-C charging module according to automotive quality standards including

- › USB 2.0 functionality with signal re-synchronization
- › illuminated customer interface (optional)

Applications

- › Designed for cockpit integration

Protocols & Signals

- › Charging currents according to USB Type-C and USB Power Delivery 3.0 Standard
- › Additional charging profiles
 - › USB Type-C charging (5 V / 3 A)
 - › PDOs 5 V / 9 V / 15 V / 20 V (max. 27 W)
 - › PD PPS 3.3 V – 11 V (max. 27 W)

PD	Power Delivery
PPS	Programmable Power Supply
BC	Battery Charging
V_{Supply}	Input supply voltage
V_{bus}	Supported output voltage



MD in a Nutshell



The C.A.S.E. megatrend describes the four essential future topics for the automotive industry: Connected, Autonomous, Shared & Service and Electric. Data plays a central role and drives the future of the automotive industry. Data is generated, transferred, merged and evaluated. We are experts in the transmission of the rapidly increasing data volumes and have developed the latest technological solutions for this future topic.

25

years experience
in the automotive industry



100 %

automotive



Supplier of products for
over 350 car models from
more than 60 OEMs



Volume supplier – over
160 million products in more than
20,000 variants annually



Global production- &
sales network in NAFTA,
Europe and APAC



Stable
ownership structure



Worldwide leading
company for data transmission
solutions in vehicles



Approx. 6,000
employees worldwide



Accredited in-house
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Do you have any questions or need a data transmission solution in vehicles?
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