USB Type-C Single Charger PPS

USB module with 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 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
- 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. 56 mm x 40 mm x 26 mm

Environmental

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

Requirements

USB charging module according to automotive quality standards with one USB Type-C female connector incl. illuminated customer interface (optional).

Applications

- Designed for cockpit integration

Protocols & Signals

- Charging currents according to USB Type-C Standard and USB Power Delivery 3.0 Standard
- Additional charging profiles
  - Legacy charging profiles BC1.2 DCP
  - Apple charging profile (2.4 A)
  - 1.2 V Divider Mode
  - 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

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more than **60 OEMs**

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160 million products in more than
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Global production- &
sales network in **NAFTA**,
Europe and **APAC**

Stable
ownership structure

Worldwide leading
company for data transmission
solutions in vehicles

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employees worldwide

Accredited in-house
test laboratory

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