

STR-USBC-2PORT-100W-EVK: USB Auto 2-Port 100W Source

The Dual 100W USB-PD Automotive Charging System demonstrates ON Semiconductor's broad portfolio of USB-PD and Power Solutions, including the FUSB302 Type-C & PD Port Controller, the FUSB252 HV Protection Switch, and the NCV81599 4switch buck-boost controller. Additionally, the Strata software also provides full control over the system and allows the user to experiment with various fault and foldback features, change power profiles on each port, and monitor telemetry while charging various load devices. Design collateral such as schematics, PCB layout, test reports, etc. are supplied in the same Strata interface to ease evaluation. See the Strata webpage at www.onsemi.com/strata for more details!



Features and Applications

Features

- Input: 5V to 32V
- Outputs up to 100W per port (200W max.)
- Default power profiles: 5/7/9/12/15/20V at up to 5A
- Full system; Power, Port + Policy, and Protection
- Adjustable power profiles: 5V to 20V in 100mV steps
- Fault and Foldback for Temperature & Input voltage
- Cable Compensation

Benefits

- FUSB302T Type-C & PD Port Controller
- Low Power Icc=25uA (typical)
- USB-PD 2.0 Spec Compliant
- I2C configurable
- NCV81599 4-switch Buck-Boost
- Integrated Drivers
- I2C Interface to implement USB-PD
- FUSB252 HV Protection Switch
- 20V Protection on CC
- 16V Protection on D+/D-
- Surge Protection

Evaluation/Development Tool Information

Product	Status	Compliance	Short Description	Parts Used
STR-USBC-2PORT-100W-EVK	Active	Pb-free	USB Auto 2-Port 100W Source	FUSB252UMX , FUSB302TMPX

https://www.onsemi.com/PowerSolutions/evalBoard.do?id=STR-USBC-2PORT-100W-EVK/1-14-19