

CX2980C/USB Type-C and PD Source Controller

FEATURES

- **USB Type-C 2.1 and USB PD3.1 Source**
 - Support 5 FPDOs with Programmable Voltage and Current
 - Support 2 APDOs with Programmable Voltage and Current
- **Support BC1.2 DCP and HVDCP Protocols**
 - BC1.2 DCP Mode
 - Divider 3 Mode
 - QC2.0/3.0 Class A
 - AFC, FCP and SCP
- **Integrated low R_{dson} N-MOSFET**
- **Support Constant Voltage Loop (CV) and Constant Current Loop (CC) Operation**
- **Accurate Constant Power Limit**
- **Additional 7 Power Levels Configured by PS0, PS1 Pins**
- **Integrated OVP, UVP, UVLO, OCP, FOCP and TSD Protections**
- **Package: QFN4x4-32L**

- **±4 kV HBM ESD Rating for USB IO Pins**

APPLICATIONS

- AC-DC Power Adaptor
- Car Charger

GENERAL DESCRIPTION

The CX2980C is a high performance, high integration USB Type-C Power Delivery source controller. It integrates an ultra-low conduction resistance N-channel MOSFET. The CX2980C supports PD2.0, PD3.0, PPS, QC2.0/3.0, Divider 3, BC1.2 DCP, AFC, FCP and SCP protocols. It supports up to 5 FPDOs with programmable voltage and current and 2 APDOs which are fully compliant with USB Power Delivery Specification Revision 3.1, version 1.0.

The CX2980C integrates all of required protections such as Over Voltage Protection (OVP), Under Voltage Protection (UVP), Under Voltage Lock Out (UVLO), Over Current Protection (OCP), Fast Over Current Protection (FOCP) and Thermal Shut Down (TSD).

It is available in QFN-32L, 4 mm x 4 mm package.

TYPICAL APPLICATION CIRCUIT

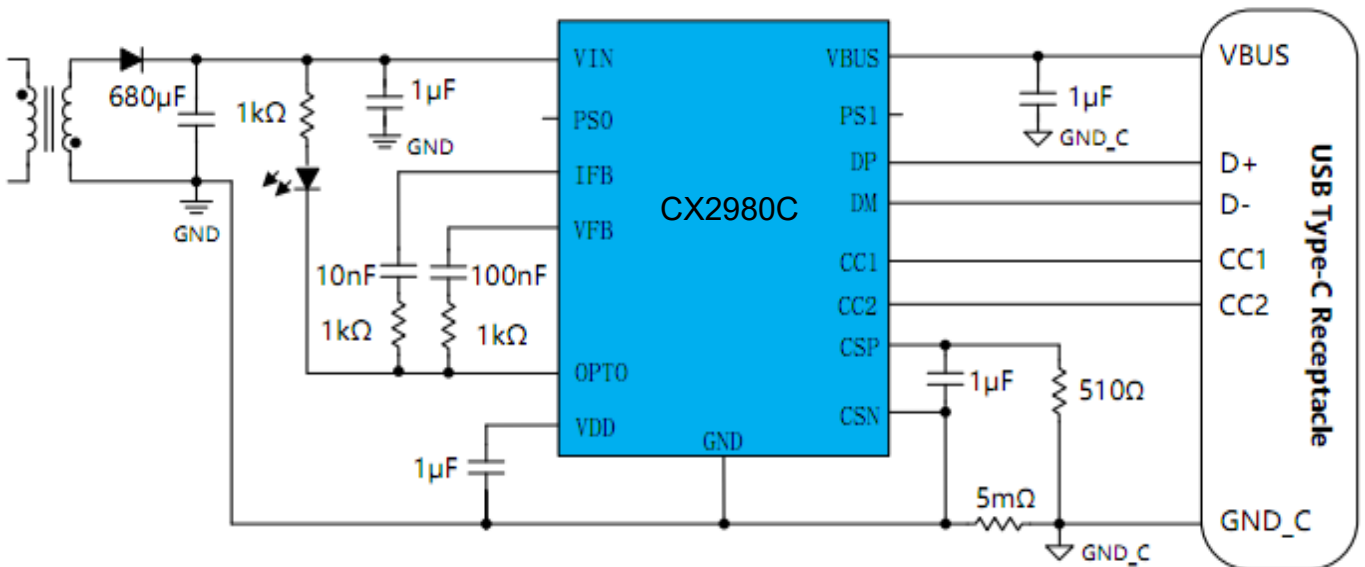


Figure 1. Typical Application Circuit