

USB Type-C and PD Source Controller

Hynetek Semiconductor Co., Ltd.

HUSB361

FEATURES

- USB Type-C 2.1 and USB PD3.1 source Compliance certified, TID: 5547
 - 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
 - Divider3 mode
 - QC2.0/3.0 Class A
 - AFC, FCP and SCP
- Support driving external N-MOSFET or P-MOSFET
- Support constant voltage (CV) loop and constant current(CC) loop
- Accurate constant power limit
- Additional 8 power levels are configured by PS0 and PS1 pins
- Integrated OVP, UVP, UVLO, OCP, FOCP and TSD protections

- Small packages: QFN3x3-16L, QFN4x4-16L and SSOP-10L
- ±5 kV HBM ESD rating for D+, D-, CC1, CC2

APPLICATIONS

AC-DC power adaptor Car charger

GENERAL DESCRIPTION

The HUSB361 is a high performance, high integration USB Type-C Power Delivery Source Controller.

The HUSB361 supports PD2.0, PD3.0, PPS, QC2.0/3.0, Divider3, 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 HUSB361 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 SSOP-10L, QFN-16L, 3 mm x 3 mm and QFN-16L, 4 mm x 4 mm packages.

TYPICAL APPLICATION CIRCUIT

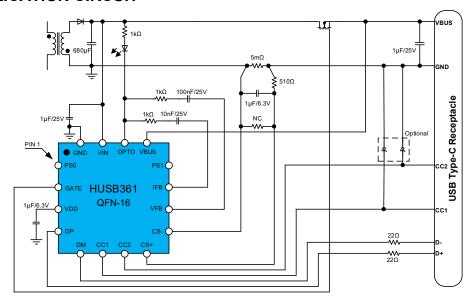


Figure 1. Typical Application Circuit