

# Hynetek Semiconductor Co., Ltd.

# USB PD Controller with Integrated Power Switch HUSB380A

#### **FEATURES**

- USB Type-C 2.1 and USB PD3.1 Compliant
  - Support 5 V, 9 V, 12 V, 15 V, 20 V FPDOs
  - Support 2 programmable APDOs
- Support BC1.2 DCP and HVDCP Protocols
  - BC 1.2 DCP mode
  - Apple 5 V 2.4 A mode
  - QC2.0/3.0
  - AFC, FCP and LVSCP/HVSCP
- Integrated VBUS Power Path Switch
- Support Constant Voltage Loop(CV) and Constant Current loop(CC) Operation
- Multiple Cable Compensation Options
- Integrated OVP, UVP, UVLO, OCP, FOCP and TSD Protections
- eSSOP-10L package
- ±2 kV HBM ESD Rating for USB IO Pins

#### **APPLICATIONS**

**Power Adaptors** 

### **GENERAL DESCRIPTION**

The HUSB380A is designed for a USB type C PD product. It can support 5 FPDOs with programmable voltage and current for different applications and 2 APDOs for PPS options. All of PDOs are fully compliant with PD3.1 Rev.1.8 specs.

Besides, the HUSB380A supports multiple legacy protocols including QC2.0, QC3.0, AFC, FCP, SCP and Divider 3 mode which provide excellent compatibility for the legacy devices.

It integrates an N-MOSFET to enable the power path from VBUS to VIN. Once there is any fault triggered, the HUSB380A can turn off the power path and protect the connected device.

Only 0.5 mA operation current is needed for the HUSB380A.

It is available in eSSOP-10L package.

## TYPICAL APPLICATION CIRCUIT

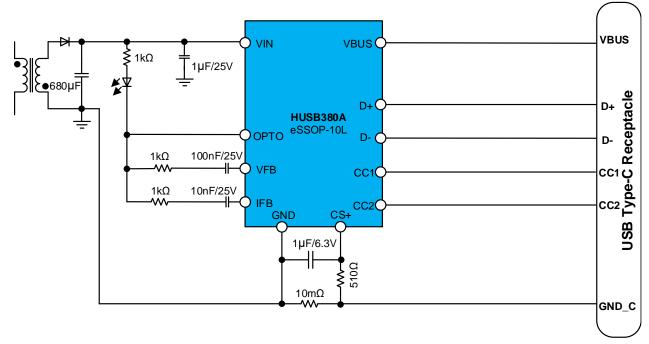


Figure 1. Typical Application Circuit