

FEATURES

- **USB Type C PD DFP supported**
- **USB Power Delivery (PD3.0 with PPS)**
Compliant, TID 5053
 - **Max 6 Programmable FPDOs available**
 - **Max 3 Programmable APDOs available**
 - **Integrated Ra Detection and VCONN Source for e-Marker Detection**
- **Integrated N-MOSFET Driver with Softstart**
- **Built-in Shunt Regulation**
 - **Programmable Constant Voltage Control**
 - **Programmable Constant Current Control**
 - **Programmable Cable Compensation**
- **Multiple Protection Integrated**
 - **Over-Current Protection (OCP)**
 - **Over-Voltage Protection (OVP)**
 - **Short-Circuit Protection (SCP)**
 - **Over-Temperature Protection (OTP)**
 - **Under-Voltage Protection (UVP)**
- **Low Operation Current**
- **±4 kV HBM ESD Rating for USB IO pins**

APPLICATIONS

PD Adaptor

GENERAL DESCRIPTION

HUSB360 is designed for a USB Type-C PD product. It is a USB PD source only controller and can support up to 6 FPDOs with programmable voltage and current for different applications. Additionally, 3 APDOs options are also implemented to support the PPS Mode in PD3.0. All of PDOs are fully compliant with PD3.0 Rev.2.0 specs.

HUSB360 integrates an N-FET driver to enable the VBUS from VIN to perform the USB Type C connection and fault protections. It monitors the voltage and current at the connected USB Type-C port. HUSB360 implements multiple protections including OCP, SCP, OVP, OTP, UVP to turn off the power path once there is any fault triggered during normal operation.

HUSB360 also integrates the discharge path for VIN and VBUS during voltage transition. With the high integration, this simple pin count and less external components can save much board space and BOM cost.

Only 400 μ A operation current is needed for HUSB360. The high ESD rating provides more reliability for the system.

TYPICAL APPLICATION CIRCUIT

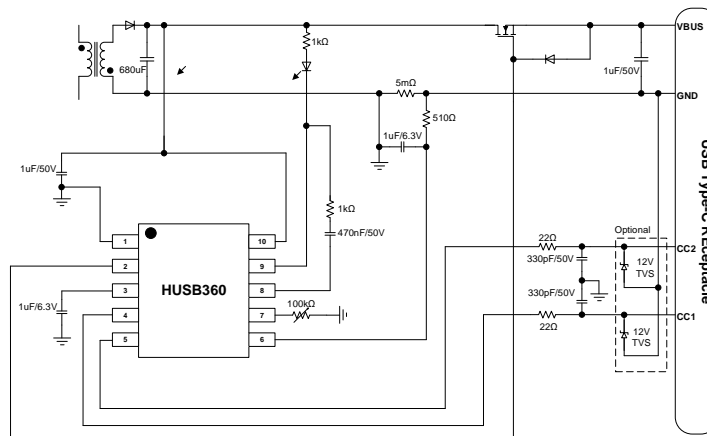


Figure 1. HUSB360 Typical Application Circuit