

FEATURES

- USB Type-C 2.1 and USB PD 3.1 Compliant
 - Support 5 V, 9 V, 12 V, 15 V and 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
 - QC 2.0/3.0/QC 3.0+ Class A or Class B
 - AFC, FCP and LVSCP/HVSCP
 - PE 1.1+ and 2.0
 - UFCS
- Support 3-ports Application (2C1A or 2A1C)
- As Low as 5 mA Light Load Detection
- External N-MOSFET Supported
- Support Constant Voltage Loop(CV) and Constant Current Loop(CC) Operation
- Support I²C Function
- Multiple Cable Compensation Options
- Integrated OVP, UVP, UVLO, OCP, FOCP, CC/DPDM OVP, TSD and OTP Protections
- QFN-32L (4 mm x 4 mm) Package
- ±6 kV HBM ESD Rating for USB IO Pins

APPLICATIONS

Adapters
Car Chargers

GENERAL DESCRIPTION

The **HUSB392** is a high performance, high integration 3-Ports controller (2C1A or 2A1C). When a single port is attached, the controller enables fast charging protocols such as USB PD or HVDCP. However, when 2 or more ports are connected simultaneously, it provides only a 5 V output.

The **HUSB392** is a USB PD 3.1 source controller that supports 5 FPDOS and 2 APDOs with programmable current and voltage. Besides the **HUSB392** also supports BC 1.2 DCP, Apple 2.4 A, QC 2.0/3.0/QC 3+, AFC, FCP, SCP, PE 1.1+/2.0, and UFCS protocols.

The **HUSB392** supports I²C mode. In I²C mode, the master can read the charge voltage, charge current, and the negotiated protocols of HUSB392 through the I²C bus. It can also modify the power limit of The **HUSB392** through the I²C bus to achieve dynamic power management.

The **HUSB392** integrates all of essential protections such as Over Voltage Protection (OVP), Under Voltage Protection (UVP), Under Voltage Lockout (UVLO), Over Current Protection (OCP), Fast Over Current Protection (FOCP), CC or DPDM Over Voltage Protection (Port OVP), Over Temperature Protection(OTP)and Thermal Shut Down (TSD).

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