

OVERVIEW

The FT4233HP is a high speed USB bridge IC with a Type-C controller supporting USB Type-C and Power Delivery standards. USB bridge function is compatible with FT4232H – Quad high-speed USB to multi-purpose UART / MPSSE bridge. The Type-C / Power Delivery controller supports two Type-C ports; with PD1 configured as a power sink or dual role, and PD2 as a sink.

DEMO SETUP

The FT4233HP USB Type-C charge-through application demonstrates how to control the following modules using a notebook PC's USB-C port via a USB to MPSSE / UART / GPIO function, while the notebook remains charged.

- 1) An ambient light sensor
- 2) A distance sensor with buzzer
- 3) A BT / BLE module for wireless communication via phone / tablet

DEMO APPLICATION

Scenario 1:

PD1 is connected to the USB-C port of the notebook, sinking power at 5V while sending sensor data and phone messages via USB data transfer to the notebook, whilst PD2 is being switched off.

Scenario 2:

When the USB-C charger on PD2 is turned ON, PD1 switches from sinking to power sourcing and charges the notebook battery. When the USB-C charger on PD2 is turned OFF, the PD1 switches back to sinking power again. The USB-C meter monitors and displays voltage and current of the charging / discharging.

