

FT4233H USB Type-C Charge-Through Demo

FT4233H is a hi-speed USB bridge IC with Type-C and USB Power delivery (PD) 3.0 controllers that support the latest USB Type-C and Power Delivery standards. The USB bridge function is comparable with FT4232H – Quad high speed USB to multipurpose UART/MPSSSE bridge. The Type-C/PD controller supports 2 Type-C ports, with PD1 configurable as power sink, source or dual role, and PD2 working as a sink.

The FT4233H USB Type-C charge-through application demonstrates the use of a FT4233H to bridge to a 2nd display from the notebook PC through a USB to MPSSE SPI data bridge from the notebook's USB-C port. The connection may charge the Notebook, or sink power from

the Notebook when the PD power adaptor loses power. In this demo setup, PD1 is connected to the USB-C port of the notebook, sinking power at 5V, and displaying contents on the EVE module through USB data transfer.

When the USB-C charger on PD2 is turned on, PD1 switches to power sourcing and charges the notebook battery. When the USB-C charger on PD2 is switched off, PD1 switches to sinking power again. During power role swaps the USB data transfer is uninterrupted, thus the EVE display is running continuously. A USB-C meter will monitor and display the voltage and current of the charging/discharging.

