Overview

The PD charger example is a simple demonstration based on the MCUXpresso SDK PD stack.

The application simulate charger product.

The demo only works as source and is external powered.

System Requirement

Hardware requirements

- One or two Type-C shield board
- One or two 9V DC power suppliers
- Type-C Cable
- One or two hardwares (Tower module/base board, and so on) for a specific device, for example: lpcxpresso54114 board
- · Personal Computer

Software requirements

• The project files are in:

 $<\!MCUX presso_SDK_Install >\!/boards/<\!cd>/usb_examples/usb_pd_source_charger/<\!rtos>/<toolchain>.$

Note

The <rtos> is Bare Metal or FreeRTOS OS.

• Terminal tool.

Getting Started

Hardware Settings

For detailed instructions, see the appropriate board User's Guide.

Note

Set the hardware jumpers (Tower system/base module) to default settings.

Prepare the example

- 1. Download the program to the target board.
- 2. Power on Type-C shield board then power on development board.

Run the example

- 1. Connect the OpenSDA USB port to the PC and open terminal.
- 2. This charger provide power 5V/2.7A and 9V/1.5A.
- 3. Connect the sink with Type-C cable to the board, The board will print the sink's request power information. For example: Download usb_pd_charger_battery or usb_pd_sink_battery demo to another board and connect to the tested board.