

## 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:  
`<MCUXpresso_SDK_Install>/boards/<board>/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.