

## 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

- The MIMXRT685-AUD-EVK board jumper settings:  
JP12 2-3, JP43 2-3.  
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.