

CYPRESS EZ-PD™ BARREL CONNECTOR REPLACEMENT (BCR) KIT

The CY4533 EZ-PD Barrel Connector Replacement (BCR) Kit provides a simple evaluation platform for the EZ-PD Barrel Connector Replacement (CYPD3177) USB-C™ Port Controller. The BCR kit enables a developer to quickly prototype a USB Power Delivery (PD) input system using a USB-C connector, replacing the existing barrel connector.



EZ-PD BCR (CYPD3177) USB-C PORT CONTROLLER FEATURES:

- USB PD 3.0 certified, including Programmable Power Supply (PPS) mode
- Upstream Facing Port (UFP) only, acting as a power sink
- Configurable PDOs, supporting 5V, 9V, 12V, 15V, 20V, up to 5A
- Configurable R_{θ} resistor
- V_{Bus} -to-CC short protection
- Host Programming Interface (HPI) over I²C to external SoC
- Over-voltage and under-voltage protection
- IEC61000-4-2 ESD level 4C ESD protection on CC, I2C, V_{Bus} pins
- 3V to 24.5V power supply (30V tolerant)
- 24-pin QFN package
- Qualified for extended industrial temperature range (-40°C to 105°C)

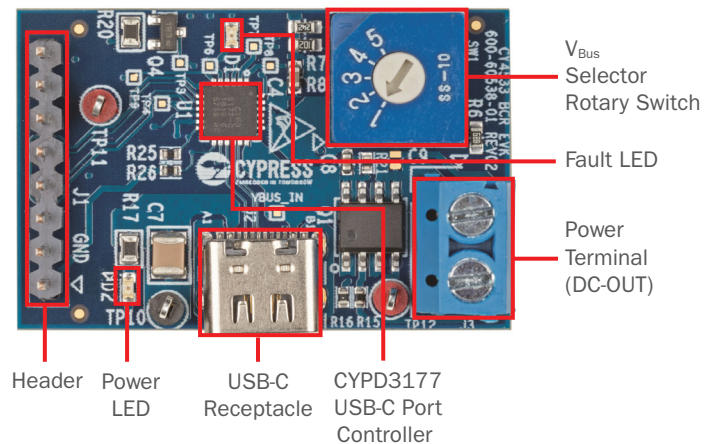
CY4533 EZ-PD BCR KIT FEATURES:

- USB-C receptacle for V_{Bus} -in
- Power terminal for DC-out
- Power LED and fault LED
- V_{Bus} selection rotary switch
- Measuring only 3.7 cm x 2.5 cm (L x W) in PCB size

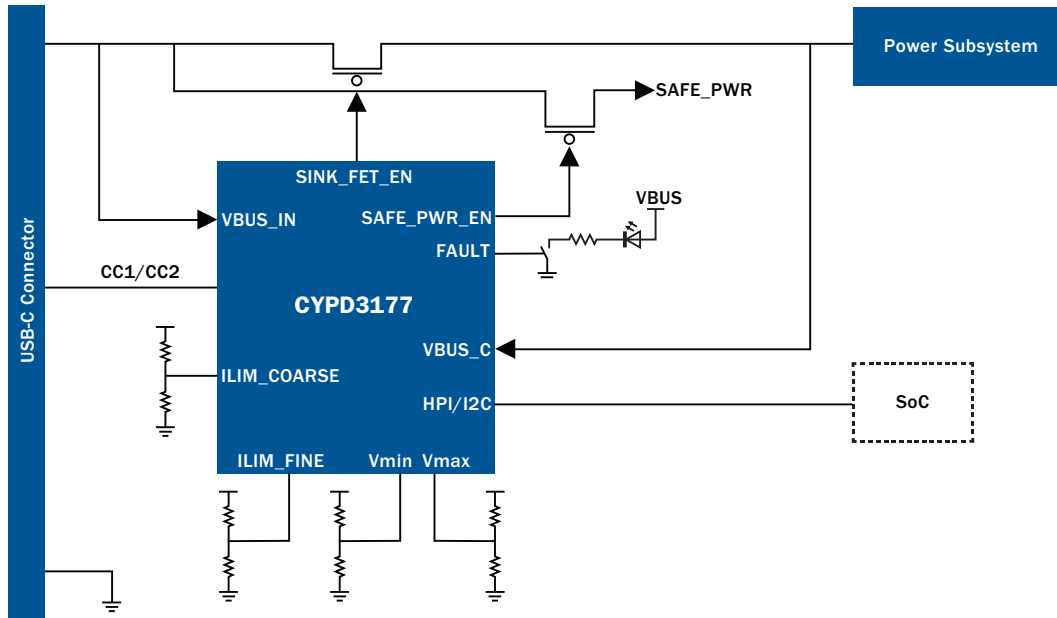
Switch Position	Max V_{Bus} Requested	DC-OUT Voltage	Max Current Requested
1	5V	5V	900mA*
2	9V	9V	900mA*
3	12V	12V	900mA*
4	15V	15V	900mA*
5	20V	20V	900mA*

* Can be adjusted to up to 5A by changing resistors on the BCR Kit. Please refer to CY4533 Kit User Guide for more details.

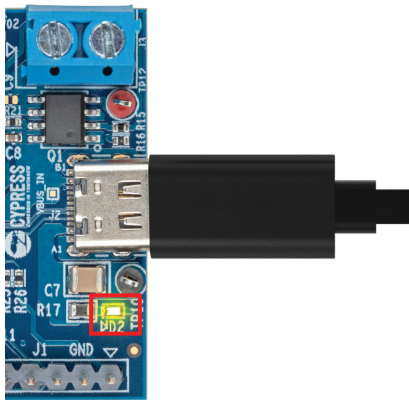
EZ-PD BCR KIT



EZ-PD BCR (CYPD3177) BLOCK DIGARAM



REPLACE YOUR BARREL POWER CONNECTOR WITH USB-C IN THREE, SIMPLE STEPS USING THE CY4533 EZ-PD BCR KIT



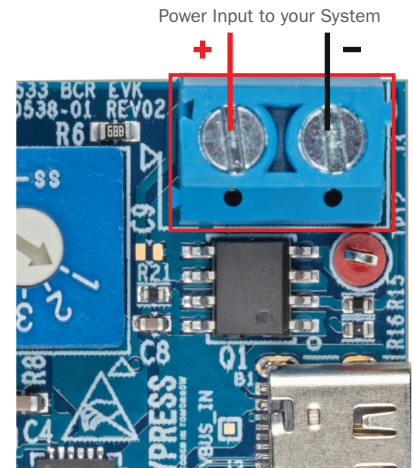
STEP 1:

Connect a USB-C power adapter (e.g. 30W Apple USB-C power adapter) to the USB-C receptacle of the CY4533 Kit. Observe the Power LED (green color) as it comes ON.



STEP 2:

Select the max V_{Bus} voltage (5V, 9V, 12V, 15V, or 20V) using the rotary switch that matches the voltage rating of the external load. The actual voltage is determined by the connected USB-C power adapter.



STEP 3:

Measure DC-OUT on the power terminal with a multi-meter to confirm that it matches the voltage rating of the external load. Connect the DC-OUT to the external load.



GET STARTED NOW

For more information about the EZ-PD BCR (CYPD3177) USB-C Port Controller and CY4533 EZ-PD BCR Kit, visit: www.cypress.com/BCR, www.cypress.com/CY4533

For technical support, visit: www.cypress.com/support

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