

TUSB319 Evaluation Module

This document describes how to use TUSB319EVM.

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USB Type-C is a trademark of USB Implementers Forum, Inc..

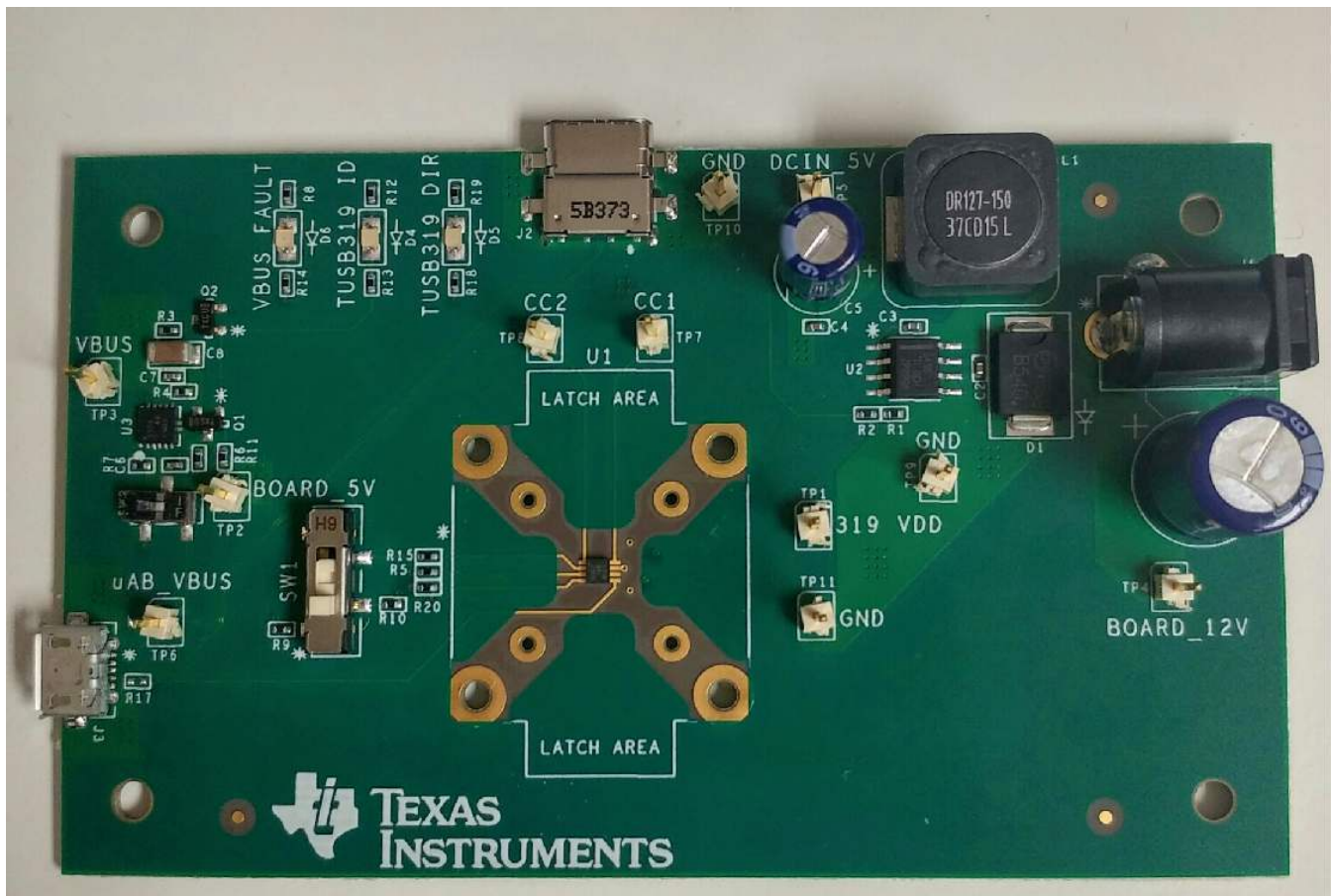


Figure 2. TUSB319EVM

2 TUSB319EVM

2.1 Power

The TUSB319EVM can be powered either using a 12-V DC power supply or via USB thru the integrated micro AB USB connector. This evaluation board is capable to provide up to 3 A at 5 V DC to the USB Type-C connector (VBUS).

2.2 Connectors

The EVM has a USB micro-AB and a USB Type-C receptacle. The micro-AB connector can be connected to a USB legacy host or OGT device. A USB Type-C device can be connected to the USB Type-C receptacle provided on the EVM for charging or an optional high-speed connection.

2.3 USB Type-C™ Current Advertisement

The TUSB319EVM is capable to advertise three different current modes: USB standard current (500 mA and 900 mA), medium level (1.5 A) and high level (3 A); the switch SW1 controls the advertised current, selecting the levels from High to Low with the positions 1 to 3, respectively.

2.4 Data Path

There is an optional USB2 data path; it is a direct high-speed trace between the micro-AB connector and the USB Type-C receptacle.

2.5 LEDs

LEDs are provided to indicate the connection status of the TUSB319EVM. LEDs are described in [Table 1](#).

Table 1. LED Descriptions

Ref Designator	LED_COLOR	LED Status Description
D2	LED_RED	Illuminates when an overcurrent condition has occurred
D3	LED_GRN	Advertises the USB Type-C cable orientation
D4	LED_GRN	Illuminates when the TUSB319 has detected a UFP device and the ID pin is active

3 TUSB319 EVM Quick Start Guide

3.1 12-V DC Power Supply

Use the following directions for accessing 12-V DC power supply:

1. Connect the TUSB319EVM to a 12 V DC power supply using the J1 jack.
2. Configure the SW1 switch in position 1.
3. Connect a UFP device on the USB Type-C connector.
4. Verify that LED D4 is ON and LED D3 is either way ON or OFF.
5. Disconnect the USB Type-C cable.
6. Verify that LEDs D4 and D3 are OFF.
7. Flip and connect the USB Type-C cable.
8. Verify that LED D4 is ON and LED D3 has the opposite state as in step 4.

3.2 USB Power Supply

Use the following directions for accessing USB power supply:

1. Connect the TUSB319EVM to a USB host via the micro-AB USB connector.
2. Configure the SW1 switch in position 2.
3. Connect a UFP device on the USB Type-C connector.
4. Verify that LED D4 is ON and LED D3 is either way ON or OFF.
5. Disconnect the USB Type-C cable.
6. Verify that LEDs D4 and D3 are OFF.
7. Flip and connect the USB Type-C cable.
8. Verify that LED D4 is ON and LED D3 has the opposite state as in step 4.

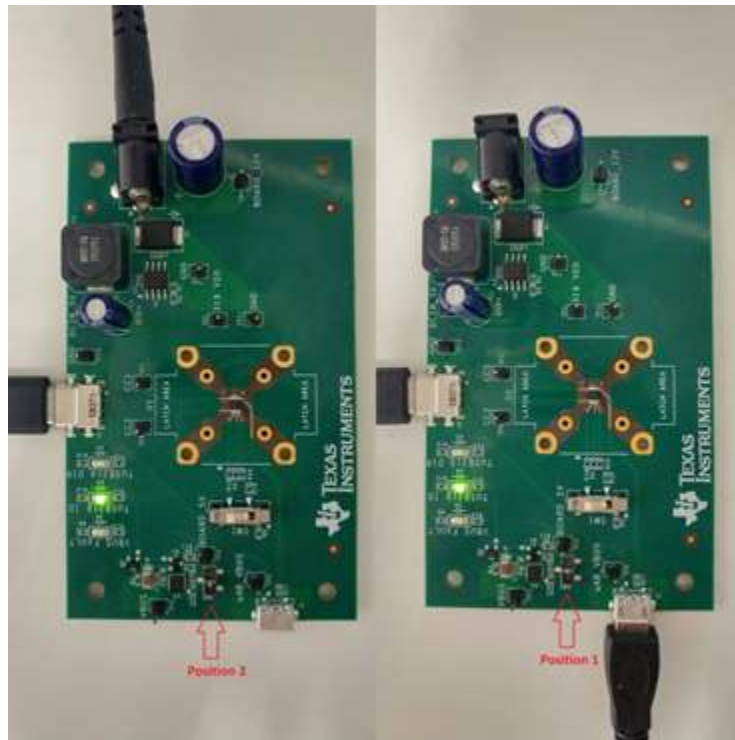


Figure 3. TUSB319EVM Power Configurations

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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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