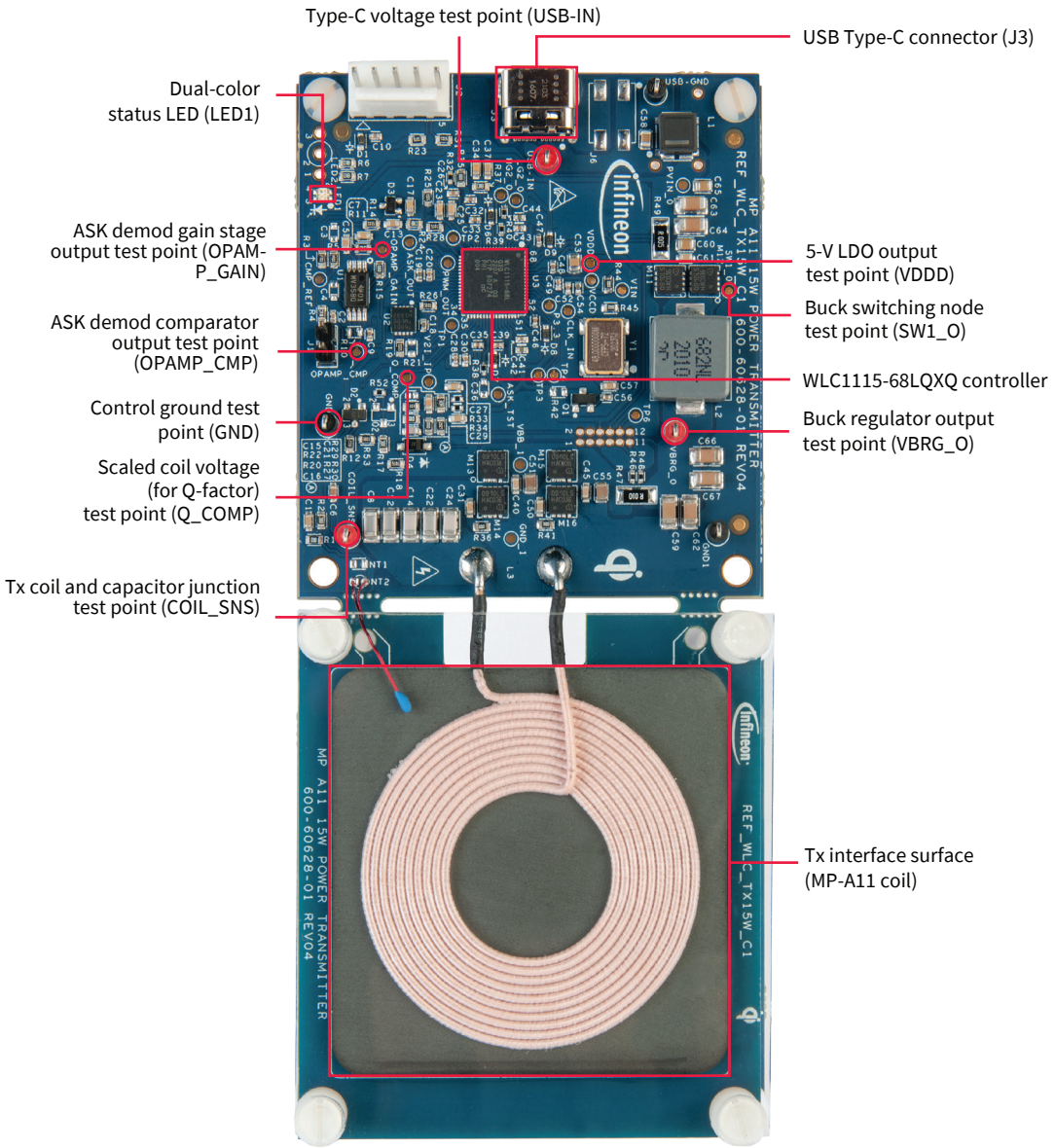
Quick start guide

WLC MP-A11 15W wireless power transmitter reference board

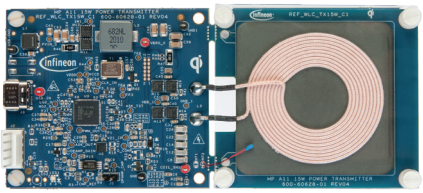
REF_WLC_TX15W_C1

The WLC MP-A11 15W wireless power transmitter reference board (REF_WLC_TX15W_C1) demonstrates the functionality of the Infineon WLC1115 wireless charging transmitter controller. It implements the Qi v1.3.2 specification and supports 15W wireless charging using Qi Extended Power Profile (EPP). It also supports Qi's Basic Power Profile (BPP) to support 5W wireless charging with receivers which do not support EPP. This reference board is powered using a USB-C power adapter that is compliant with USB PD 2.0 and higher specifications.



Before you start

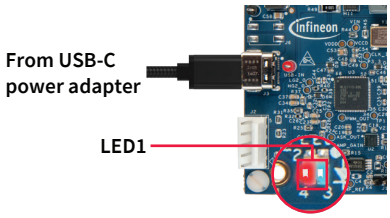
1. Ensure that the following contents are available in the WLC MP-A11 15W wireless power transmitter reference board package:
   - REF_WLC_TX15W_C1 reference board
   - USB-C power adapter
   - USB Type-C cable
   - Qi-compatible receiver
   - HPI dongle for programming/debugging
   - USB Micro-B cable
   - Jumper wires (x4)
2. (Optional) Get a Qi-compatible phone to check the wireless power transfer functionality using a phone instead of the Qi-compatible receiver.



REF_WLC_TX15W_C1 board

Step 1: Hardware connection

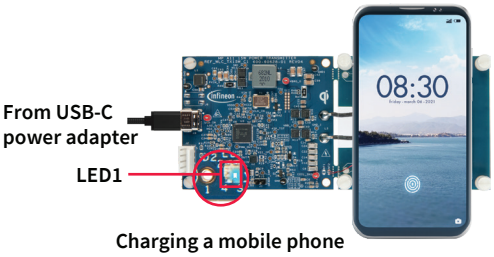
1. Connect the USB-C power adapter to the USB Type-C connector (J3) of the reference board.
2. Confirm that the status LED (LED1) blinks five times in blue and red. Now, the board is ready for use.



Powering the REF_WLC_TX15W_C1 board

Step 2: Start wireless power transfer

1. Place the (phone or receiver) to be charged on the Tx interface surface of the reference board. The status LED (LED1) glows blue when charging is in progress.
2. Observe that the status LED turns OFF when the receiver is removed from the Tx interface surface or when the phone battery is fully charged (100%).
3. Refer to the following table for system states and corresponding status LED indications.



Charging a mobile phone

System states and Status LED indications

System state	Status LED indication
Idle state	No LED indication
Configuration of the power delivery parameters with receiver/phone in progress	Blinks blue
Power delivery in progress	Glows blue
Power delivery/charge complete	No LED indication
Foreign object (FO) such as a metal coin/clip detected	Glows red until FO is removed
Fault during power transfer	Glows red until the fault is cleared
Abrupt End of Power Transfer (EPT) initiated by the receiver	Blinks red

Next steps

1. Download the reference board release package from the WLC product page (www.infineon.com/wirelesscharging-ics)
2. See the user guide:
   - To configure the parameters in firmware and download onto the reference board using Wireless Charging Configuration Utility
   - To learn about hardware design including usage of onboard test points

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