

## Product brief

# Wireless charging IC

## WLC1115 - transmitter 15 W

Integrated USB-PD, buck, inverter, sensing, software

WLC1115 is a highly integrated wireless charging transmitter IC that includes USB-PD/PPS sink, DC/DC controller, a full bridge inverter, sensing peripherals, configurable memory and software that supports Qi v1.3.x and proprietary charging protocols.

Infineon's wireless charging controllers (WLC) offer highly integrated yet scalable platforms that help to meet compliance and proprietary charging requirements with configurable software.

### Key features

#### WLC1115

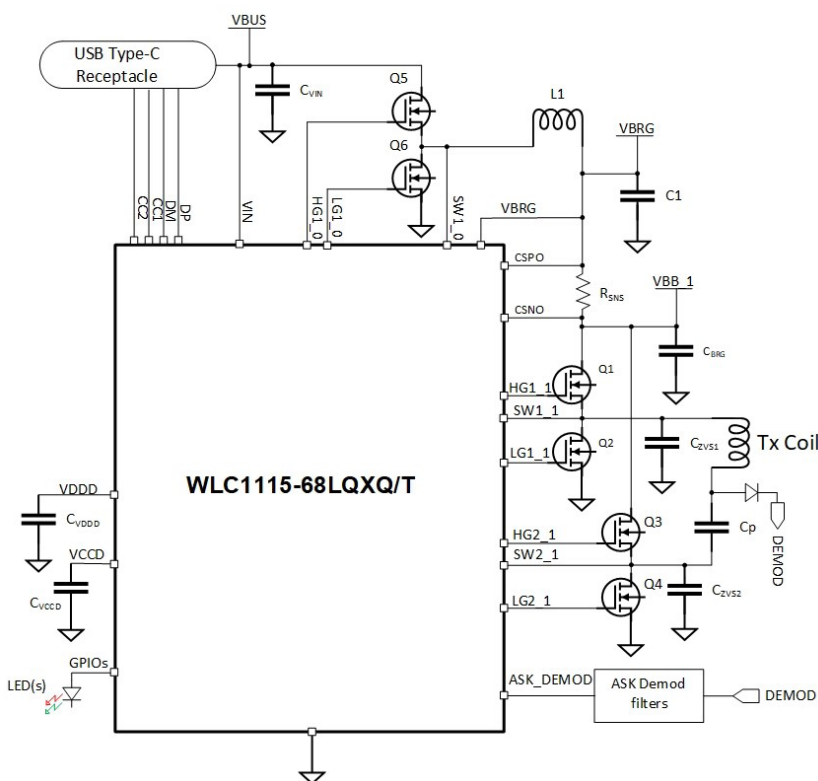
- > Qi v1.3.x EPP transmitter
- > Integrated USB-PD controller
- > Integrated DC/DC buck converter
- > Integrated gate drivers for inverter
- > Adaptive foreign object detection
- > Multipath ASK demodulation
- > Supports Qi authentication
- > Wide input voltage range: 4.5 V-24 V
- > Communication ports: I2C, UART
- > Temperature range: -40 °C - 105 °C

#### WLC1115-package

- > Qi v1.3.x EPP transmitter
- > Tray or tape & reel options

### Potential applications

- > Smartphone
- > Smart speakers
- > Docking station
- > Aftermarket auto accessories
- > Furniture integrated and industrial charging accessories



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The companion **REF\_WLC\_TX15W\_C1** MP A11 power transmitter solution board is Qi v1.3.2 compliant extended power profile (EPP) transmitter design. It also supports basic power profile (BPP) with proprietary power delivery extensions.

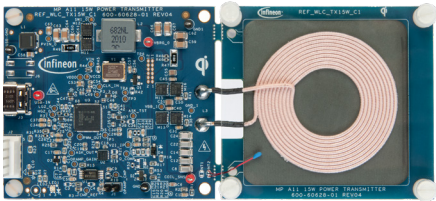
This reference board is operated at typical frequency of 127.7 kHz and is powered using USB PD 3.0-compliant USB-C power adapter. Additionally, it can support DC input of 9 V-20 V through firmware option.

[Click here](#) to learn more about our board!

**Key benefits**

- > Highly integrated single-chip 15 W transmitter solution
- > Configurable software for Qi v1.3.2 compliance
- > Programmable features for proprietary protocols
- > Adaptive foreign object detection
- > Adjustable protection thresholds- OVP, OCP, OTP

## Key enabling products



Wireless power transmitter

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OptiMOS™

WLC1115

OPTIGA™  
Trust charge  
SLS32AIA020Ux



AC/DC adapter

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EZ-PD™  
PAG1P

EZ-PD™  
PAG1S

OptiMOS™  
CoolMOS™

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