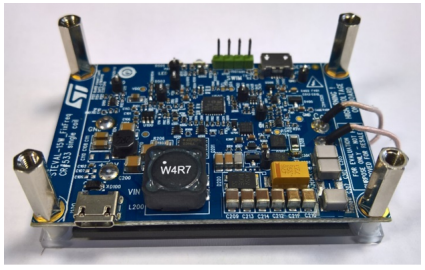
EVALSTWBC-EP

Data brief

Qi MP-A15 15W wireless charger TX evaluation kit based on STWBC-EP



Features

- STWBC-EP digital controller
- MP-A15 fixed frequency topology
- 15W output power
- Flexible input voltage: 5V to 20V from USB connector
- 5W mode when connected to 5V USB input
- WPC Qi1.2.4 standard compliant
- Robust demodulation algorithm, with triple path (V, I, f)
- Foreign Object Detection (FOD)
- Active presence detection
- UART protocol to control and monitor the system
- Complete reference design (evaluation board, schematics, PCB layout, firmware and tools)
- 2 layers PCB
- Low standby power consumption
- Flash memory based
- CE certified
- ROHS compliant

Product status link
EVALSTWBC-EP

Product summary	
Qi MP-A15 15W wireless charger Tx evaluation kit	EVALSTWBC-EP
USB-UART dongle	EVALWBCDNGV1
Firmware for EVALSTBC-EP	STSW-STWBC-EP
Digital controller for wireless battery charger transmitters (WBC) in 15W medium power applications	STWBC-EP

Description

The EVALSTWBC-EP is a wireless battery charger TX evaluation kit including EVALSTWBC-EP demo-board and EVALWBCDNGV1 USB-UART dongle, designed for charging devices such as smartphones or tablets where high power levels are required.

The evaluation board supports wireless battery charging of Qi-compliant devices up to 15W. It also supports proprietary fast charging modes up to 10W.

The EVALSTWBC-EP transmitter is based on the STWBC-EP and features a cost-effective half bridge topology offering external interface via UART. The EVALSTWBC-EP solution provides a complete kit, which includes demo board, its firmware, a graphical interface for debug, the schematics, layout files and bill of materials.

Tools for EVALSTWBC-EP are available on www.st.com and allow users to access runtime information such as power delivered, regulation error and protocol status. Parameters can also be adjusted with these tools

1 Evaluation board and block diagram

Figure 1. **EVALSTWBC-EP evaluation board**

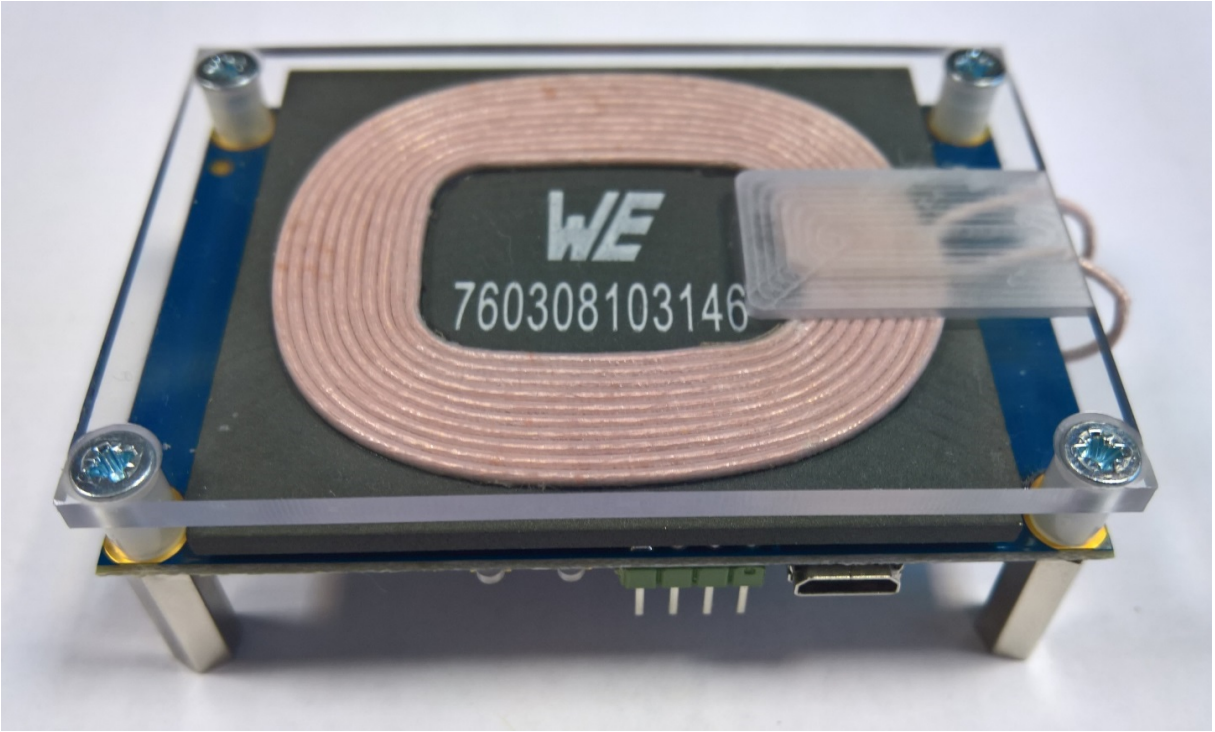
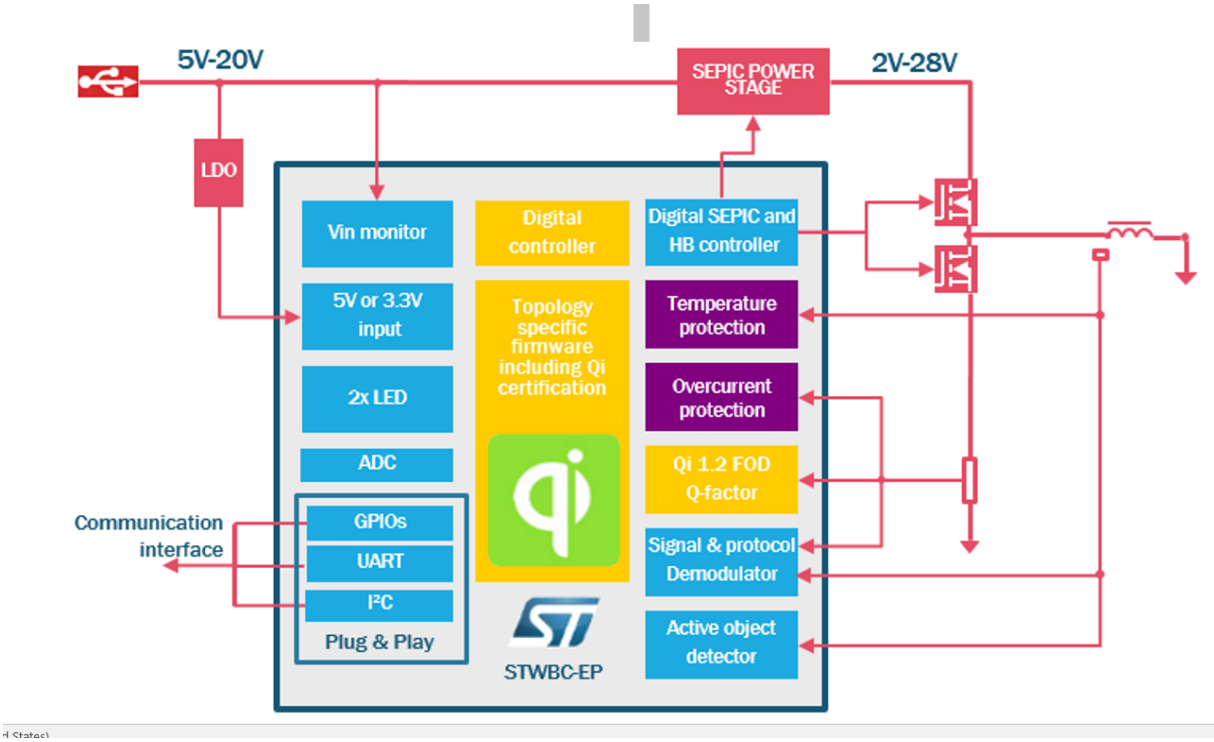


Figure 2. **EVALSTWBC-EP block diagram**



Revision history

Table 1. **Document revision history**

Date	Version	Changes
07-May-2019	1	Initial release.