

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

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

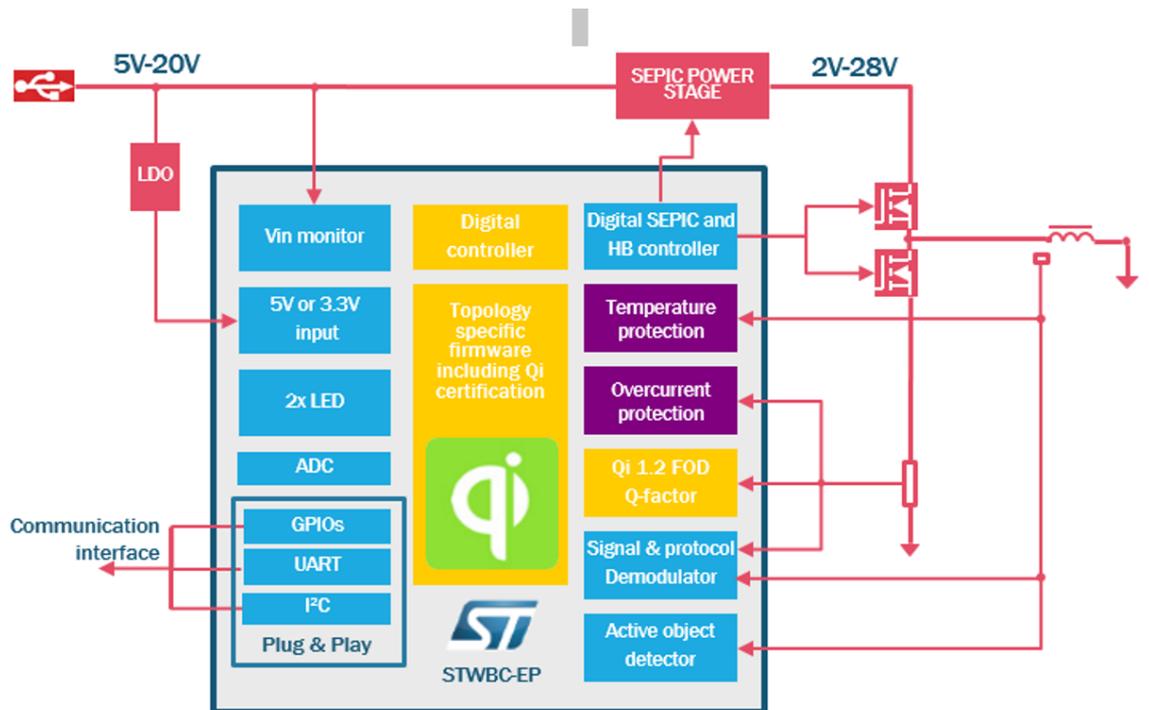
Product status link	
EVALSTWBC-EP	
Product summary	
Qi MP-A15 15W wireless charger Tx evaluation kit	EVALSTWBC-EP
USB-UART dongle	EVALWBCDNGV1
Firmware for EVALSTWBC-EP	STSW-STWBC-EP
Digital controller for wireless battery charger transmitters (WBC) in 15W medium power applications	STWBC-EP

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.

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