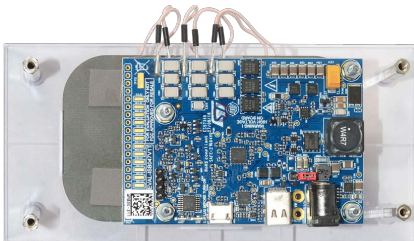


## Qi certified 3-coil 15 W wireless charger TX evaluation kit based on STWBC-MC



### Features

- **STWBC-MC** digital controller
- MP-A15 3-coil array
- 15 W potential power
- Flexible input voltage: 5 to 20 V from USB-C or DC jack
- 5 W mode when connected to 5 V USB input or DC jack
- Fixed frequency operation
- WPC Qi1.2.4 standard certified
- 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-layer PCB
- Low standby power consumption
- Flash memory based
- CE certified
- RoHS compliant
- WEEE compliant

### Product summary

Qi certified 3-coil 15 W wireless charger TX evaluation kit based on STWBC-MC	<a href="#">STEVAL- ISB047V1</a>
USB-UART dongle	<a href="#">STEVAL- WBCDNGV1</a>
Digital controller for wireless battery chargers transmitters for Qi multicoil applications	<a href="#">STWBC-MC</a>
Firmware for STEVAL- ISB047V1	<a href="#">STSW- ISB047FW</a>
Stand-alone USB PD controller	<a href="#">STUSB4500</a>

### Description

The [STEVAL-ISB047V1](#) wireless battery charger TX evaluation kit consists of the STEVAL-ISB047V1T evaluation board and STEVAL-WBCDNGV1 USB-UART dongle. The kit is 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 15 W. It also supports proprietary fast charging modes up to 10 W.

The STEVAL-ISB047V1 transmitter is based on the [STWBC-MC](#) and features a cost-effective half bridge topology, offering external interface via UART.

The STEVAL-ISB047V1 evaluation kit is a full solution, complete with boards, firmware, a GUI for debugging, schematics, layout files and bill of materials.

Tools for STEVAL-ISB047V1 are available on [www.st.com](http://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. STEVAL-ISB047V1T evaluation board

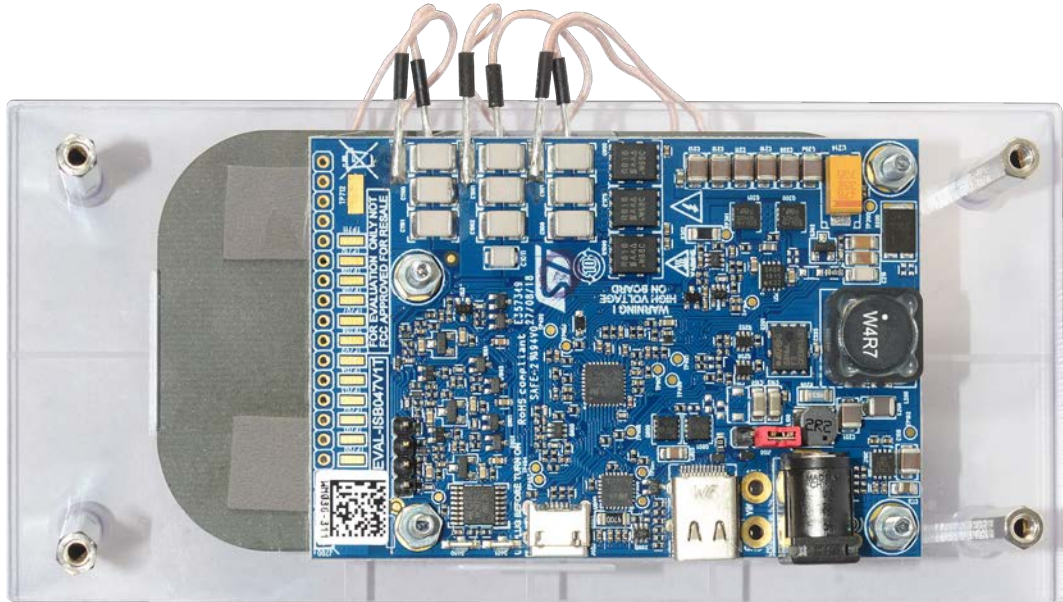
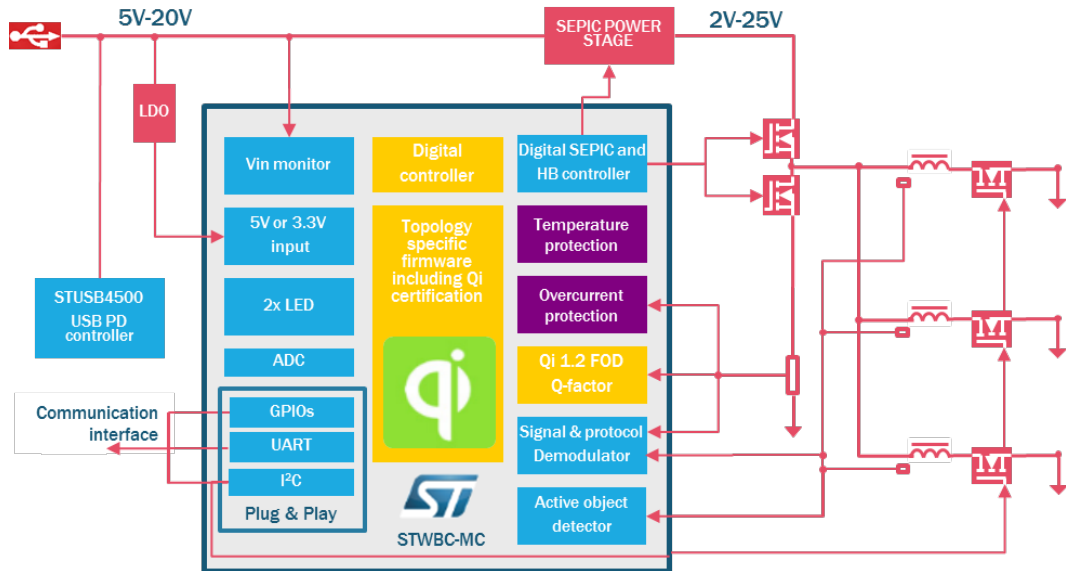


Figure 2. STEVAL-ISB047V1T block diagram



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
03-Aug-2018	1	Initial release.
06-Feb-2019	2	Updated title and cover page features.

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