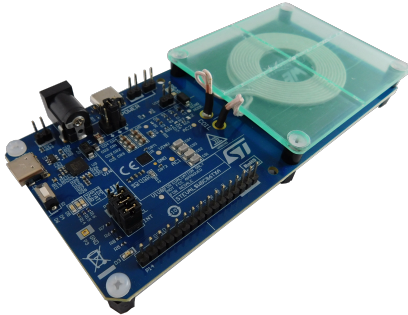


Qi-compatible wireless power transmitter evaluation board for 5 W application based on STWBC86



Features

- Up to 5 W output power transfer
- Power Tx design A-11a topology
- Wide input Operating range 5 V to 20 V
- Integrated drivers and high efficiency Full bridge inverter
- 32-bit, 64 MHz ARM Cortex M0+ core with 8 kB SRAM and 48kB ROM
- I²C interface
- FTP for Firmware patching and advanced features
- On-chip thermal management and protections

Description

The **STEVAL-WBC86TX** evaluation board, based on **STWBC86**, is designed for wireless power transmitter application, and allows its user quickly start their 5W Qi-BPP designed for wireless power transmitter applications, compatible wireless charging transmitter projects.

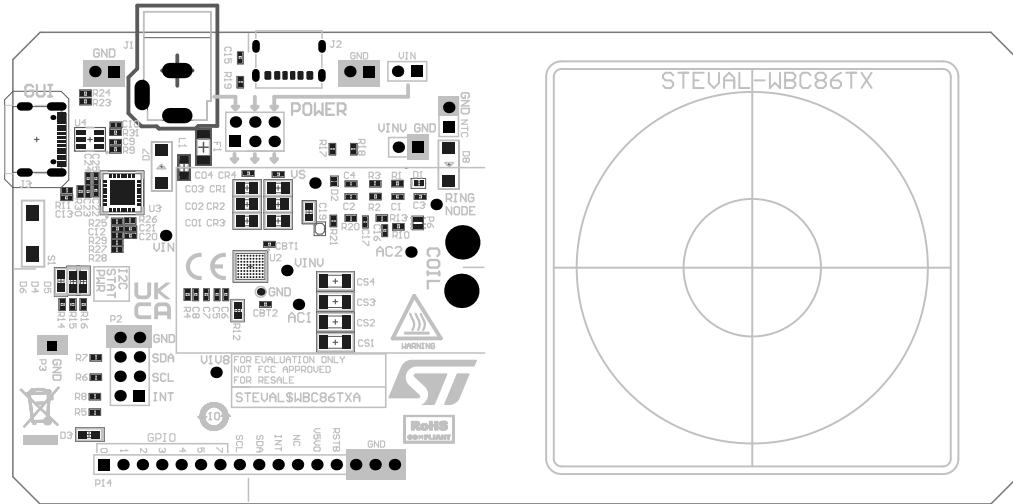
Through the I²C interface the user can access and modify different configuration parameters, tailoring the operation of the device to the needs of custom applications.

Using an on-board USB-to-I²C bridge, the user can monitor and control the **STWBC86** using the **STSW-WPSTUDIO** graphical user interface (GUI).

Product summary	
Qi-compatible wireless power transmitter evaluation board for 5W applications	STEVAL-WBC86TX
Qi-compatible inductive wireless charger power transmitter for up to 5W applications	STWBC86JR
Firmware for wireless power transmitter evaluation board	STSW-WBC86FWBPP
Graphical user interface for wireless power receiver and transmitter evaluation boards	STSW-WPSTUDIO
Applications	Wireless chargers

1 Component layout

Figure 1. Component layout



2 Schematic diagrams

Figure 2. circuit schematic (1 of 4)

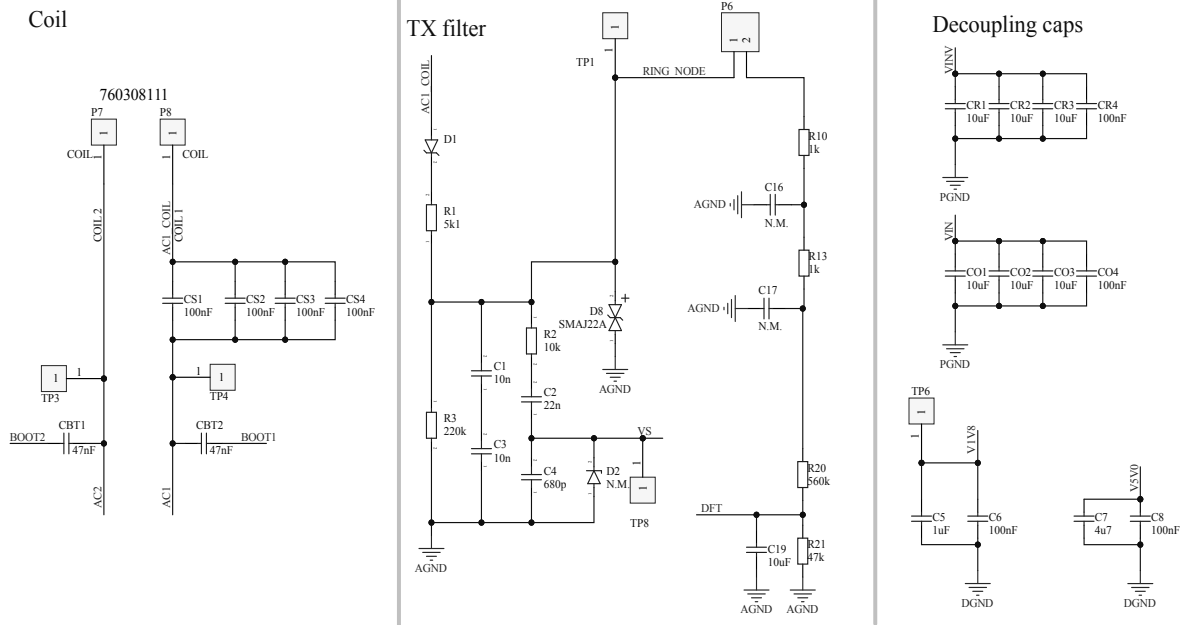


Figure 3. circuit schematic (2 of 4)

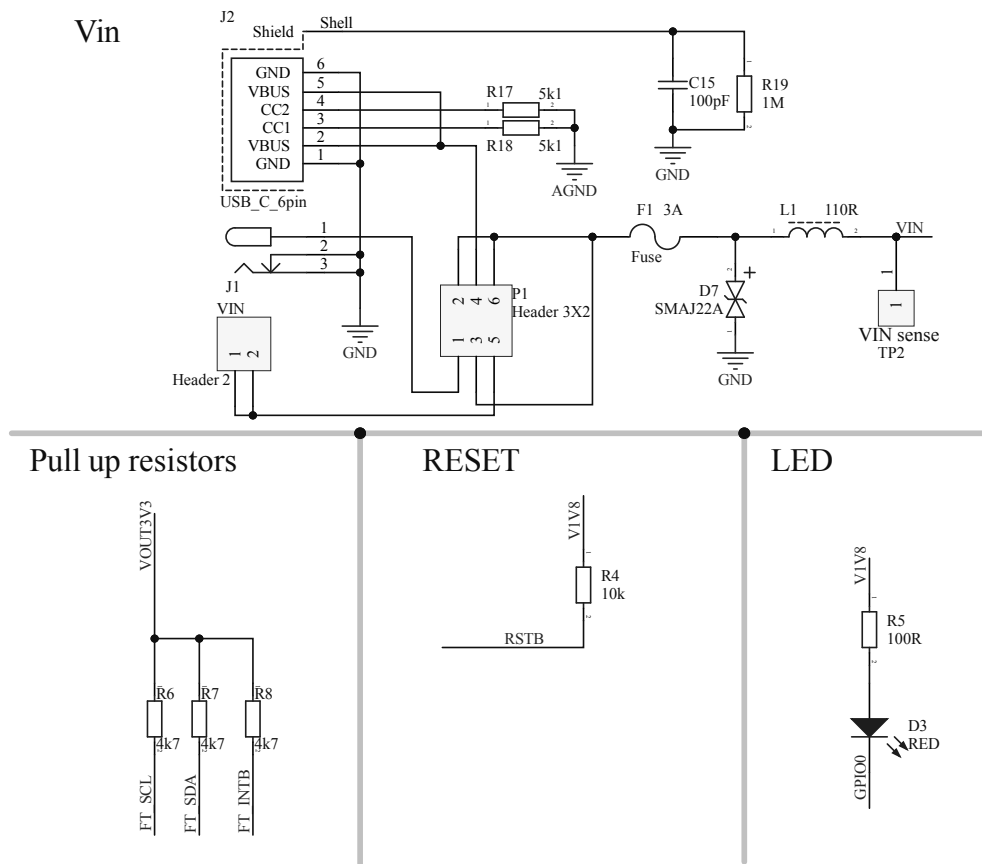


Figure 4. circuit schematic (3 of 4)

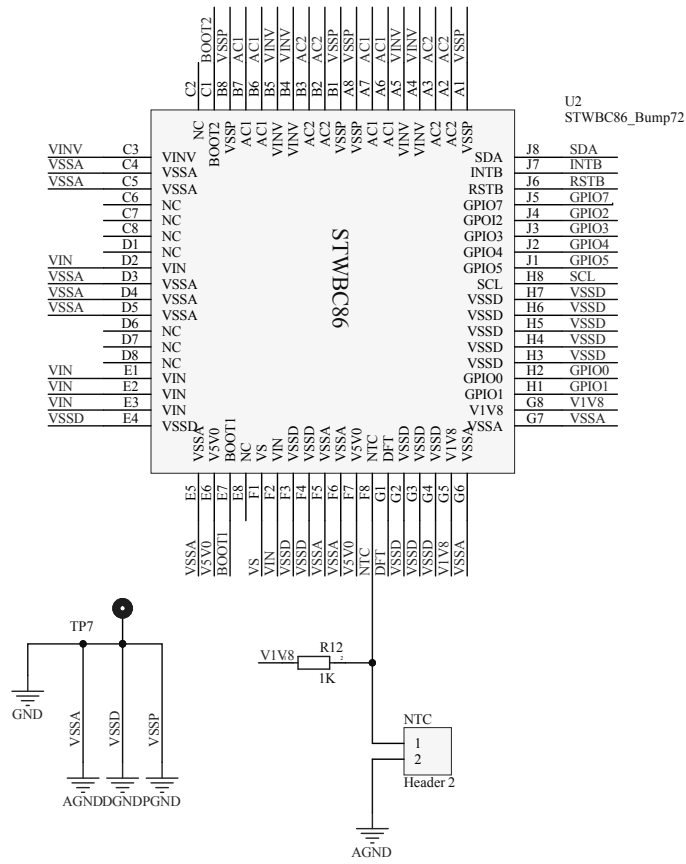
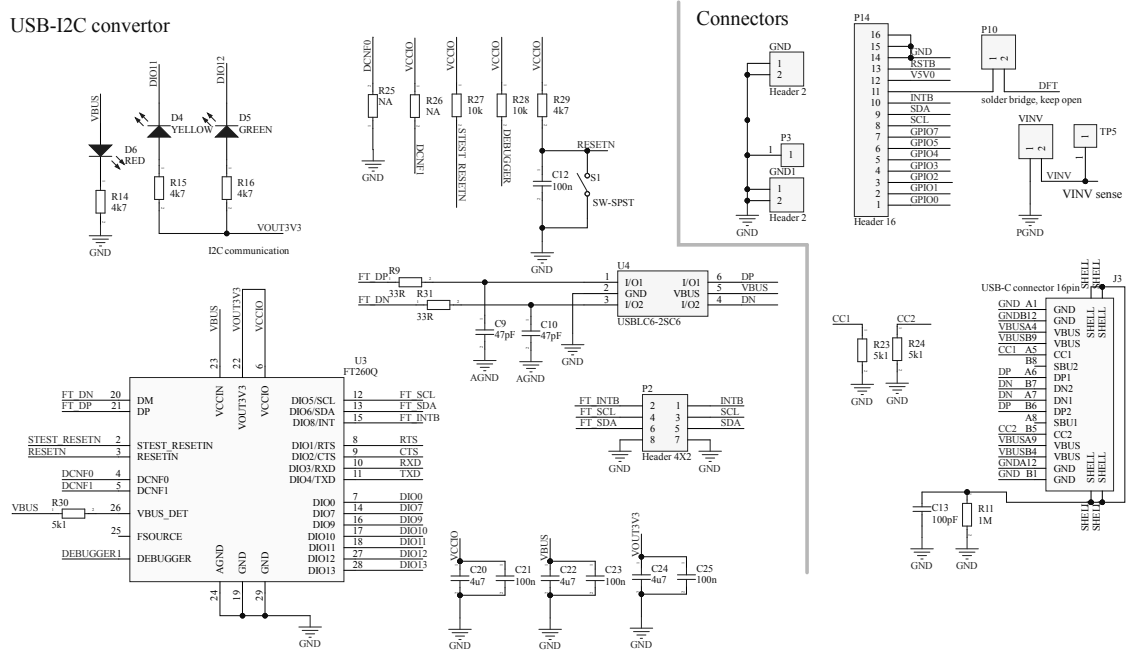


Figure 5. circuit schematic (4 of 4)



Revision history

Table 1. Document revision history

Date	Version	Changes
20-Jul-2023	1	Initial release.

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