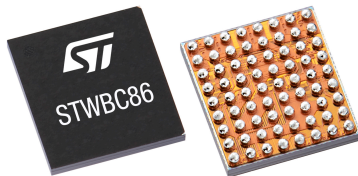


5W Wireless Power Transmitter



Features

- Up to 5 W output power transfer on the receiver side
- Monolithic solution with integrated Half-bridge/Full-bridge inverter and drivers for high efficiency and low BOM
- 32-bit, 64 MHz Arm® Cortex® M0+ core
- On-chip current sense
- I²C target interface for host controller
- Configurable GPIOs
- Accurate voltage/current measurements for FOD
- Current limit and thermal protection
- Robust ASK demodulation, FSK modulation for communication
- Package: WLCSP72 8 x 9 Ball (3.26 mm x 3.67 mm x 0.57 mm) pitch 0.4 mm

Product status link

STWBC86JR

Product summary

Order code	STWBC86JR
Package	WLCSP72
Packing	Tape and reel

Application

- Proprietary charging pads
- Smartwatches, wearables, hearables
- Medical and healthcare equipment
- Performs best with STWLC38JRM Rx

Description

The STWBC86JR is a highly integrated monolithic wireless power transmitter solution suitable for applications up to 5 W.

This solution requires a low external BOM count. Because of the integrated low impedance Full/Half bridge inverter, STWBC86JR achieves high efficiency and low-power dissipation.

The i²c interface allows firmware and platform parameters to be customized and the device can be configured using the embedded FTP.

Additional firmware patching also improves the application flexibility of STWBC86JR.

The flip chip package and low BOM count make the device suitable for very compact applications.

Revision history

Table 1. Document revision history

Date	Version	Changes
16-Jun-2025	1	Initial release

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