

## • Overview

TCS9027B is a highly integrated wireless charging transmitter SOC. The chip integrates 32-bit high-performance MCU, high-efficiency full-bridge inverter system, FSK modulation and dual-channel ASK demodulation system, and supports B PP5W and EPP 10W And EPP1 5 W maximum output power. High-precision voltage and current detection and Q value detection function, support higher precision FOD algorithm. At the same time, it also supports the voltage regulation function of external DC-DC, which can better support the application of constant frequency voltage regulation and fixed voltage input.

TCS9027B also integrates rich adapter detection interfaces: HVDCP / AFC / FCP / SCP and PD. Do not need to add an additional fast charging protocol chip when they cooperate with the fast charging adapter to realize wireless fast charging.

## package size

Part Number	package	Dimension
TCS9027B_QDY	FCQFN 25	4mm x 4mm x 0.75mm

## System schematic

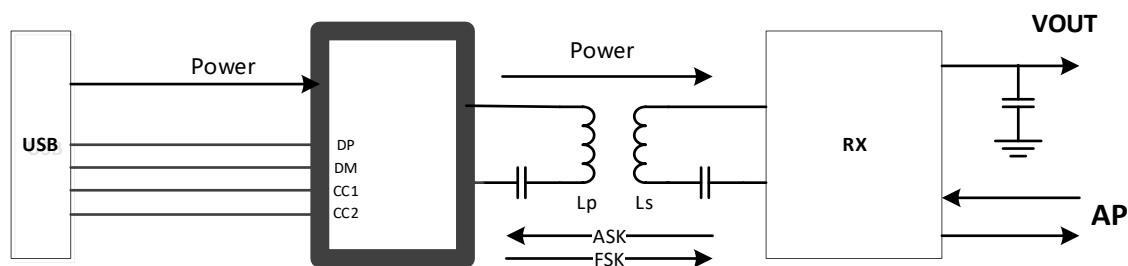


Figure 1

## Features

- 4-14V wide input voltage range
- Integrated 4 low R on power MOS FETs
- Integrated high-efficiency full-bridge drive circuit.
- Integrated high-precision voltage and current detection circuit.
- Integrated voltage and current dual demodulation circuit
- Integrated Q value detection function
- Support undervoltage and overvoltage protection
- Support over-current, over-temperature protection.
- Integrated fast charge adapter detection.

## Application

- wireless power transmitter
- DC motor driver