

15W High Efficiency Full-Bridge Power Stage for Wireless Charger Transmitter

Parameters Subject to Change Without Notice

DESCRIPTION

The JW[®]7951 is a high efficiency full-bridge power stage (integrated MOS plus driver) designed for wireless charger transmitter. With a transmitter controller, it can provide flexible wireless charger solutions compliant with WPC v1.2.3 Baseline Power Profile and Extended Power Profile.

The integrated low $R_{DS(ON)}$ power MOSFETs maximizes the system efficiency with better heat performance.

The JW7951 also provides input current sense function. The chip measures the input current with the current sampling resistor and reports it on the ISENSE pin, so that the total current can be read by the controller to realize the FOD (Foreign Object Detection) and in-band communication.

The JW7951 guarantees robustness with input over-current protection, thermal shutdown and under voltage lockout.

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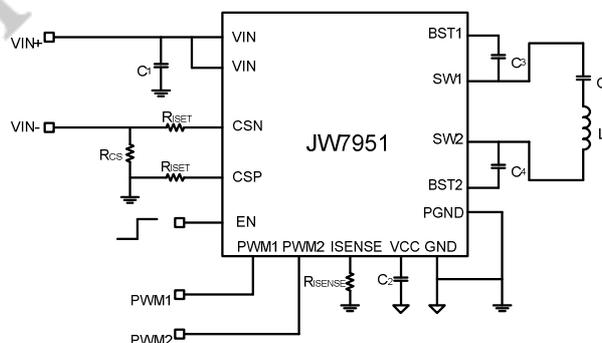
FEATURES

- 3.0V to 20V wide input voltage range.
- Output power: 15W
- Integrate low $R_{DS(ON)}$ switch power MOS.
- Independent two PWM control for flexible transmitter design.
- Integrate input current sense and programmable current sense ratio.
- Support all wireless charger switch frequency.
- High efficiency over full load range.
- Over-current protection
- Thermal shutdown.
- Package: QFN3x4-15 and ETSSOP20

APPLICATIONS

- Wireless Charger Transmitter
- Motor Drivers

TYPICAL APPLICATION



Typical application circuit