P9225-R, Dual Mode Wireless Charging Receiver for 5W Applications

Together with the P9038-R transmitter (Tx), the P9225-R forms a complete wireless power system solution for power applications up to 5W.

FEATURES AND BENEFITS

- Single chip solution supporting up to 5W applications
- WPC-1.2.4 compliant and PMA SR1 compatible
- Innovative over-voltage protection clamp eliminating external
- Embedded 32-bit ARM® processor
- Programmable output voltage
- 82% peak efficiency using IDT P9038-R Tx
- Supports I²C communication
- 0 to +85°C temperature range
- 52-WLCSP package

High-Efficiency, 5W Wireless Charging Receiver

The P9225-R is a high-efficiency wireless power receiver (Rx) compatible to PMA and compliant to WPC standards. Using magnetic inductive charging technology, the receiver converts an AC power signal from a resonant tank into a regulated DC output voltage ranging from 4.5 to 5.5 V. An integrated, low $R_{DS(ON)}$ synchronous rectifier and ultra-low dropout linear (LDO) regulator enable high efficiency, making the product ideally suited for battery-operated applications.

The P9225-R includes a 32-bit ARM® Cortex®-M0 microprocessor offering a high level of programmability. The device also features a programmable current limit and patented over-voltage protection function. The over-voltage protection function eliminates the need for additional capacitors typically required for wireless power receivers, minimizing the external component count and cost. Together with the P9038-R transmitter (Tx), the P9225-R forms a complete wireless power system solution for power applications up to 5W.

The P9225-R is available in a 52-WLCSP package, and it is rated for 0°C to 85°C ambient operating temperature range.

To request samples, download documentation or learn more visit: idt.com/wirelesspower