

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

IDT and the IDT Logo are registered trademarks or trademarks of Integrated Device Technology, Inc., in the United States and other countries. All other trademarks are the property of their respective owners. © 2018. Integrated Device Technology, Inc. All Rights Reserved.