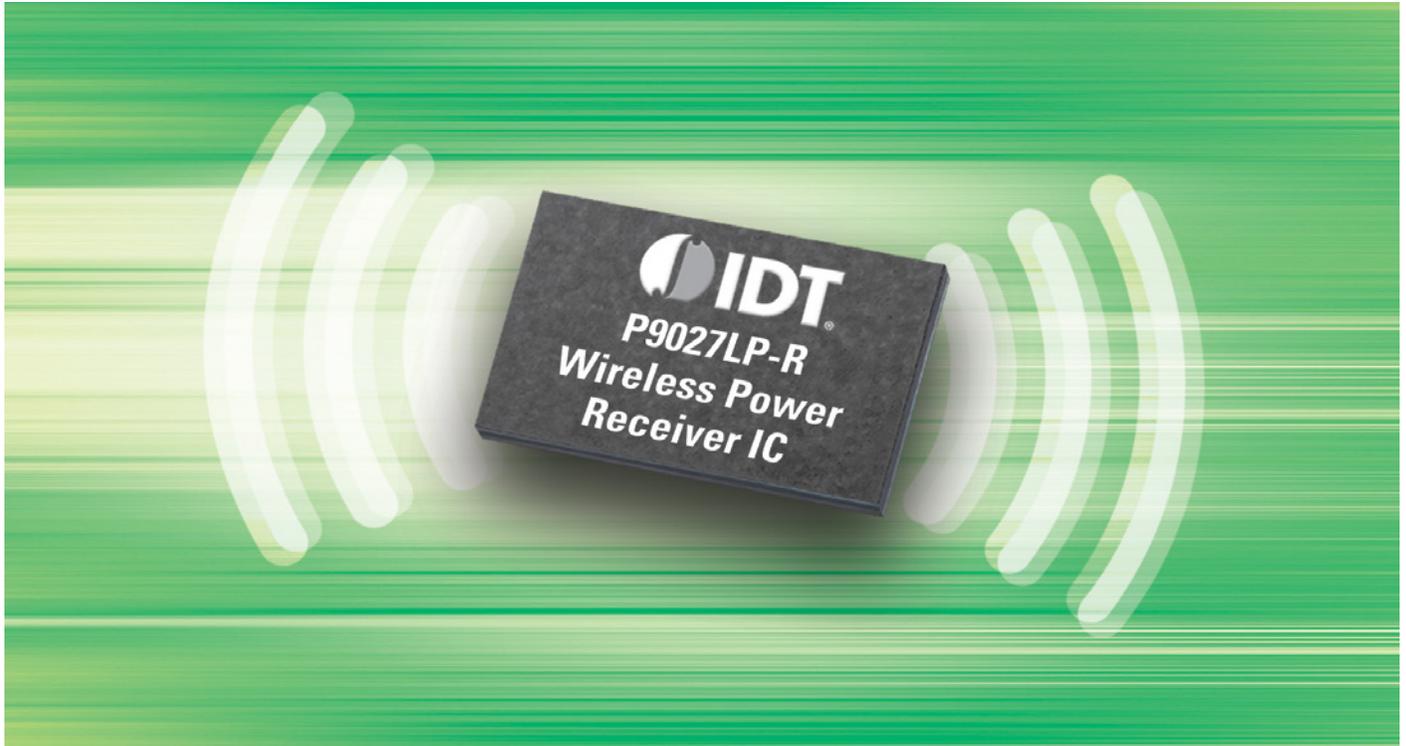


P9027LP-R Wireless Power Receiver for $\leq 3W$ Applications



FEATURES AND BENEFITS

- Small solution area: 32mm²
- Patented OVP clamp eliminating external capacitors
- Integrated tracking LDO
- Synchronous rectifier bridge with low $R_{DS(ON)}$ for high efficiency
- Programmable rectifier voltage for optimal efficiency
- Programmable current limit
- Supports I²C communication
- Programmable output voltage: 4.5 to 6.0 V
- 0 to +85°C temperature range
- 40-WLCSP package

High-Efficiency Receiver for Ultra-Compact Applications

The P9027LP-R is a highly integrated, low BOM count, single-chip receiver targeted for applications up to 3W. The receiver is designed to convert an AC power signal from a resonant tank into a programmable, regulated voltage ranging from 4.5 to 6.0 V. The device includes a high-efficiency synchronous full-bridge rectifier, a fast-tracking, NMOS LDO, and a charge pump to improve startup under very weak coupling or poor alignment conditions.

The P9027LP-R includes a patented internal scheme for modulation and communication using no additional external components. As a result, it provides an extremely small application area. The P9027LP-R is available in a WLCSP-40 package (2.24 × 3.62 mm), and it is rated for 0 to +85°C temperature range.

The P9027LP-R with the P9235A-R transmitter make a complete solution for $\leq 3W$ power applications.

To request samples, download documentation, or learn more, visit: idt.com/P9027LP-R