P9242-R Wireless Power Transmitter for 15W Applications

FEATURAS AND BENEFITS

- Up to 15W power transfer
- WPC-1.2.2 compliant
- Integrated step-down regulator
- Embedded 32-bit ARM® processor
- Integrated drivers for external power FETs
- 87% peak efficiency using P9221-R Rx
- Low standby power
- Supports I²C communication
- Dedicated remote temperature sensing
- –40°C to +85°C temperature range
- Small 48-VFQFN package

Industry’s Simplest 15W Wireless Power Transmitter

The P9242-R is a highly-integrated 15W magnetic induction wireless power transmitter compliant to the WPC-1.2.2 specification. The product is designed to withstand a wide input voltage range of 4.25 to 21 V, while consuming very low power in standby mode.

The transmitter includes a 32-bit ARM Cortex®-M0 processor, foreign object detection (FOD), full bridge power stage drivers, and on-chip simultaneous voltage and current demodulation. The device supports a programmable current limit, programmable LED pattern; and I²C serial interface protocol to read back information such as voltage, current and fault conditions. Together with P9221-R receiver, the P9242-R is a complete wireless power system solution for 15W applications.

The P9242-R is available in a space-saving 6 × 6 mm 48-VFQFN package. It is rated for –40°C to +85°C ambient operating temperature range.

To request samples, download documentation, or learn more, visit: idt.com/go/P9242-R

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