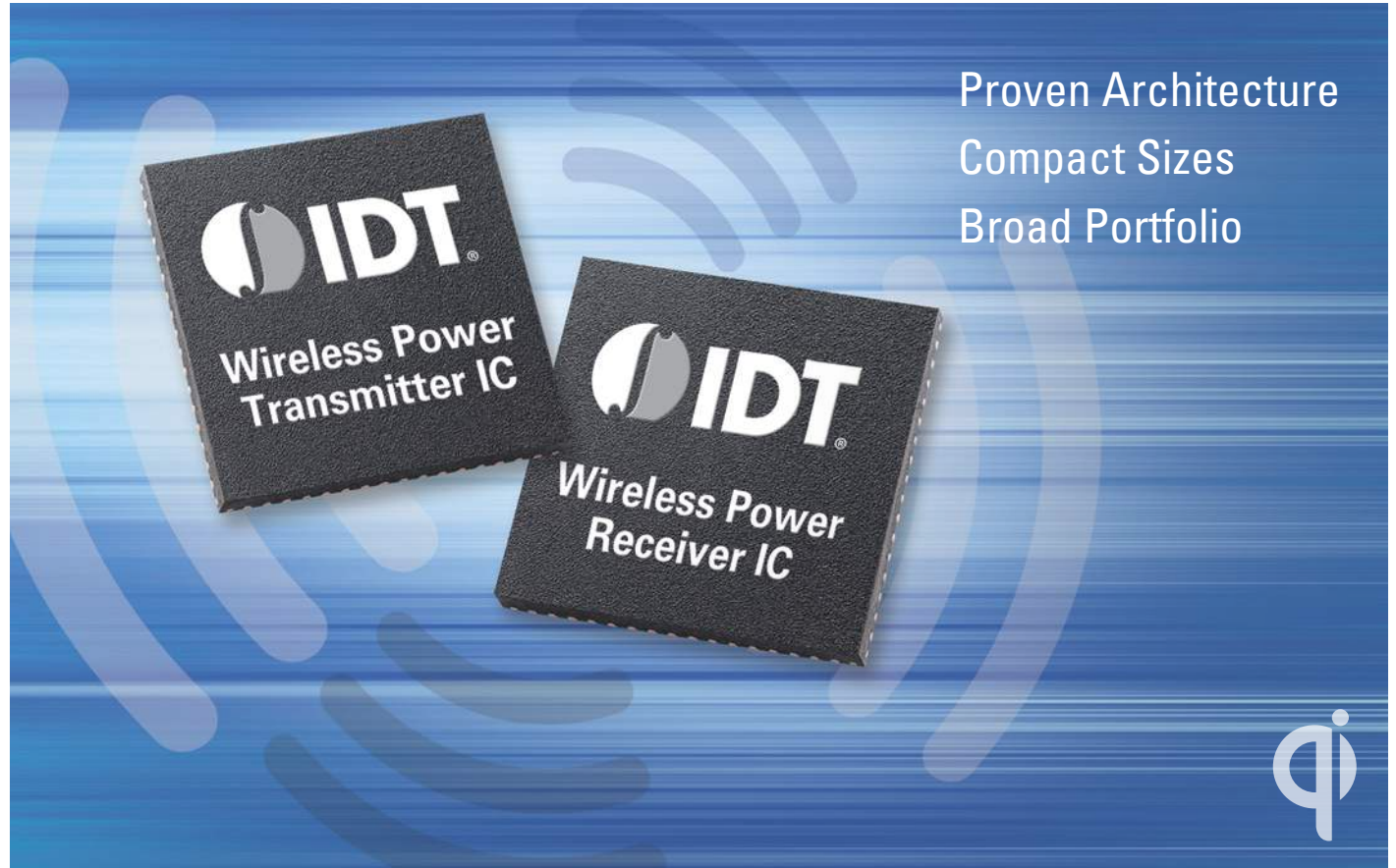


The Leader in Wireless Power



Proven Architecture
Compact Sizes
Broad Portfolio

WIRELESS POWER REFERENCE KITS

IDT's wireless power reference solutions support a wide range of applications, from 0.5 to 3 W electronic wearables and from 5 to 15 W consumer and industrial portables products.

Leveraging our leadership position and expertise in wireless power, IDT's wireless power reference kits offer Wireless Power Consortium (WPC) Qi-compliant solutions. These turnkey wireless power transceiver and receiver solutions enable faster prototyping and time to market. They are simple to use and offer the highest degree of integration and flexibility.

IDT is the leader in ICs for wireless power transfer systems. Addressing all major standards and technologies, IDT's broad portfolio of wireless power IC transmitters and receivers offer distinct advantages in integration, ease-of-use, power efficiency and flexibility. IDT's wireless power portfolio includes innovative and award-winning products. Prominent industry players have recognized this leadership and choose to partner with IDT for their next-generation wireless power solutions.

INDUSTRY-COMPATIBLE WIRELESS POWER ICs

IDT has strong partnerships in all major industry associations and ecosystems, including the Wireless Power Consortium (WPC) Qi Standard. IDT has developed a wide portfolio of wireless power ICs based on the magnetic induction wireless power transfer systems.

With magnetic induction technology, the base station's transmitter coil uses alternating current to generate a magnetic field, inducing a voltage in the receiver coil. This voltage is used to power a mobile device or charge a battery. This results in industry leading high efficiency and fast charging time.



The Leader in Wireless Power

Applications Include

- Smartwatches
- Fitness Trackers
- Headphones and Accessories
- Electronic Toys



Wireless Power Reference Solution for 0.5 to 3 W Applications

Wearable technology is becoming ubiquitous and interwoven into daily life as innovative companies look to enhance or extend the functionality of watches and personal accessories. Many varieties of portable personal technology accessories provide users with personalized data on daily activities and state of health, tracking information such as movement, steps and heart rate. A new segment is also emerging in connected sports equipment allowing users to track their performance metrics.

IDT's wireless power reference kit is targeted for applications with power requirements ranging from 0.5 to 3 W. The reference kit is comprised of both a transmitter (P9235A-R-EVK) and a receiver (P9027LP-R-EVK), and contains three different coil size options to support applications with different form factors. The turnkey reference design enables immediate prototyping and an associated layout module allows for direct instantiation onto a system board, while an optimized and fully-tested Bill-of-Materials (BOM) takes the guess-work out of component selection. In addition, the extensive digital library of collateral eliminates traditional design and support barriers regardless of application volume.

Part Number	Product Description	Voltage Range	Coils	Package (mm)
WP3W-RK	P9027LP-R Receiver	4.5 to 6 V	1W / 2W / 3W coils	5 x 5 32-VFQFPN
	P9235-R Transmitter	4.5 to 5.5 V	1W / 2W / 3W coils	7 x 7 56-VFQFPN



The Leader in Wireless Power



Applications Include

- Electric Shavers
- Wireless Headphones
- Video / Audio Remotes
- Portable Medical Equipment

Wireless Power Reference Solution for 5W Applications

The mobile phone is still the primary driver for the deployment of the wireless power charging market. Successful adoption of wireless power charging in smartphones has increased consumer awareness and acceptance of wireless power technology in other areas of consumer and medical applications. As the technology matures, adoption of wireless power charging will drive development of aftermarket accessory solutions that benefit from the ease-of-use, environmental protection and safety features wireless charging provides.

The P9038-R-EVK and P9025AC-R-EVK are turnkey 5 Watt, Qi-certified wireless power transmitter and receiver reference kits, for fast prototyping and design integration. The kits consist of an easy-to-use reference board and comprehensive support collateral that significantly eases design-in effort and minimizes time-to-market. An associated layout module enables direct instantiation on to a system board, while an optimized and fully-tested bill-of-materials (BOM) takes the guess-work out of component selection. The solutions are well-suited for a wide range of applications, including PC peripherals, furniture, medical devices, and other portable devices still hindered by traditional contact-based charging stands or cables.

Part Number	Product Description	Voltage Range	Coils	WPC Qi Certified	Package (mm)
P9025AC-R-EVK	Receiver	5.04 to 5.56 V	5W coil	1.1.2	5 x 5 32-VFQFPN
P9038-R-EVK	Transmitter	4.5 to 6.9 V	A5 / A11	1.2.2	7 x 7 56-VFQFPN



The Leader in Wireless Power



- Applications Include**
- Charging Stations
 - Tablets
 - PC Peripherals
 - Smartphone Fast Charge Docks

Wireless Power Reference Solution for 15W Applications

Medium-power wireless charging provides users with the capability of faster charging time and the ability to power a wider variety of products. These products include higher power consumer electronics, commercial, and industrial products. Applications may include infrastructure charging stations in airports, restaurants and other public areas. These wireless power solutions are scalable and compatible to charging solutions from 100mW to 15W.

The P9242-R-EVK and P9221-R-EVK are turnkey 15 Watt, Qi-certified wireless power transmitter and receiver reference kits for fast prototyping and design integration. The kits consist of an easy-to-use reference board and comprehensive support collateral that deliver ultra-high efficiency of 87 percent while significantly easing design-in effort and minimizing time to market. An associated layout module enables direct instantiation onto a system board, while an optimized and fully-tested bill of materials (BOM) takes the guess-work out of component selection. The solutions are well-suited for a higher power range of applications, including tablets, charging stations, smartphone fast charge docks, PC peripherals and other portable devices.

Part Number	Product Description	Voltage Range	Coils	WPC Qi Certified	Package (mm)
P9221-R-EVK	Receiver	3.5 to 12 V	15W coil	1.2.2	2.64 x 3.94 mm 52-WLCSP
P9242-R-EVK	Transmitter	4.25 to 21 V	MP-A2	1.2.2	6 x 6 40-VFQFPN

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