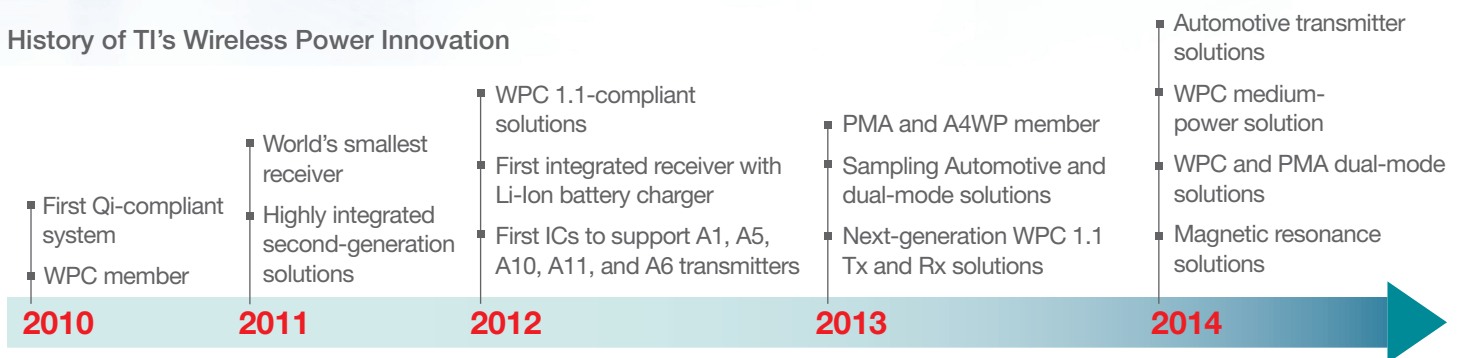


Industry-Leading Wireless Power Solutions

The Most Widely Adopted in the Market



History of TI's Wireless Power Innovation



The TI Advantage

- Industry leader with first WPC 1.1 ICs
- Innovative, broad portfolio
 - Multiple transmitter types, 7 receiver versions
- Comprehensive design support
 - Reference designs, app notes, complete solutions

Solutions on the Market

- 40+ Qi-compliant receivers
- 20+ Qi-compliant transmitters
- 80% of current Qi-enabled devices use TI technology

Visit ti.com/wirelesspower for product details and design resources.

Design with Proven Wireless Power Solutions

Transmitter Features:

Widest range of transmitter type support

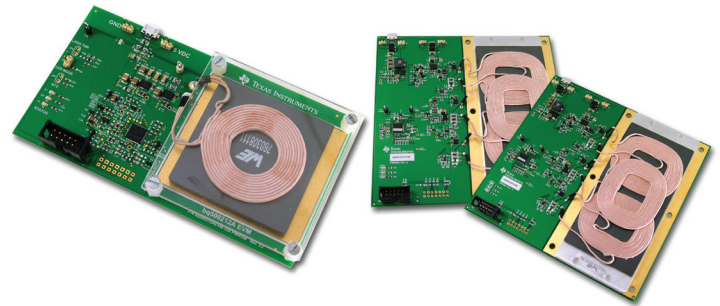
- First A1, A5, A10, A11, and A6 solutions
- Single coil and coil arrays
- Next-generation portfolio reduces BOM with integrated demodulation

5V input with patented Dynamic Power Limit™

- Supports 5V, A5, and A11 WPC transmitter types (bq500211A, bq500212A)
- Ensures robust operation from USB port

Continued innovation

- Increased charging area coil array (bq500412)
- Supports single and multiple coil designs
- Small transmitter form factors
- WPC 1.1-compliant (Foreign Object Detection) for 1.0 and 1.1 receivers



bq500212A eval board with 5V coil.

bq500412 eval board with 12V coil array.

Qi-Compliant Transmitter Solutions

Device	Tx Type	V _{IN} (V)	Magnet	WPC	Key Features
bq500412	A6	12	No	1.1	1 to 3 coils, free positioning
bq500212A	A5 A11	5 5	Yes No	1.1	Reduced component count, power from low-cost 5V adapter or USB port
bq500211A	A5 A11	5 5	Yes No	1.1	Power from low-cost 5V adapter or USB port
bq500210	A1 A10	19 19	Yes No	1.0	Second-generation solution with digital demodulation to reduce component count

Receiver Features:

Industry's first and smallest receivers

- Monolithic receiver IC with built-in Li-Ion charger
- 93% AC/DC efficiency
- WPC 1.1-compliant (Foreign Object Detection)

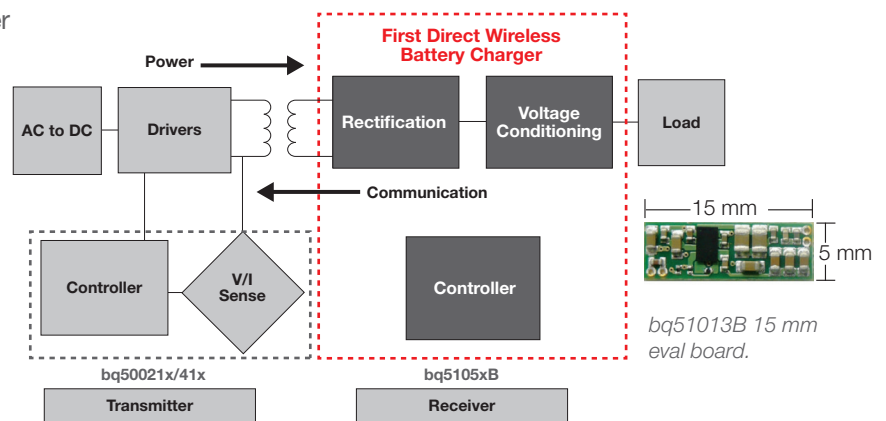
Patented system design

- Adaptive communications current limit for robust communications during transients
- Dynamic efficiency scaling optimizes performance over a wide range of operating power
- Dynamic rectifier control improves load transient performance

Robust and flexible architecture

- 20V maximum input tolerance with patented OVP clamp
- Automatic adaptor detection enables wired or wireless charging
- 5V, 7V, and Li-Ion battery charger options

Wireless Power Transfer System



Qi-Compliant Receiver Solutions

Device	Description
bq51013A	WPC 1.0, integrated wireless power receiver, 5V regulated output
bq51013B	WPC 1.1, integrated wireless power receiver, 5V regulated output
bq51050B	WPC 1.1, integrated wireless power receiver and 4.2V Li-Ion charger receiver
bq51051B	WPC 1.1, integrated wireless power receiver and 4.35V Li-Ion charger receiver

To download data sheets or evaluate TI's wireless power technology in your lab, visit ti.com/wirelesspower or contact your local TI office.

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