

bqTESLA™ Portfolio of Wireless Power Solutions

Easily Integrate Wireless Charging into Portable Electronics

bq500210 Wireless Power Transmitter

TEXAS INSTRUMENTS

bq51013 Wireless Power Receiver



TI's bqTESLA™ wireless power portfolio includes both receiver and transmitter ICs for contactless charging integration. Both devices are supported by evaluation modules, user guides and development kits.

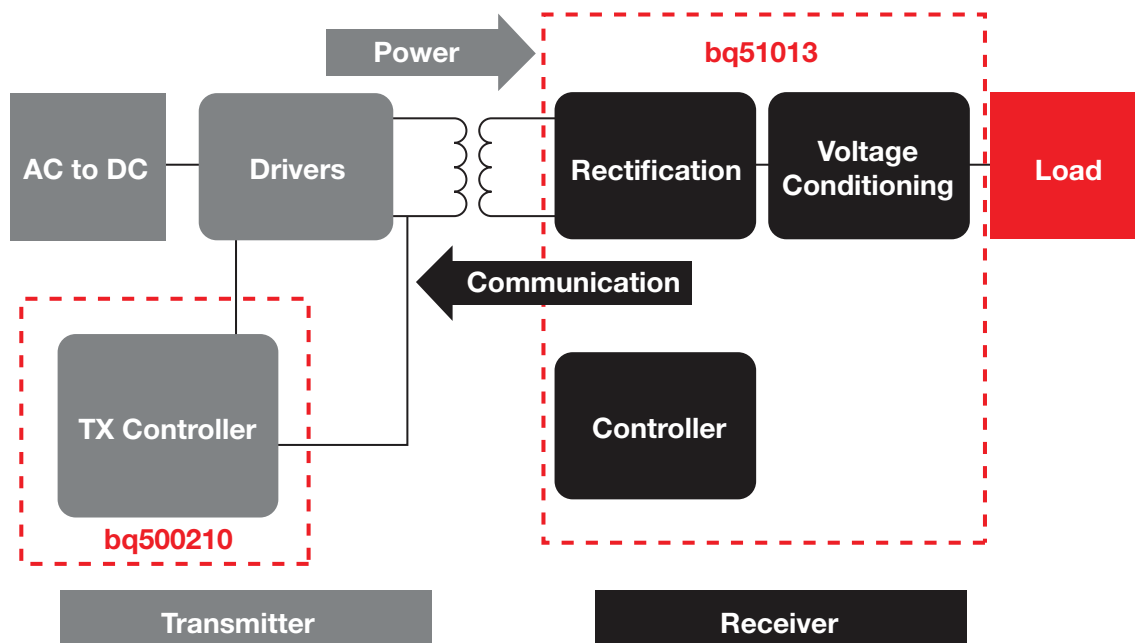
Example Applications

Phones
Remote controls
Digital cameras (still and video)
Medical equipment
Power tools and flashlights
MP3 players
Toothbrushes
Global positioning devices
Automotive accessories



TI Wireless Power Devices are Qi™ Compliant!

- Wireless Power Consortium (WPC) is the only industry standard for wireless power
- Qi compliant assures interoperability between various charging pads and portable devices



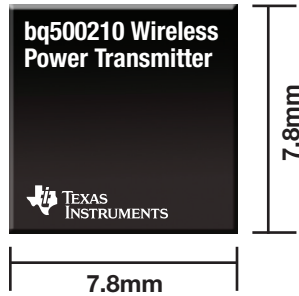
Learn more, find answers and stay up to date at:

www.ti.com/wirelesspower

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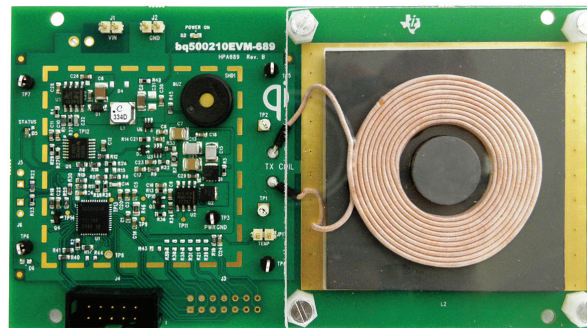
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bq500210 Wireless Power Transmitter Gen 2



Key benefits and features

- Digital demodulation signal processing reduces total system components from previous general analog demodulation circuitry.
- Single-chip wireless power transfer controller compliant to WPC Qi-compliant specification 1.0.2, which allows for a simple, cost effective, interoperable design implementation.
- Real-time efficiency analyzer maximizes power transfer efficiency, reduces power consumption, and protects itself and the receiver from excessive power loss and heat.
- Parasitic metal object detection (PMOD) provides protection from power transfer to metal objects, overheating and power loss.
- Overload and over temperature protection ensures safe and reliable operation.
- Small 7-mm x 7-mm, 48-pin QFN package minimizes impact to end equipment designs.



▲ bq500210EVM-689

bq51013 Wireless Power Receiver



▲ bq51013EVM-725

Key benefits and features

- Highly-integrated and efficient wireless power receiver IC includes full-bridge synchronous rectification, voltage conditioning and wireless power control in one single device.
- 1.9-mm x 3-mm WCSP package allows for easy integration with minimal size impact. Device PCB area reduced by 80-percent from first generation receiver solution, bqTESLA100LP.
- Wireless Power Consortium (WPC) Qi-compliance enables powering or charging from TI's transmitter solution, and any Qi-compliant transmitter in the market.
- Built in protection against voltage, current and temperature fault conditions, assure a safe and reliable system operation.
- 93% peak efficiency reduces thermal rise inside the system while allowing charge rates comparable to AC adapter.

Wireless Power Development Kit

For a complete kit (transmitter + receiver), order the bq500210 and bq51013 EVMs.

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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