



News Release

Media Contacts:

Matt McKinney Texas Instruments 214-567-7406

m-mckinney1@ti.com

Mary C. Dunnie GolinHarris 972-341-2576

mdunnie@golinharris.com

(Please do not publish these numbers or e-mail addresses.)

TI transforms mobile charging experience with wireless power

Single-chip wireless power receiver with integrated battery charger enables faster, more efficient charging; next-generation transmitter expands charge area

DALLAS (Nov. 7, 2012) – Making wireless power a reality, Texas Instruments Incorporated (TI) (NASDAQ: TXN) today introduced its first single-chip wireless power receiver with integrated battery charger and a new “free-position” transmitter integrated circuit, which expands the charge area by 400 percent. The two bqTESLA™ circuits give smartphone users a simpler, stress-free charging experience and help designers implement wireless power technology in more places, such as automotive consoles, charging pads and office furniture. For samples and bqTESLA development kits, visit: www.ti.com/wirelesspower-pr.

TI's bq51050B is the industry's first Wireless Power Consortium (WPC) 1.1 Qi-compliant [wireless power receiver with integrated direct battery charger](#), and enables faster, more efficient charging of smartphones, wireless keyboards and other portable electronics. The unique 20-V receiver combines rectification, voltage conditioning, communication control and Li-Ion charging capability in a single, tiny integrated circuit, – eliminating the need for a separate battery charger circuit. The inductor-free, single-stage design delivers the industry's highest system efficiency and saves up to 60-percent board space compared to a multi-stage implementation.

In addition to the receiver, TI's bq500410A is the first [WPC 1.1-ready wireless power transfer controller](#) to support A6 transmitters. The controller allows a Qi-compliant smartphone or other portable device to charge in a surface area of at least 70 mm by 20 mm, 400-percent larger compared to today's 18-mm by 18-mm “bull's-eye” charge space. The bq500410A achieves greater than 70-percent efficiency, and relies on a unique parasitic metal and foreign object detection feature to safely protect the system and stop delivering power if a metal object is detected between the transmitter and receiver.

Wireless power at electronica 2012

TI's receivers and bq500410A transmitter ICs are included in the new [Nokia Lumia 920](#) and [Nokia Lumia 820](#) smartphones and wireless charging accessories, such as the [Nokia BH-220](#) Bluetooth headset and DT-38 cradle, [JBL PowerUp Wireless Charging Speaker](#) docking station with built-in NFC, and the Nokia [Wireless Charging Pillow by Fatboy](#), which TI will demonstrate in its booth at electronica (Hall A4, Booth 420) on Nov. 13-16.

Making wireless power a reality

Wireless power is an emerging technology that creates a better charging experience for consumers, just as Wi-Fi replaced the need to use an Ethernet cable for Internet connectivity. TI's advanced receiver and

transmitter integrated circuits, design tools and resources are making wireless power a reality. TI has current solutions that support Qi-compliant devices, and will expand its portfolio to support future, viable technologies. As the leading provider of power management ICs, including battery management and power supply technology, TI relies on power design expertise to drive innovations in wireless charging.

Availability and pricing

The bq51050B comes in a 1.9-mm by 3.0-mm WCSP package or 4.5-mm by 3.5-mm QFN, and is priced at US\$2.75 in 1,000-unit quantities. A bq51051B version with 4.35-V charge voltage is available. The bq500410A comes in a 48-pin, 7-mm by 7-mm QFN package, and is priced at US\$3.18 in 1,000-unit quantities.

Find out more about TI's power portfolio by visiting the below links:

- Check out TI's battery management, low-power DC/DC and highly integrated PMICs at: www.ti.com/power-pr.
- Ask questions, solve problems in the Power Forum in the TI E2E™ Community: www.ti.com/powerforum-pr.
- Download TI's Power Management Guide: www.ti.com/powerguide-pr.

#

About Texas Instruments

Texas Instruments semiconductor innovations help 90,000 customers unlock the possibilities of the world as it could be – smarter, safer, greener, healthier and more fun. Our commitment to building a better future is ingrained in everything we do – from the responsible manufacturing of our semiconductors, to caring for our employees, to giving back inside our communities. This is just the beginning of our story. Learn more at www.ti.com.

Trademarks

TI E2E and bqTESLA are trademarks of Texas Instruments. All registered trademarks and other trademarks belong to their respective owners.