WattUp® PowerHub Developer Kit



Enabling Faster Integration of Energous' WattUp Wireless Charging Technology Into Customer Product Designs

The WattUp PowerHub reference design transmitter incorporates the DA14682, DA4100, EN3921 and EN3913M devices. The DA4100 is a highly integrated system-on-chip (SoC) Wireless Power Transfer (WPT) transmitter IC, the EN3913M is a highly-efficient, GaN power amplifier (PA) controlled by the EN3921, while the DA14682 is a Bluetooth low energy 5.0 SoC with enhanced security and integrated FLASH memory.

On the receiver side, the DA2223 RF-to-DC receiver can be connected to up to four antennas and the DA14585 is a size-optimized, ultra-low power Bluetooth low energy system-on-chip ideal for small form factor product designs.



Kit Contents

- Reference Design Transmitter Hardware
- Reference Design Receiver Hardware
- · Mobile App to monitor & control TX/RX
- TX/RX Schematics and Layout files
- TX/RX Antenna Design files
- TX/RX Mechanical files
- Firmware SDK

Simple Implementation

- Flexible designs that can fit into multiple transmitter and receiver designs
- Universal transmitter supports variety of receiver devices charging at the same time "one to many"
- · Single PA/antenna non-beamforming
- Lowest BOM for Tx and Rx
- Smallest Tx Size

User Friendly Experience

Over-the-air distance charging interoperability

Advantages

- Ready to evaluate WattUp transmitter and receiver platform technologies
- Faster TX solution integration through optimized design
- RX capable of charging small form factor and large consumer devices
- Proven FW SDK already supporting Dialog BLE device
- RX detection and management for multiple simultaneous charging devices

Scalable Architecture

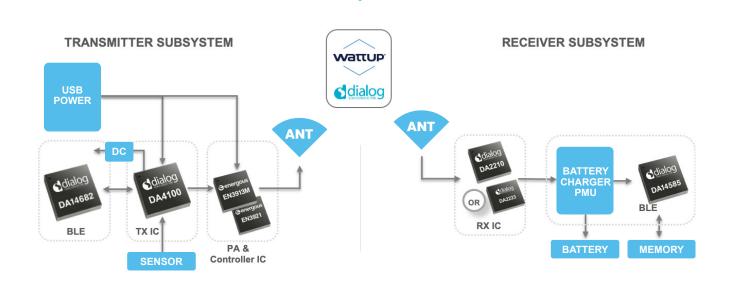
 Scalable Tx architecture to go for higher power and higher distance







WattUp PowerHub Wireless Charging Developer Kit Block Diagram



Applications

- **Smart Speakers**
- **Gaming Consoles**
- **Desktop Speakers**
- WiFi Access Points
- Computer monitors
- Teleconference Equipment & More

Wireless charging transmitter supporting groundbreaking at-a-distance charging

- Small size and cost optimized BOM using optimized WattUp technology
- Scalable performance up to 5.5 W of conducted power using a single WattUp PA
- Charging Zone up to 15cm
- Optimized antenna for performance design fitted to product mechanical requirements

For more information or to order, please contact: sales@energous.com

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