

WattUp[®] Hearing AID & PSAP Developer Kit

WattUP[®]

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

The WattUp developer kit for hearing aids and PSAPs provides manufacturers with a robust set of tools and resources to enable faster integration of Energous' WattUp technology into future product designs.

The hearing aid reference design transmitter incorporates the DA4100, DA3210 and DA14682 ICs. The DA4100 is a highly integrated system-on-chip (SoC) Wireless Power Transfer (WPT) transmitter IC, while the DA3210 is a high-power, high-efficiency power amplifier (PA) and 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. The complete chipset is available from Energous' manufacturing partner, Dialog Semiconductor.

Advantages

- Faster product integration
- Easier manufacturing of wirelessly charged products
- Small footprint to accommodate devices with various form factors, including those with curved edges and non-flat surfaces
- WattUp receiver detection
- Transmitter is available through authorized ODM partner

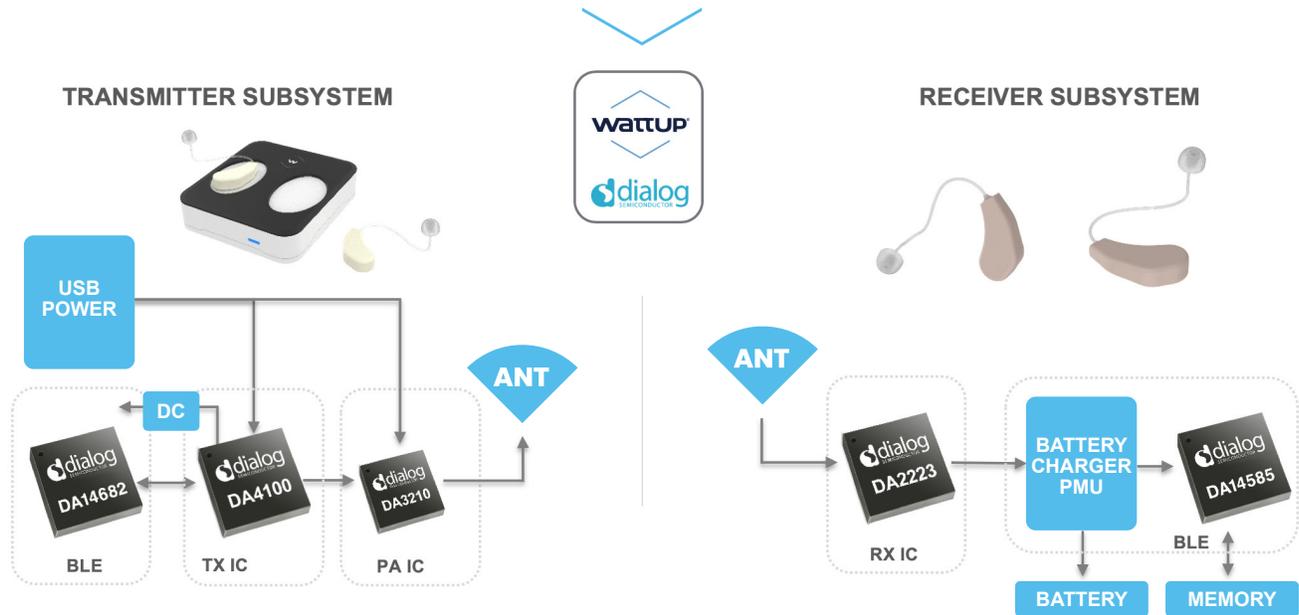


Kit Contents

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



WattUp NF-230 Wireless Charging Developer Kit Block Diagram



Receiver Board

- Optimized for 20mA battery at 0.75C (15mA), higher-power charging available per use case
- DA2223 RXIC, DA14585 BLE and supporting circuitry
- Miniature rectifier circuit board design
- Multiple antenna system support
- Fuel gauge and battery protection
- App-based power measurement and control

Transmitter

- DA3210 Power Amplifier and DA4100
- TX Controller
- Split feeds for multiple antennas
- DA14682 BLE communication
- Debug Port on USB-C connector

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

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