WattUp® Hearing Aid Developer Kit

Wattup

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

The WattUp developer kit for hearing aids 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 EN4100 and EN3210. The EN4100 is a highly integrated system-on-chip (SoC) Wireless Power Transfer (WPT) transmitter IC, while the EN3210 is a high-power, high-efficiency power amplifier (PA).

On the receiver side, the EN2223 RF-to-DC receiver can be connected to up to four antennas.



Kit Contents

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

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





WattUp Hearing Aid Wireless Charging Developer Kit Block Diagram



Receiver Board

- Optimized for 20mA battery at 0.75C (15mA), higher-power charging available per use case
- EN2223 RXIC with 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

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

- EN3210 Power Amplifier and EN4100 TX Controller
- Split feeds for multiple antennas
- **BLE** communication



Genergous Scan to Download this Document

This publication is issued to provide outline information only, which unless agreed by Energous Corporation may not be used, applied, or reproduced for any purpose or be regarded as a representation relating to products.

Energous, WattUp, and the Energous and WattUp logos are trademarks of Energous Corporation. All other product or service names are the property of their respective owners. © Copyright 2022 Energous Corporation. All rights reserved.

3590 N 1st Street, Suite 210 | San Jose, CA 95134 | (408) 963-0200