

# WattUp® Smart Glasses Developer Kit



# WATTUP®

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

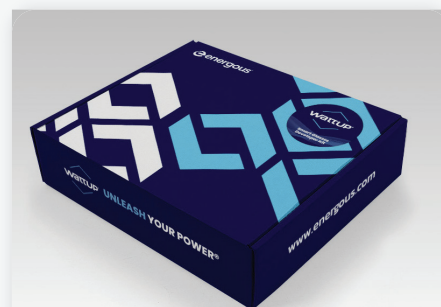
The WattUp developer kit for smart glasses provides manufacturers with a robust set of tools and resources to enable faster integration of Energous' WattUp technology into future product designs.

The smart glasses reference design transmitter incorporates the DA4100, DA3210 and DA14682 ICs. The DA4100 is a highly integrated System-on-Chip (SoC) RF transmitter IC, while the DA3210 is a high-power, high-efficiency power amplifier (PA) and the DA14682 is a Bluetooth low energy 5.0 System-on-Chip (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 SoC 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

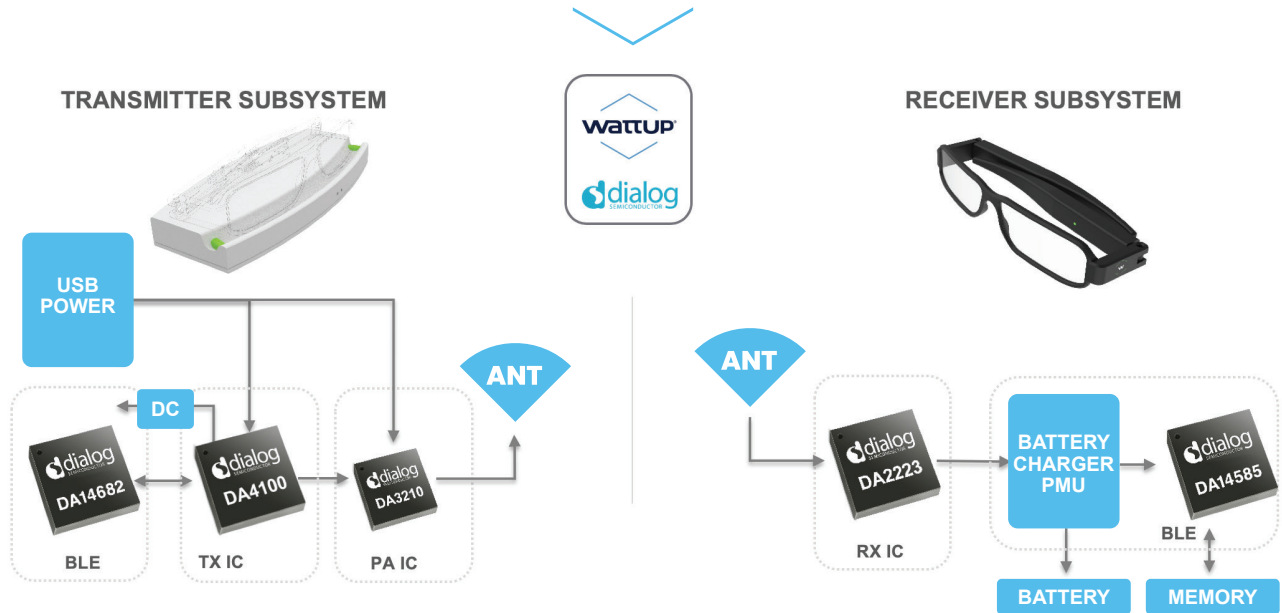


### Kit Contents

- 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 40mA battery at 0.5C (20mA), higher-power charging available per use case
- DA2223 RX IC, 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,  
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