

## Evaluates: MAX86176

## MAX86176 Evaluation Kit

### General Description

The MAX86176 evaluation kit (EV kit) provides a platform to evaluate the functionality and features of the MAX86176 with photoplethysmogram (PPG) and electrocardiogram (ECG) measurement capabilities. The EV kit allows for flexible hardware and software configurations to help the user quickly learn how to configure and optimize the MAX86176 for their own applications.

The MAX86176 is a complete PPG and ECG analog front-end solution that consists of two optical readout channels and one single-lead ECG channel that can operate simultaneously. The optical readout channels support up to 6 LEDs and 4 photodiode inputs.

The MAX86176 EV kit consists of two boards. MAXSENSORBLE\_EVKIT\_B is the microcontroller (MCU) board while MAX86176\_EVKIT\_B is the sensor board containing the MAX86176. To enable PPG and ECG measurement capabilities, the sensor board also contains 3 LEDs (red, green, and IR), 3 discrete photodiodes (Vishay VEMD8080), a 3 LED, 1 photodiode module (Osram SFH7050), and component configurations on the ECG channel. The EV kit can be powered through USB connection to PC using a USB-C to USB-A cable or a LiPo Battery. The EV kit communicates with MAX86176GUI (should be installed in user's system) using Bluetooth® built into Windows (Win BLE). The EV kit contains with the latest firmware but comes with the programming circuit board MAXDAP-TYPE-C in case a firmware change is needed.

### Features

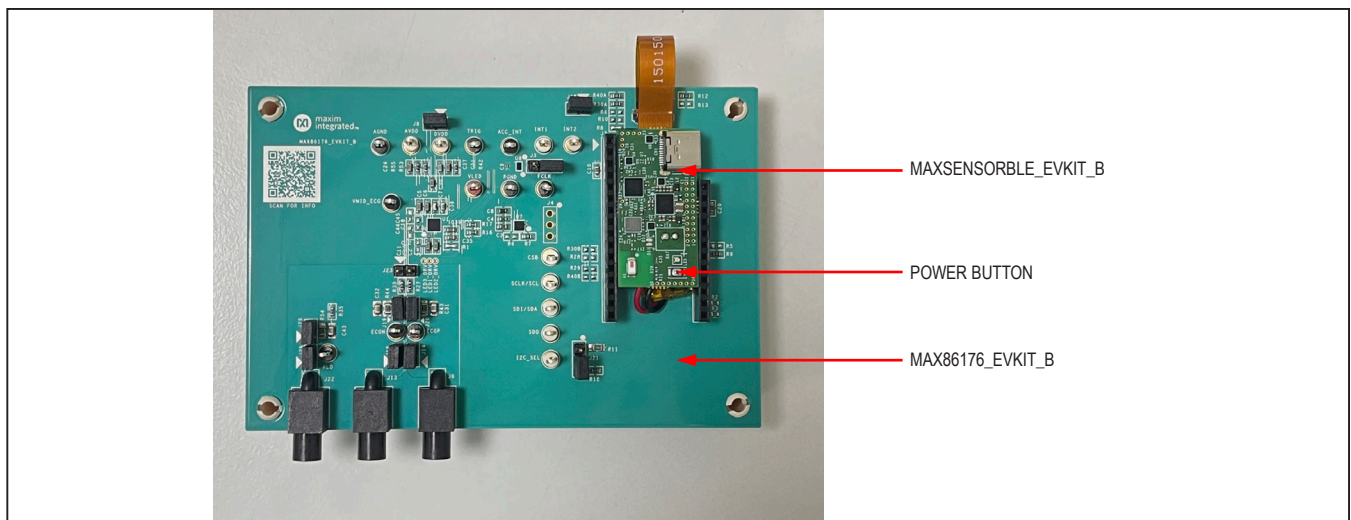
- Convenient Platform to Evaluate the MAX86176
- Many Easy-to-Reach Test Points
- Real-Time Monitoring and Plotting
- Data Logging Capabilities
- Bluetooth® LE
- Windows® 10 Compatible GUI software
- Facilitates IEC 60601-2-47 Compliance Testing

### EV Kit Contents

- MAXSENSORBLE\_EVKIT\_B microcontroller board
- MAX86176\_EVKIT\_B sensor board
- 105mAh Li-Po battery LP-401230
- USB-C to USB-A cable
- MAXDAP-TYPE-C programmer board
- Micro USB-B to USB-A cable
- Three ECG cables

[Ordering Information](#) appears at end of data sheet.

### Photo of MAX86176 Evaluation Kit



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**Notes**

