

## General Description

The MAX30011 evaluation kit (EV kit) provides a platform to evaluate the functionality and features of the MAX30011 biopotential (ECG, EMG, EEG) and bioimpedance (BioZ) measurement capabilities. The EV kit contains flexible hardware and software configurations to help the user quickly learn how to configure and optimize the MAX30011 for their own applications.

The MAX30011 is a complete ECG and BioZ analog front-end solution that comprises four ECG channels and a BioZ channel that supports both tetrapolar and bipolar electrode configurations, all of which can operate simultaneously. The BioZ channel supports several modes of stimulation: sine-wave currents, square-wave sink/source currents, sine-wave voltages, and square-wave voltages with a range of frequencies to support multiple BioZ applications.

The MAX30011 EV kit comprises two boards. MAXSENSORBLE\_CH\_EVKIT\_D is the microcontroller (MCU) board while MAX30011\_EVKIT\_C is the sensor board containing the MAX30011. The EV kit can be powered through USB connection to PC using a USB-C to USB-A cable or through a Lithium Polymer (Li-Po) battery. The EV kit relays data using Bluetooth® in the MCU board. The EV kit contains the latest firmware but comes with the programming circuit board MAXDAP-TYPE-C in case a firmware change or upgrade is needed in the future.

## Features

- Convenient Platform to Evaluate the MAX30011
- Many Easy-to-Reach Test Points
- Real-Time Monitoring and Plotting
- Data Logging Capabilities
- Bluetooth Low Energy (BLE)
- Windows® 10-Compatible GUI Software
- Facilitates IEC 60601-2-47 Compliance Testing

## EV Kit Contents

- MAX30011\_EVKIT\_C PCB
- MAXSENSORBLE\_CH\_EVKIT\_D
- 105mAh Li-Po battery LP-401230
- MAXDAP-TYPE-C programmer board
- USB-A to USB-C cable
- USB-A to micro-USB cable

## MAX30011 EV Kit Files

FILE	DESCRIPTION
MAX30011SetupVxxx_Web.zip	Setup file to install PC GUI program

### Notes:

The GUI setup files can be obtained from the [www.analog.com](http://www.analog.com). Follow the procedure described in the [Quick Start](#) section.

The MAX30011 EVKIT and MAXSENSORBLE\_CH EVKIT design files are attached at the end of this document.

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

*Analog Devices is in the process of updating documentation to provide culturally appropriate terminology and language. This is a process with a wide scope and will be phased in as quickly as possible. Thank you for your patience.*

### EV Kit Photo

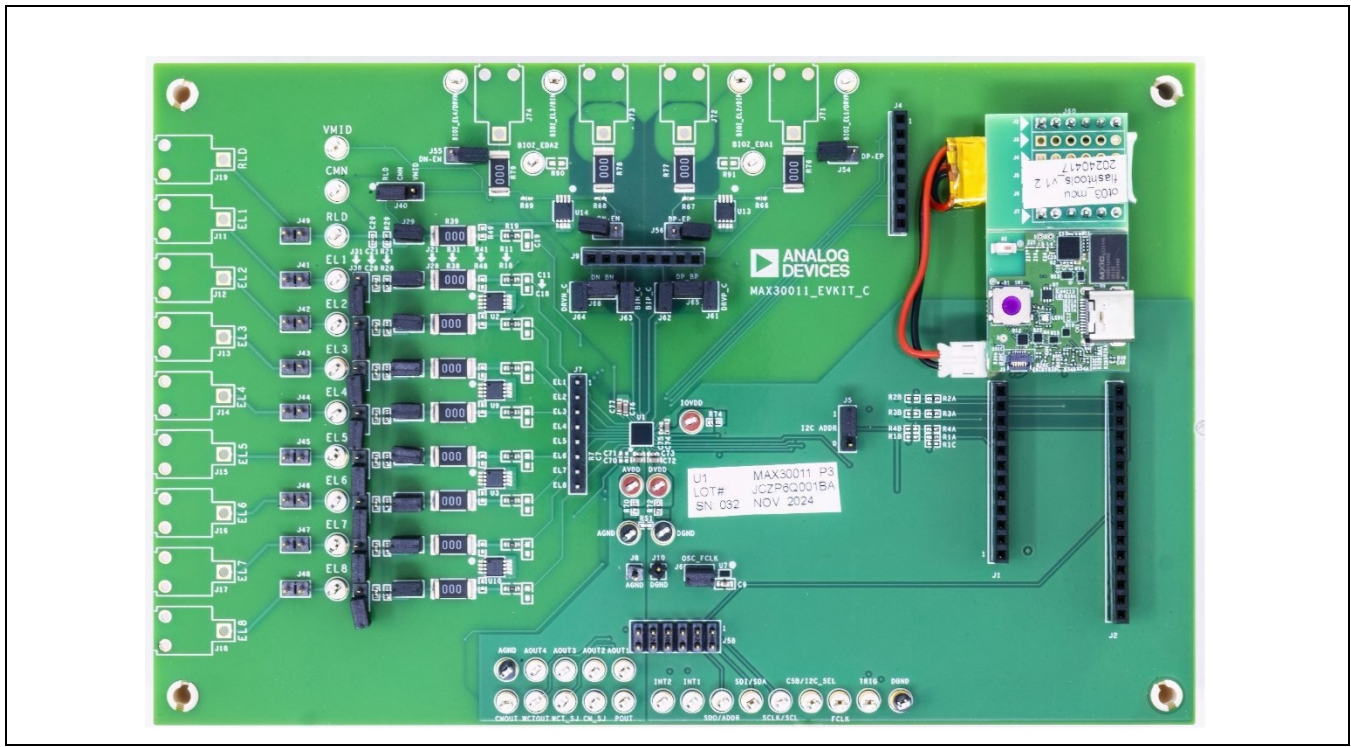


Figure 1. Photo of EV Kit

### Notes

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