

# Evaluation Board User Guide

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### EVAL-ADMP405Z-FLEX: Bottom-Ported Analog Output MEMS Microphone Evaluation Board

#### **GENERAL DESCRIPTION**

The EVAL-ADMP405Z-FLEX is a simple evaluation board that allows quick evaluation of the performance of the ADMP405 MEMS microphone. The small size and low profile of the flexible PCB enables direct placement of the microphone into a prototype or an existing design for an in situ evaluation. The EVAL-ADMP405Z-FLEX consists of an ADMP405 microphone soldered to a flexible PCB with color-coded wires attached. The only other component on the board is a 0.1  $\mu F$  supply bypass capacitor.

**Table 1. Pin Function Descriptions** 

Wire Color	Mnemonic	Description
Red	V <sub>DD</sub>	Power Supply. 1.5 V dc to 3.3 V dc and 250 μA maximum.
White	OUTPUT	Analog Output Signal. 0.8 V dc offset, 450 mV ac peak maximum, and 200 Ω Z <sub>OUT.</sub>
Black	GND	Ground.

#### **EVALUATION BOARD CIRCUIT**

Figure 1 shows the schematic of the EVAL-ADMP405Z-FLEX, and Figure 2 shows the layout of the EVAL-ADMP405Z-FLEX. See the ADMP405 data sheet for a complete description and specifications of the microphone.

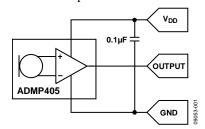


Figure 1. Evaluation Board Schematic

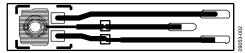


Figure 2. Evaluation Board Layout (Top View)

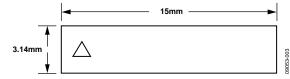


Figure 3. Evaluation Board Dimensions in Millimeters (Wires Not Included)

#### **EVALUATION BOARD PHOTOGRAPH**

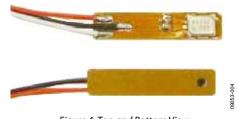


Figure 4. Top and Bottom View

## NOTES REVISION HISTORY

8/10—Revision 0: Initial Version

2/11—Rev. A to Rev. B
Changes to General Description, Figure 1, Figure 2, and Figure 4
10/10—Rev. 0 to Rev. A
Changes to Title



#### ESD Caution

**ESD** (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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