

## EVAL-ADMP521Z Bottom Port Digital Output MEMS Microphone Evaluation Board

### GENERAL DESCRIPTION

The EVAL-ADMP521Z is a simple evaluation board that allows quick evaluation of the performance of the [ADMP521](#) bottom port, digital output, omnidirectional microphone. The EVAL-ADMP521Z has a dual-row, 12-pin, 0.1-inch spaced header for access to all microphone pins. All signals are connected to the row of pins along the edge of the board. The pins on the inner row are not connected to any signals.

The EVAL-ADMP521Z is designed to plug directly into either row of Connector J6 on the Analog Devices, Inc., EVAL-ADAU1761Z evaluation board. When these two boards are connected, the EVAL-ADMP521Z board should extend off the left edge of the EVAL-ADAU1761Z board. [Circuit Note CN0078](#) fully describes the connection between these two boards and the register settings of the codec.

The dimensions of the EVAL-ADMP521Z are 13 mm × 18 mm. The evaluation board is RoHS-compliant part.

### EVALUATION BOARD CIRCUIT

The schematic of the EVAL-ADMP521Z is shown in Figure 1. See the [ADMP521](#) data sheet for a complete description and microphone specifications.

The PCB layout of the EVAL-ADMP521Z is shown in Figure 2. The factory-installed 0.1 μF capacitor, C1, is a bypass capacitor that reduces supply noise and ensures proper microphone operation. The board is powered from a single 1.8 V to 3.3 V supply on Pin 11 of the connector. The EVAL-ADMP521Z connector pin functions are described in Table 1.

**Table 1. Connector Pin Functions of the EVAL-ADMP521Z**

Pin No.	Description
1	GND
2, 4, 5, 6, 8, 10, 12	Not connected
3	CLK
7	L/R SELECT
9	DATA
11	V <sub>DD</sub>

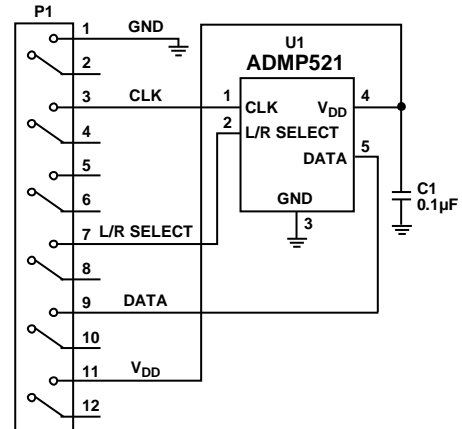


Figure 1. Schematic

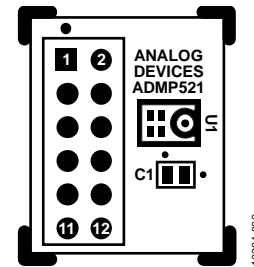


Figure 2. PCB Layout

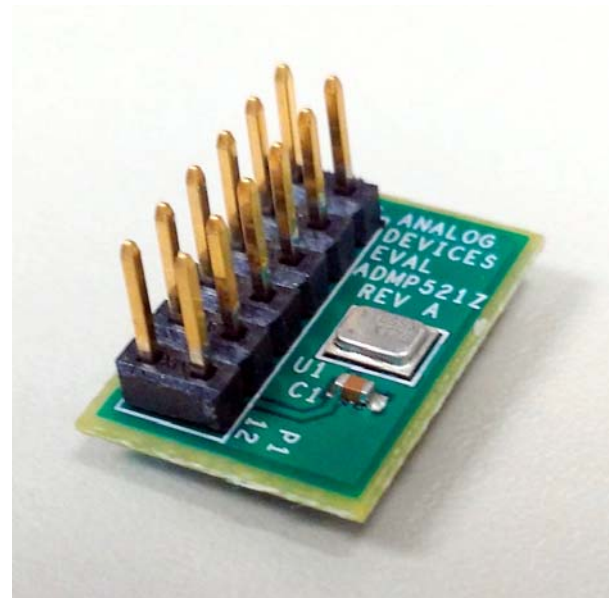


Figure 3. Evaluation Board Photograph

## NOTES

**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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