

EVAL-ADMP421Z Bottom Port Digital Output MEMS Microphone Evaluation Board

GENERAL DESCRIPTION

The EVAL-ADMP421Z is a simple evaluation board that allows quick evaluation of the performance of the ADMP421 bottom port digital output omnidirectional microphone. The EVAL-ADMP421Z has a dual-row 12-pin, 0.1 inch spaced header for access to all microphone pins. The EVAL-ADMP421Z is designed to plug directly into Connector J6 on the Analog Devices, Inc., EVAL-ADAU1761Z evaluation board (see also the [ADAU1761](#) product page).

The dimensions of the EVAL-ADMP421Z are 13 mm × 18 mm. The evaluation board is RoHS-compliant.

EVALUATION BOARD CIRCUIT

The schematic of the EVAL-ADMP421Z is shown in Figure 1. See the ADMP421 data sheet for complete description and specifications of the microphone.

The PCB layout of the EVAL-ADMP421Z is shown in Figure 2. The factory-installed 0.1 μ F capacitor, C1, is a bypass capacitor that reduces supply noise and ensures proper microphone operation. The EVAL-ADMP421Z connector pin functions are described in Table 1.

Table 1.

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

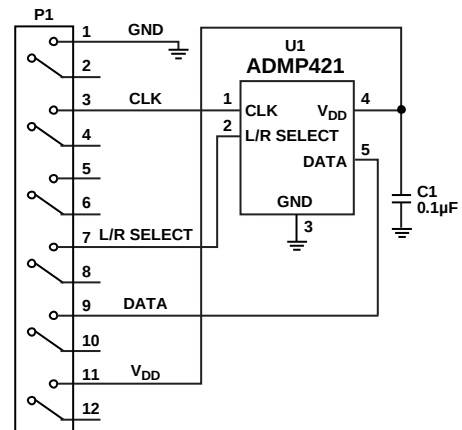


Figure 1. Schematic

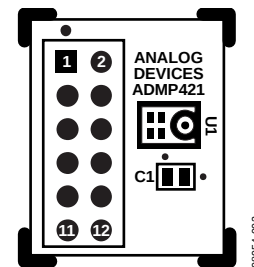


Figure 2. PCB Layout

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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