

EVAL-ADMP421Z-FLEX: Bottom-Ported Digital Output MEMS Microphone Evaluation Board

GENERAL DESCRIPTION

The EVAL-ADMP421Z-FLEX is a simple evaluation board that allows quick evaluation of the performance of the [ADMP421](#) MEMS microphone. The small size and low profile of the flexible PCB enable direct placement of the microphone into a prototype or an existing design for an in-situ evaluation. The EVAL-ADMP421Z-FLEX consists of an ADMP421 microphone and a 0.1 μ F bypass capacitor soldered to a flexible PCB with color-coded wires attached.

Table 1. Pin Function Descriptions

Mnemonic	Wire Color	Description
DATA	Blue	PDM digital output signal.
V _{DD}	Red	Power supply, 1.8 V to 3.3 V dc.
CLK	White	Clock input, 1.0 MHz to 3.3 MHz.
GND	Black	Ground.
L/R SELECT	Yellow	Left or right channel select. DATA1 (right): L/R SELECT tied to GND. DATA2 (left): L/R SELECT pulled to V _{DD} .

EVALUATION BOARD CIRCUIT

Figure 1 and Figure 2 show the schematic and the layout of the EVAL-ADMP421Z-FLEX. See the ADMP421 data sheet for a complete description and specifications of the microphone.

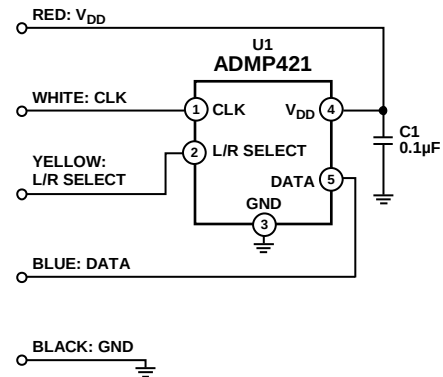


Figure 1. Evaluation Board Schematic

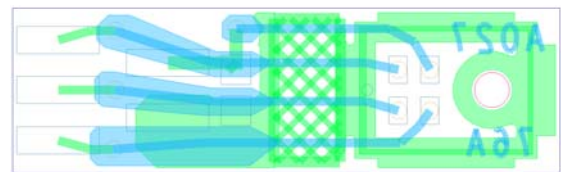


Figure 2. Evaluation Board Layout

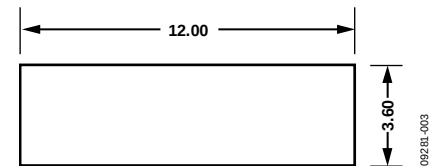


Figure 3. Evaluation Board Dimensions in mm (Wires Not Included)

EVALUATION BOARD PHOTO

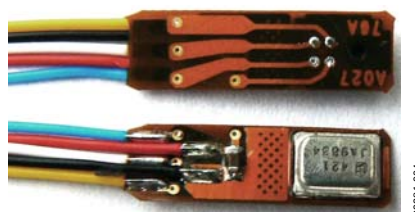


Figure 4.

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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