

DESCRIPTION

The EVAL-ADXL335Z is a simple evaluation board that allows quick evaluation of the performance of the [ADXL335](#) three-axis accelerometer. The EVAL-ADXL335Z has a 6-pin, 0.1 inch spaced header for access to all power and signal lines that the user can attach to a prototyping board (breadboard) or wire using a standard plug. Four holes are provided for mechanical attachment of the EVAL-ADXL335Z to the application.

The dimensions of the EVAL-ADXL335Z are 20 mm × 20 mm with mounting holes set 15 mm × 15 mm at the corners of the printed circuit board (PCB).

CIRCUIT DESCRIPTION

The schematic of the EVAL-ADXL335Z is shown in Figure 1. Analog bandwidth can be set by changing Capacitors C2, C3, and C4. See the ADXL335 data sheet for a complete description of the operation of the accelerometer.

The part layout of the EVAL-ADXL335Z is shown in Figure 2. The EVAL-ADXL335Z has four factory installed 100 nF capacitors. C1 at V_S is a bypass capacitor to reduce supply noise. C2, C3, and C4 at X_{OUT} , Y_{OUT} , and Z_{OUT} are filter capacitors to set the bandwidth to 50 Hz (see Figure 1). Many applications require a different bandwidth, in which case the user can change C2, C3, and C4 as appropriate.

SPECIAL NOTES ON HANDLING

The EVAL-ADXL335Z is not reverse polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL335.

Dropping the EVAL-ADXL335Z on a hard surface can generate several thousand gees (g) of acceleration, which may exceed the data sheet absolute maximum limits. See the ADXL335 data sheet for more information.

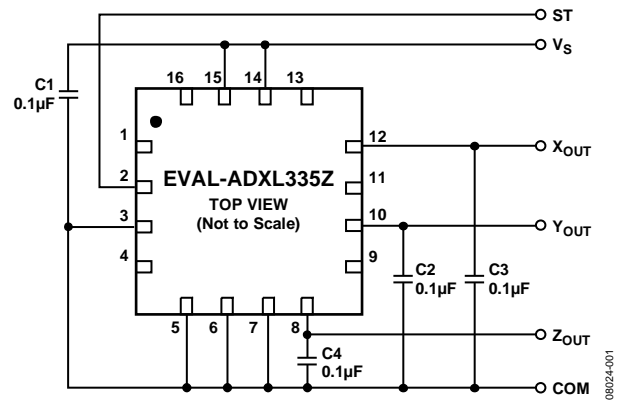


Figure 1. EVAL-ADXL335Z Schematic

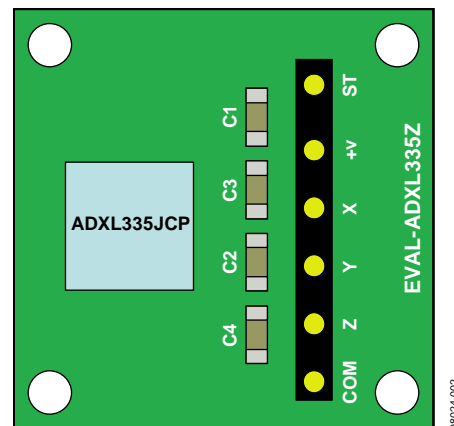


Figure 2. EVAL-ADXL335Z Physical Layout

ORDERING GUIDE

Model	Package Description
EVAL-ADXL335Z ¹	Evaluation Board

¹ Z = RoHS Compliant Part.

Rev. 0

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EVAL-ADXL335Z

NOTES