

# Three-Axis Accelerometer Evaluation Board

# **EVAL-ADXL330Z**

#### DESCRIPTION

The EVAL-ADXL330Z is a simple evaluation board that allows quick evaluation of the performance of the ADXL330 dual-axis accelerometer. The EVAL-ADXL330Z has a 5-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-ADXL330Z to the application.

The EVAL-ADXL330Z is 20 mm  $\times$  20 mm with mounting holes set 15 mm  $\times$  15 mm at the corners of the PCB.

### **CIRCUIT DESCRIPTION**

The schematic of the EVAL-ADXL330Z is shown in Figure 1. Analog bandwidth can be set by changing Capacitors C2, C3, and C4. See the ADXL330 data sheet for a complete description of the operation of the accelerometer.

The part layout of the EVAL-ADXL330Z is shown in Figure 2. The EVAL-ADXL330Z has three factory installed 100 nF capacitors (C2, C3, and C4) at  $X_{\rm OUT}$ ,  $Y_{\rm OUT}$ , and  $Z_{\rm OUT}$  to reduce the bandwidth to 50 Hz. 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-ADXL330Z is not reverse polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL330.

Dropping the EVAL-ADXL330Z on a hard surface can generate several thousand *g* of acceleration and might exceed the data sheet absolute maximum limits. See the ADXL330 data sheet for more information.

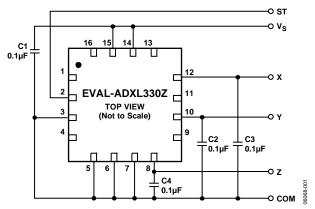


Figure 1. EVAL-ADXL330Z Schematic

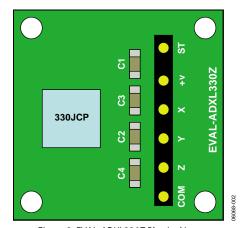


Figure 2. EVAL-ADXL330Z Physical Layout

#### **ORDERING GUIDE**

Model	Package Description				
EVAL-ADXL330Z <sup>1</sup>	Evaluation Board				

 $<sup>^{1}</sup>$  Z = Pb-free part.

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