

Dual-Axis Accelerometer Evaluation Board

ADXL321EB

GENERAL DESCRIPTION

The ADXL321EB is a simple evaluation board that allows quick evaluation of the performance of the ADXL321 dual-axis $\pm 18~g$ accelerometer. The ADXL321EB has a 5-pin, 0.1 inch spaced header for access to all power and signal lines which the user can attach to a prototyping board (breadboard) or wire using a standard plug. Four holes are provided for mechanical attachment of the ADXL321EB to the application.

The ADXL321EB 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 ADXL321EB is shown in Figure 1. Analog bandwidth can be set by changing capacitors C2 and C3. See the ADXL321 data sheet for a complete description of the operation of the accelerometer.

The part layout of the ADXL321EB is shown in Figure 2. The ADXL321EB has two factory-installed 100 nF capacitors (C2 and C3) at X_{OUT} and Y_{OUT} to reduce the bandwidth to 50 Hz. Many applications require a different bandwidth, in which case the user can change C2 and C3, as appropriate.

SPECIAL NOTES ON HANDLING

The ADXL321EB is not reverse polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL321.

Dropping the ADXL321EB on a hard surface can generate several thousand *g* of acceleration and might exceed the data sheet absolute maximum limits. See the ADXL321 data sheet for more information.



Figure 1. ADXL321EB Schematic



Figure 2. ADXL321EB Physical Layout

ORDERING GUIDE

Model	Package Description
ADXL321EB	Evaluation Board

Rev. 0

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