

Dual-Axis Accelerometer Evaluation Board

ADXL320EB

GENERAL DESCRIPTION

The ADXL320EB is a simple evaluation board that allows quick evaluation of the performance of the ADXL320 dual-axis $\pm 5~g$ accelerometer. The ADXL320EB 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 ADXL320EB to the application.

The ADXL320EB 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 ADXL320EB is shown in Figure 1. Analog bandwidth can be set by changing capacitors C2 and C3. See the ADXL320 data sheet for a complete description of the operation of the accelerometer.

The part layout of the ADXL320EB is shown in Figure 2. The ADXL320EB has two factory-installed 100 nF capacitors (C2 and C3) at $X_{\rm OUT}$ and $Y_{\rm OUT}$ 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 ADXL320EB is not reverse polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL320.

Dropping the ADXL320EB on a hard surface can generate several thousand *g* of acceleration and might exceed the data sheet absolute maximum limits. See the ADXL320 data sheet for more information.

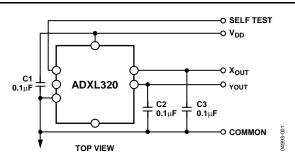


Figure 1. ADXL320EB Schematic

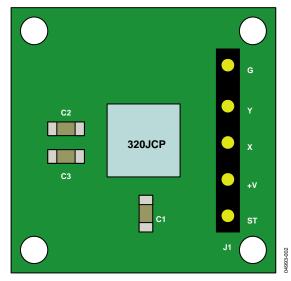


Figure 2. ADXL320EB Physical Layout

ORDERING GUIDE

| Model | Package Description | |
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| ADXL320EB | Evaluation Board | |

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