

Dual-Axis Accelerometer Evaluation Board

ADXL322EB

GENERAL DESCRIPTION

The ADXL322EB is a simple evaluation board that allows quick evaluation of the performance of the ADXL322 dual-axis $\pm 2~g$ accelerometer. The ADXL322EB 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 ADXL322EB to the application.

The ADXL322EB 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 ADXL322EB is shown in Figure 1. Set the analog bandwidth by changing Capacitor C2 and Capacitor C3. See the ADXL322 data sheet for a complete description of the operation of the accelerometer.

The part layout of the ADXL322EB is shown in Figure 2. The ADXL322EB has two factory installed 0.1 µF capacitors (C2 and C3) at X_{OUT} and Y_{OUT} to reduce the bandwidth to 50 Hz. Many applications require a different bandwidth, therefore, the user can change C2 and C3 as appropriate.

SPECIAL NOTES ON HANDLING

The ADXL322EB is not reverse polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL322.

Dropping the ADXL322EB on a hard surface can generate several thousand *g* of acceleration and might exceed the data sheet absolute maximum rating limits. See the ADXL322 data sheet for more information.

CIRCUIT AND LAYOUT DIAGRAMS

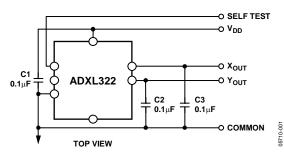


Figure 1. Schematic

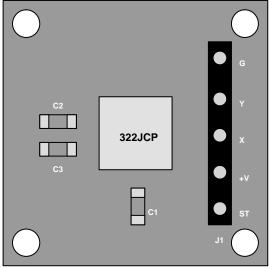


Figure 2. Physical Layout

ORDERING GUIDE

| Model | Description |
|-----------|------------------|
| ADXL322EB | Evaluation Board |

ESD CAUTION

ESD (electrostatic discharge) sensitive device. Electrostatic charges as high as 4000 V readily accumulate on the human body and test equipment and can discharge without detection. Although this product features proprietary ESD protection circuitry, permanent damage may occur on devices subjected to high energy electrostatic discharges. Therefore, proper ESD precautions are recommended to avoid performance degradation or loss of functionality.



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