

Dual Axis Accelerometer Evaluation Board

ADXL311EB

GENERAL DESCRIPTION

The ADXL311EB is a simple evaluation board that allows you to quickly evaluate the performance of the ADXL311 dual axis ±2 g accelerometer. The ADXL311EB has a 5-pin, 0.1 inch spaced header for access to all power and signal lines that you may attach to a prototyping board (breadboard) or wire via a standard plug. Four holes are provided for mechanical attachment of the ADXL311EB to your application.

The ADXL311EB is 20 mm × 20 mm, with mounting holes set $15 \text{ mm} \times 15 \text{ mm}$ at the corners of the PCB.

CIRCUIT DESCRIPTION

The schematic and parts of the ADXL311EB are shown in Figure 1. The analog bandwidth may be set by changing capacitors C2 and C3. Refer to the ADXL311 data sheet for a complete description of the operation of the accelerometer.

The parts layout of the ADXL311EB is shown in Figure 2. The ADXL311EB has two factory installed 100 nF capacitors (C2 and C3) at X_{OUT} and Y_{OUT} to reduce the bandwidth to 50 Hz. Your application may require a different bandwidth, in which case you may change C2 and C3 as appropriate.

SPECIAL NOTES ON HANDLING

Note that the ADXL311EB is not reverse polarity protected. Reversing the +V_{SUPPLY} and Ground pins may damage the ADXL311.

Dropping the ADXL311EB on a hard surface may generate several thousand g of acceleration and may exceed the data sheet absolute maximum limits. Refer to the ADXL311 data sheet for more information.

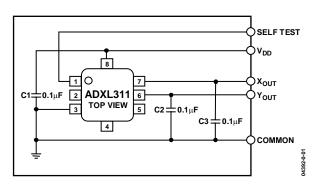


Figure 1. ADXL311EB Schematic Diagram

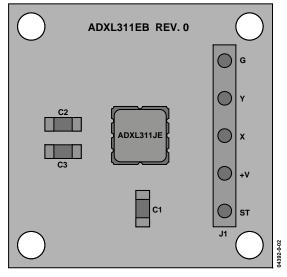


Figure 2. ADXL311EB Physical Layout

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REVISION HISTORY

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