

Dual-Axis Accelerometer Evaluation Board

ADXL204EB

GENERAL DESCRIPTION

The ADXL204EB is a simple evaluation board that allows quick evaluation of the performance of the ADXL204 dual-axis $\pm 1.7~g$ accelerometer. The ADXL204EB 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 ADXL204EB to the application.

The ADXL204EB 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 and parts list of the ADXL204EB are shown in Figure 1. Analog bandwidth can be set by changing capacitors C2 and C3. See the ADXL204 data sheet for a complete description of the operation of the accelerometer.

The part layout of the ADXL204EB is shown in Figure 2. The ADXL204EB 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 ADXL204EB is not reverse-polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL204.

Dropping the ADXL204EB on a hard surface can generate several thousand *g* of acceleration and might exceed the data sheet absolute maximum limits. See the ADXL204 data sheet for more information.

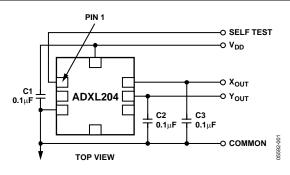


Figure 1. ADXL204EB Schematic

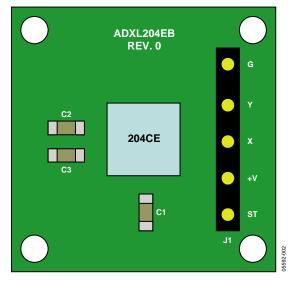


Figure 2. ADXL204EB Physical Layout

ADXL204EB

ORDERING GUIDE

Model	Package Description
ADXL204EB	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.

