DESCRIPTION

The EVAL-ADXL330Z is a simple evaluation board that allows quick evaluation of the performance of the ADXL330 dual-axis accelerometer. The EVAL-ADXL330Z 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 EVAL-ADXL330Z to the application.

The EVAL-ADXL330Z is 20 mm × 20 mm with mounting holes set 15 mm × 15 mm at the corners of the PCB.

CIRCUIT DESCRIPTION

The schematic of the EVAL-ADXL330Z is shown in Figure 1. Analog bandwidth can be set by changing Capacitors C2, C3, and C4. See the ADXL330 data sheet for a complete description of the operation of the accelerometer.

The part layout of the EVAL-ADXL330Z is shown in Figure 2. The EVAL-ADXL330Z has three factory installed 100 nF capacitors (C2, C3, and C4) at XOUT, YOUT, and ZOUT to reduce the bandwidth to 50 Hz. Many applications require a different bandwidth, in which case, the user can change C2, C3, and C4 as appropriate.

SPECIAL NOTES ON HANDLING

The EVAL-ADXL330Z is not reverse polarity protected. Reversing the +V supply and ground pins can cause damage to the ADXL330.

Dropping the EVAL-ADXL330Z on a hard surface can generate several thousand g of acceleration and might exceed the data sheet absolute maximum limits. See the ADXL330 data sheet for more information.

ORDERING GUIDE

<table>
<thead>
<tr>
<th>Model</th>
<th>Package Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVAL-ADXL330Z</td>
<td>Evaluation Board</td>
</tr>
</tbody>
</table>

1 Z = Pb-free part.