Features

Analog Devices ADXL335 3-axis accelerometer

Functional Description

The DKSB1002B is a low cost, minimal implementation of the Analog Devices ADXL335 three-axis accelerometer. It provides a convenient means of making mechanical and electrical connections to the ADXL335, facilitating its use when the surface mount form factor of the device might otherwise be inconvenient.

The DKSB1002B is modeled after the Analog Devices EVAL-ADXL335Z evaluation board for the ADXL335. Both boards are approximately 20mm square with mounting holes on a 15mm spacing. The orientation and location of the accelerometer and 6-pin connector are common to both boards as well. The locations of the output filter capacitors differ from those on the EVAL-ADXL335Z in order to facilitate manual replacement of these components if a change in their value is desired.

Please refer to the ADXL335 datasheet at www.analog.com for electrical specifications and application information.
Schematic

Physical Dimensions
Bill of Materials

<table>
<thead>
<tr>
<th>Ref-Des</th>
<th>Digi-Key P/N</th>
<th>Mfr P/N</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>PCC2277CT-ND</td>
<td>ECJ-1VB1E104K</td>
<td>0.1uF ceramic cap X7R 25V 0603</td>
</tr>
<tr>
<td>C2,C3,C4</td>
<td>PCC1828CT-ND</td>
<td>ECJ-2VB1E104K</td>
<td>0.1uF ceramic cap X7R 25V 0805</td>
</tr>
<tr>
<td>U1</td>
<td>ADXL335BCPZ-RL7CT-ND</td>
<td>ADXL335BCPZ-RL7</td>
<td>3-axis accelerometer</td>
</tr>
<tr>
<td>JP1</td>
<td>SAM1038-06-ND</td>
<td>SAM1038-06-ND</td>
<td>0.1&quot; header, 0.025&quot; sq. pin, 6 pos</td>
</tr>
</tbody>
</table>

Hardware Revision History

Rev A:
- Initial Revision

Rev B:
- Cosmetic changes to bottom silkscreen layer
- Populated C2,C3,C4 with 0.1uF capacitor
- Populated JP1
- Updated documentation to reflect hardware changes

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