

# ADXL1002BCPZ

Data Sheet

Accelerometer Single  $\pm 50g 5V 40mV/g 32$ -Pin LFCSP EP Tray

Manufacturers	Analog Devices, Inc	THE REAL PROPERTY OF THE PARTY
Package/Case	QFN	States and the set
Product Type	Motion & Position Sensors	
RoHS		
Lifecycle		Images are for reference only
Please submit RFQ for ADXL1002BCPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.		

# **General Description**

The ADXL1001/ADXL1002 deliver ultralow noise density over an extended frequency range with two full-scale range options, and are optimized for industrial condition monitoring. The ADXL1001 ( $\pm$ 100 g) and the ADXL1002 ( $\pm$ 50 g) have typical noise densities of 30 µg/√Hz and 25 µg/√Hz, respectively. Both accelerometer devices have stable and repeatable sensitivity, which is immune to external shocks up to 10,000 g.

The ADXL1001/ADXL1002 have an integrated full electrostatic self test (ST) function and an overrange (OR) indicator that allow advanced system level features and are useful for embedded applications. With low power and single-supply operation of 3.3 V to 5.25 V, the ADXL1001/ADXL1002 also enable wireless sensing product design. The ADXL1001/ADXL1002 are available in a 5 mm  $\times$  5 mm  $\times$  1.80 mm LFCSP package, and are rated for operation over a  $-40^{\circ}$ C to  $+125^{\circ}$ C temperature range.

## Features

Single in plane axis accelerometer with analog output

Linear frequency response range from dc to 11 kHz (3 dB point)

Resonant frequency of 21 kHz

Ultralow noise density

 $25 \,\mu g/\sqrt{\text{Hz in} \pm 50}$  g range

Overrange sensing plus dc coupling allows fast recovery time

Complete electromechanical self-test

Sensitivity performance

Sensitivity stability over temperature 5%

Linearity to  $\pm 0.1\%$  of full-scale range

Cross axis sensitivity  $\pm 1\%$  (ZX),  $\pm 1\%$  (YX),

Single-supply operation

Output voltage ratiometric to supply

Low power consumption 1.0 mA

Power saving standby operation mode with fast recovery

RoHS compliant

 $5 \text{ mm} \times 5 \text{ mm} \times 1.80 \text{ mm} \text{LFCSP}$  package

### **Related Products**



ADXL343BCCZ Analog Devices, Inc





LGA-14

CLCC-8

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# ADXRS642BBGZ

Analog Devices, Inc CBGA-32





Health usage monitoring system (HUMS)

ADXL335BCPZ-RL7

Analog Devices, Inc

ADIS16488BMLZ

Analog Devices, Inc

ADXL357BEZ

Analog Devices, Inc

LFCSP16

MSM24

LCC-14

**Application** 

Condition monitoring

Predictive maintenance

Test and measurement

Asset health

Ovaga Technologies Limited



### ADXL346ACCZ-RL7

Analog Devices, Inc LGA16



ADXL345BCCZ-RL7

Analog Devices, Inc LGA-14