

Accelerometer Single $\pm 500g$ 5V 4mV/g 32-Pin LFCSP EP Tray

Manufacturers

[Analog Devices, Inc](#)

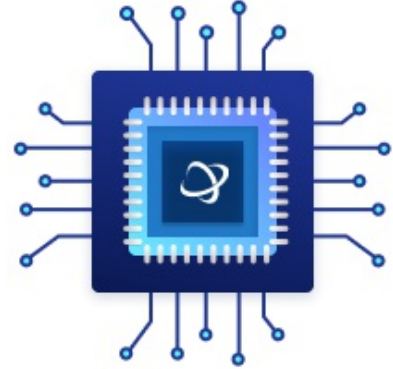
Package/Case

Product Type

Motion & Position Sensors

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ADXL1004BCPZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADXL1004 delivers ultralow noise density over an extended frequency range and is optimized for bearing fault detection and diagnostics. The ADXL1004 has typical noise density of $125 \mu g/\sqrt{Hz}$ across the linear frequency range. Microelectromechanical systems (MEMS) accelerometers have stable and repeatable sensitivity, and are immune to external shocks up to 10,000 g.

The integrated signal conditioning electronics enable such features as full electrostatic self test (ST) and an overrange (OR) indicator, useful for embedded applications. With low power and single-supply operation of 3.3 V to 5.25 V, the ADXL1004 also enables wireless sensing product design. The ADXL1004 is available in a $5 \text{ mm} \times 5 \text{ mm} \times 1.80 \text{ mm}$ LFCSP package, and operates over the -40°C to $+125^\circ\text{C}$ temperature range.

Features

Single, in plane axis accelerometer with analog output

Full-scale range: ± 500 g

Linear frequency response range: dc to 24 kHz typical (3 dB point)

Resonant frequency: 45 kHz typical

Ultralow noise density: $125 \mu\text{g}/\sqrt{\text{Hz}}$

Overrange sensing plus dc coupling allows fast recovery time

Complete electromechanical self test

Sensitivity performance

Sensitivity stability over temperature within 5%

Linearity to $\pm 0.25\%$ of full-scale range

Cross axis sensitivity: $\pm 1.5\%$ (Z-axis acceleration affect on X-axis; Y-axis acceleration affect on X-axis)

Single-supply operation

Output voltage ratiometric to supply

Low power consumption: 1.0 mA typical

Power saving standby operation mode with fast recovery

RoHS compliant

32-lead, $5 \text{ mm} \times 5 \text{ mm} \times 1.80 \text{ mm}$ LFCSP package

Application

Condition monitoring

Predictive maintenance

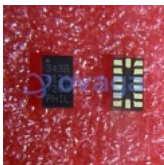
Asset health

Test and measurement

Health usage monitoring system (HUMSs)

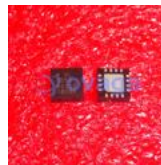
Acoustic emissions

Related Products



[ADXL343BCCZ](#)

Analog Devices, Inc
LGA-14



[ADXL335BCPZ-RL7](#)

Analog Devices, Inc
LFCSP16



[ADXL103CE](#)

Analog Devices, Inc
CLCC-8



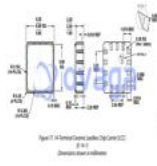
[ADIS16488BMLZ](#)

Analog Devices, Inc
MSM24



[ADXRS642BBGZ](#)

Analog Devices, Inc
CBGA-32



[ADXL357BEZ](#)

Analog Devices, Inc
LCC-14



[ADXL346ACCZ-RL7](#)

Analog Devices, Inc
LGA16



[ADXL345BCCZ-RL7](#)

Analog Devices, Inc
LGA-14