

ADXL350BCEZ-RL7

Data Sheet

MEMS Accelerometer, 3-Axis, Digital, X, Y, Z, ± 1 g, ± 2 g, ± 4 g, ± 8 g, 2 V, 3.6 V, LGA

Manufacturers

Analog Devices, Inc

Package/Case

LGA-16

Product Type

Motion & Position Sensors

RoHS

Rohs

Lifecycle

Images are for reference only

Please submit RFQ for ADXL350BCEZ-RL7 or <u>Emailto:scales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

The high performance ADXL350 is a small, thin, low power,3-axis accelerometer with high resolution (13-bit) and selectablemeasurement ranges up to $\pm 8g$. The ADXL350 offers industry-leading temperature performance with guaranteed min/max specification for offset over temperature. Digital output data isformatted as 16-bit twos complement and is accessible througheither a SPI (3- or 4-wire) or I2C digital interface.

The ADXL350 is well suited for high performance portableapplications. It measures the static acceleration of gravity in tilt sensingapplications, as well as dynamic acceleration resultingfrom motion or shock. Its high resolution (2 mg/LSB) enablesmeasurement of inclination changes of less than 1.0°.

Several special sensing functions are provided. Activity andinactivity sensing detect the presence or lack of motion and ifthe acceleration on any axis exceeds a user-set level. Tap sensingdetects single and double taps. Free-fall sensing detects if the device is falling. These functions can be mapped to one of two interrupt output pins.

Low power modes enable intelligent motion-based powermanagement with threshold sensing and active accelerationmeasurement at extremely low power dissipation.

The ADXL350 is supplied in a small, thin, 3 mm × 4 mm ×1.2 mm, 16-lead cavity laminate package.

Features

Excellent Zero-g bias accuracy and stability with minimum/maximum specifications

Ultralow power: as low as 45 µA in measurement mode and 0.1 µA in standby mode at>

Power consumption scales automatically with bandwidth

User-selectable resolution- Fixed 10-bit resolution- Full resolution, where resolution increases with g range, up to 13-bit resolution at ± 8 g (maintains 2 mg/LSB scale factor in all g ranges)

Embedded, 32-level FIFO buffer minimizes host processor load

Tap/double tap detection and free-fall detection

Activity/inactivity monitoring

Supply voltage range: 2.0 V to 3.6 V

I/O voltage range: 1.7 V to VS

SPI (3- and 4-wire) and I2C digital interfaces

See datasheet for additional features

Related Products



ADXL343BCCZ

Analog Devices, Inc LGA-14



ADXL103CE

Analog Devices, Inc CLCC-8



ADXRS642BBGZ

Analog Devices, Inc CBGA-32



ADXL346ACCZ-RL7

Analog Devices, Inc

LGA16



Portable Consumer Devices

High performance medical and industrial applications



Analog Devices, Inc LFCSP16



ADIS16488BMLZ

Analog Devices, Inc MSM24



ADXL357BEZ

Analog Devices, Inc LCC-14



ADXL345BCCZ-RL7

Analog Devices, Inc

LGA-14