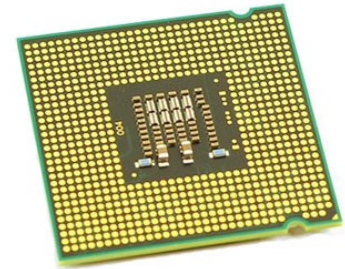


MEMS Accelerometer, Digital, X, Y, Z,  $\pm 2g$ ,  $\pm 4g$ ,  $\pm 8g$ ,  $\pm 16g$ , 2 V, 3.6 V, LGA

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	LGA
Product Type	Motion & Position Sensors
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADXL343BCCZ-RL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADXL343 is a versatile 3-axis, digital-output, low g MEMS accelerometer. Selectable measurement range and bandwidth, and configurable, built-in motion detection make it suitable for sensing acceleration in a wide variety of applications. Robustness to 10,000 g of shock and a wide temperature range ( $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ) enable use of the accelerometer even in harsh environments.

The ADXL343 measures acceleration with high resolution (13-bit) measurement at up to  $\pm 16g$ . Digital output data is formatted as 16-bit twos complement and is accessible through either an SPI (3- or 4-wire) or I2C digital interface. The ADXL343 can measure the static acceleration of gravity in tilt-sensing applications, as well as dynamic acceleration resulting from motion or shock. Its high resolution (3.9 mg/LSB) enables measurement of inclination changes less than  $1.0^{\circ}$ .

Several special sensing functions are provided. Activity and inactivity sensing detect the presence or lack of motion. Tap sensing detects single and double taps in any direction. Free-fall sensing detects if the device is falling. These functions can be mapped individually to either of two interrupt output pins.

An integrated memory management system with a 32-level first in, first out (FIFO) buffer can be used to store data to minimize host processor activity and lower overall system power consumption.

The ADXL343 is supplied in a small, thin,  $3\text{ mm} \times 5\text{ mm} \times 1\text{ mm}$ , 14-terminal, plastic package.

### Applications

Handsets

Gaming and pointing devices

Personal navigation devices

Hard disk drive (HDD) protection

## Features

Multipurpose accelerometer with 10- to 13-bit resolution for use in a wide variety of applications

Digital output accessible via SPI (3- and 4-wire) and I2C

Built-in motion detection features make tap, double-tap, activity, inactivity, and free-fall detection trivial User-adjustable thresholds Interrupts independently mappable to two interrupt pins

Low power operation down to 23  $\mu$ A and embedded FIFO for reducing overall system power

Wide supply voltage range: 2.0 V to 3.6 V I/O voltage 1.7 V to VS

Wide operating temperature range ( $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ )

10,000 g shock survival

Small, thin, Pb free, RoHS compliant 3 mm  $\times$  5 mm  $\times$  1 mm LGA package

## Application

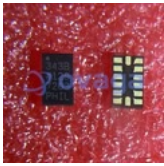
Handsets

Gaming and pointing devices

Personal navigation devices

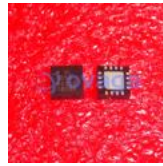
Hard disk drive (HDD) protection

## 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