

## ADXL345BCCZ-RL7

Data Sheet

Accelerometers - Board Mount Digital Output Three-Axis XL 1500pc RL

Manufacturers Analog Devices, Inc

Package/Case LGA-14

Product Type Motion & Position Sensors

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for ADXL345BCCZ-RL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

#### **General Description**

The ADXL345 is a small, thin, low power, 3-axis accelerometer 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 a SPI (3- or 4-wire) or I2C digital interface.

The ADXL345 is well suited for mobile device applications. It measures the static acceleration of gravity in tilt-sensing applications, as well as dynamic acceleration resulting from motion or shock. Its high resolution (4 mg/LSB) enables measurement of inclination changes less than 1.0°.

Several special sensing functions are provided. Activity and inactivity sensing detect the presence or lack of motion and if the acceleration on any axis exceeds a user-set level. Tap sensing detects 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. An integrated, patent pending 32-level first in, first out (FIFO) buffer can be used to store data to minimize host processor intervention.

Low power modes enable intelligent motion-based power management with threshold sensing and active acceleration measurement at extremely low power dissipation.

The ADXL345 is supplied in a small, thin, 3 mm × 5 mm × 1 mm, 14-lead, plastic package.

ADXL345-EP Supports defense and aerospace applications (AQEC)

# Features

Ultralow power: as low as 23  $\mu$ A in measurement mode and 0.1  $\mu$ A 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  $\pm 16$  g (maintaining 4 mg/LSB scale factor in all g ranges)

See data sheet for additional features.

ADXL345-EP supports defense and aerospace applications (AQEC standard)

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Extended industrial temperature range: (-55°C to +105°C)

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Enhanced product change notification

Qualification data available on request

V62/12657 DSCC Drawing Number

### **Application**

ADXL345-EP Supports defense and aerospace applications (AQEC)

Handsets

Medical instrumentation

Gaming and pointing devices

Industrial instrumentation

Personal navigation devices

Hard disk drive (HDD) protection



#### **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



#### ADXL335BCPZ-RL7

Analog Devices, Inc LFCSP16



#### ADIS16488BMLZ

Analog Devices, Inc MSM24



#### ADXL357BEZ

Analog Devices, Inc LCC-14



#### ADXL325BCPZ-RL7

Analog Devices, Inc 16-LFCSP