

## ADIS16201CCCZ

Data Sheet

MEMS Accelerometer, Dual-Axis, Digital, X, Y, ± 1.7g, 3 V, 3.6 V, LGA

Manufacturers Analog Devices, Inc

Package/Case LGA-16

Product Type Motion & Position Sensors

RoHS Rohs

Lifecycle

Please submit RFQ for ADIS16201CCCZ or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

### **General Description**

The ADIS16201 is a complete, dual-axis acceleration and inclination angle measurement system available in a single compact package enabled by the Analog Devices iSensor<sup>TM</sup> integration. By enhancing the Analog Devices iMEMS® sensor technology with an embedded signal processing solution, the ADIS16201 provides factory calibrated and tunable digital sensor data in a convenient format that can be accessed using a serial peripheral interface (SPI). The SPI interface provides access to measurements for dual-axis linear acceleration, dual-axis linear inclination angle, temperature, power supply, and one auxiliary analog input. Easy access to calibrated digital sensor data provides developers with a system-ready device, reducing development time, cost, and program risk.

Unique characteristics of the end system are accommodated easily through several built-in features, such as a single command in-system offset calibration, along with convenient sample rate and bandwidth control.

The ADIS16201 offers the following embedded features, which eliminate the need for external circuitry and provide a simplified system interface:

Configurable alarm function

Auxiliary 12-bit ADC

Auxiliary 12-bit DAC

Configurable digital I/O port

Digital self-test function

The ADIS16201 offers two power management features for managing system-level power dissipation: low power mode and a configurable shutdown feature.

The ADIS16201 is available in a  $9.2 \text{ mm} \times 9.2 \text{ mm} \times 3.9 \text{ mm}$  laminate-based land grid array (LGA) package with a temperature range of  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

#### **Features**

Dual-axis inclinometer/accelerometer measurements

12-, 14-bit digital inclination/acceleration sensor outputs

12-bit digital temperature sensor output

Digitally controlled sensitivity and bias calibration

Digitally controlled sample rate

Digitally controlled frequency response

Dual alarm settings with rate/threshold limits

Auxiliary digital I/O

Digitally activated self test

Digitally activated low power mode

SPI®-compatible serial interface

Auxiliary 12-bit ADC input and DAC output

Single-supply operation: 3.0 V to +3.6 V

3500 g powered shock survivability

# Application

Platform control, stabilization, and leveling

Tilt sensing, inclinometers

Motion/position measurement

Monitor/alarm devices (security, medical, safety)

#### **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



Analog Devices, Inc MSM24



ADXL357BEZ
Analog Devices, Inc
LCC-14



ADXL345BCCZ-RL7
Analog Devices, Inc
LGA-14