Inclinometer Digital Output 3.3V 16-Pin LGA Tray

Manufacturers	Analog Devices, Inc
Package/Case	LGA-16
Product Type	Motion & Position Sensors
RoHS	Rohs
Lifecycle	
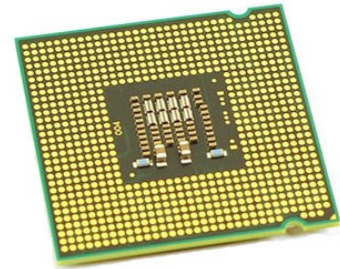
Images are for reference only

Please submit RFQ for ADIS16203CCCZ or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The ADIS16203 is a complete incline-angle measurement system in a single compact package enabled by the Analog Devices, Inc.,iSensor™ integration. By enhancing the Analog Devices iMEMS®sensor technology with an embedded signal processing solution, the ADIS16203 provides factory-calibrated, sensor-to-digital incline-angle data in a convenient format that can be accessed using aserial peripheral interface (SPI). The SPI interface provides access to multiple measurements: 360° linear inclination angles, ±180°linear incline angles, temperature, power supply, and one auxiliaryanalog input. Easy access to calibrated digital sensor data providesdevelopers with a system-ready device, reducing developmenttime, cost, and program risk.

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

The ADIS16203 offers the following embedded features that eliminate the need for external circuitry and provide a simplified system interface:

Configurable alarm function

Auxiliary 12-bit analog-to-digital converter (ADC)

Auxiliary 12-bit digital-to-analog converter (DAC)

Configurable digital I/O port

Digital self-test function

The ADIS16203 offers two power management features formanaging system-level power dissipation: low power mode anda configurable shutdown feature.

The ADIS16203 is available in a 9.2 mm × 9.2 mm × 3.9 mmlaminate-based land grid array (LGA) package with a temperature range of −40°C to +125°C.

Features

0° to 360° Inclinometer

14-bit digital inclination outputs

Linear output, 0.025° resolution

12-bit digital temperature sensor output

Digitally controlled bias calibration

Digitally controlled sample rate

Digitally controlled filtering

Digitally controlled direction/orientation

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:3.0V to 3.6V

3500 g powered shock survivability

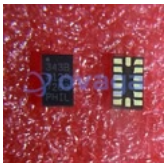# Application

Tilt sensing, inclinometers

Platform control, stabilization, and leveling

Motion/position measurement

Monitor/alarm devices (security, medical, safety)

Robotics

Related Products

ADXL343BCCZ
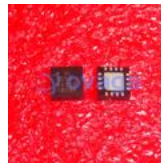
Analog Devices, Inc

LGA-14

ADXL103CE

Analog Devices, Inc

CLCC-8

ADXRS642BBGZ

Analog Devices, Inc

CBGA-32

ADXL335BCPZ-RL7

Analog Devices, Inc

LFCSP16

ADIS16488BMLZ

Analog Devices, Inc

MSM24

ADXL357BEZ

Analog Devices, Inc

LCC-14

ADXL346ACCZ-RL7

Analog Devices, Inc

LGA16

ADXL345BCCZ-RL7

Analog Devices, Inc

LGA-14

ADXL346ACCZ-RL7

Analog Devices, Inc

LGA16

ADXL345BCCZ-RL7

Analog Devices, Inc

LGA-14