# ADIS16485BMLZ

Data Sheet

Inertial Sensor 24-Pin MSM LAMINATE Tray

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|---|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | SMD |
| Product Type | Motion & Position Sensors |
| RoHS | |
| Lifecycle | |

Images are for reference only

Please submit RFQ for ADIS16485BMLZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

## General Description

The ADIS16485 iSensor® device is a complete inertial system thatincludes a triaxial gyroscope and a triaxial accelerometer. Eachinertial sensor in the ADIS16485 combines industry-leadingiMEMS® technology with signal conditioning that optimizesdynamic performance. The factory calibration characterizeseach sensor for sensitivity, bias, alignment, and linear acceleration(gyroscope bias). As a result, each sensor has its own dynamiccompensation formulas that provide accurate sensor measurements.

The ADIS16485 provides a simple, cost-effective method forintegrating accurate, multiaxis inertial sensing into industrialsystems, especially when compared with the complexity andinvestment associated with discrete designs. All necessary motiontesting and calibration are part of the production process at thefactory, greatly reducing system integration time. Tight orthogonalalignment simplifies inertial frame alignment in navigation systems.The SPI and register structure provide a simple interface fordata collection and configuration control.

The ADIS16485 uses the same footprint and connector systemas the ADIS16375 and the ADIS16488A, which greatlysimplifies the upgrade process. It comes in a module that isapproximately 47 mm × 44 mm × 14 mm and has a standardconnector interface.

## Features

Triaxial, digital gyroscope, ±450°/sec dynamic range

6°/hr in-run bias stability

0.3°/√hr angular random walk

0.01% nonlinearity

Triaxial, digital accelerometer, ±5 g

Triaxial, delta angle, and delta velocity outputs

Fast start-up time, ~500 ms

Factory calibrated sensitivity, bias, and axial alignment

Calibration temperature range: −40°C to +85°C

SPI-compatible serial interface

Embedded temperature sensor

Programmable operation and control

Automatic and manual bias correction controls

4 FIR filter banks, 120 configurable taps

Digital I/O: data-ready alarm indicator, external clock

Alarms for condition monitoring

Power-down/sleep mode for power management

Optional external sample clock input: up to 2.4 kHz

Single command self test

Single-supply operation: 3.0 V to 3.6 V

2000 g shock survivability

Operating temperature range: −40°C to +105°C

## Application

Platform stabilization and control

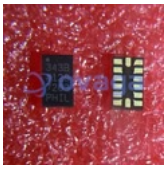
Navigation

Personnel tracking

Instruments

Robotics

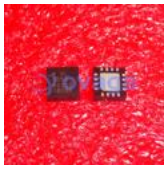
### Related Products



ADXL343BCCZ

Analog Devices, Inc

LGA-14



ADXL335BCPZ-RL7

Analog Devices, Inc

LFCSP16

[ADXL103CE]

Analog Devices, Inc

CLCC-8

[ADIS16488BMLZ]

Analog Devices, Inc

MSM24

[ADXRS642BBGZ]

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CBGA-32

[ADXL357BEZ]

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