

ADIS16365BMLZ

Data Sheet

Inertial Sensor Digital Output 5V 24-Pin Tray

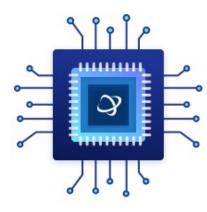
Manufacturers <u>Analog Devices, Inc</u>

Package/Case 12-NOV

Product Type Motion & Position Sensors

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADIS16365BMLZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ADIS16365 iSensor® device is a complete inertial systems that include a triaxis gyroscope and triaxis accelerometer. Each sensor in the ADIS16365 combines industry-leading iMEMS® technology with signal conditioning that optimizes dynamic performance. The factory calibration characterizes each sensor for sensitivity, bias, alignment, and linear acceleration (gyro bias). As a result, each sensor has its own dynamic compensation formulas that provide accurate sensor measurements.

The ADIS16365 provides a simple, cost-effective method for integrating accurate, multiaxis inertial sensing into industrial systems, especially when compared with the complexity and investment associated with discrete designs. All necessary motion testing and calibration are part of the production process at the factory, greatly reducing system integration time. Tight orthogonal alignment simplifies inertial frame alignment innavigation systems. An improved SPI interface and register structure provide faster data collection and configuration control.

The ADIS16365 uses a compatible pinout and the same package as the ADIS1635x family. Therefore, systems that currently use the ADIS1635x family can upgrade their performance with minor firmware adjustments in their processor designs. These compact modules are approximately $23 \text{ mm} \times 23 \text{ mm} \times 23 \text{ mm}$ and provide a flexible connector interface that enables multiple mounting orientation options.

Features

Triaxis digital gyroscope with digital range scaling

Tight orthogonal alignment: <0.05°

Triaxis digital accelerometer: ±18 g

Autonomous operation and data collection

No external configuration commands required

Start-up time: 180 ms

Sleep mode recovery time: 4 ms

Factory-calibrated sensitivity, bias, and axial alignment

SPI-compatible serial interface

Wide bandwidth: 330 Hz

Embedded temperature sensor

Programmable operation and control

Automatic and manual bias correction controls

Bartlett window, FIR filter length, number of taps

Digital I/O: data ready, alarm indicator, general-purpose

Alarms for condition monitoring

Sleep mode for power management

DAC output voltage

Enable external sample clock input: up to 1.2 kHz

Single-command self-test

Single-supply operation: 4.75 V to 5.25 V

2000 g shock survivability

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

ADIS16360 is obsolete

Related Products

Application

Medical instrumentation

Robotics

Platform control

Navigation

The ADIS16360 is no longer available.



ADXL343BCCZ

Analog Devices, Inc LGA-14



ADXL335BCPZ-RL7

Analog Devices, Inc LFCSP16



ADXL103CE

Analog Devices, Inc CLCC-8



ADXRS642BBGZ

Analog Devices, Inc CBGA-32



ADXL346ACCZ-RL7

Analog Devices, Inc LGA16



ADIS16488BMLZ

Analog Devices, Inc MSM24



ADXL357BEZ

Analog Devices, Inc LCC-14



ADXL345BCCZ-RL7

Analog Devices, Inc LGA-14