ovaga

ADIS16362BMLZ

Data Sheet

Six Degrees of Freedom Inertial Sensor; Package: MSM Laminate; No of Pins: 24;
Temperature Range: Ind

Manufacturers	Analog Devices, Inc
Package/Case	24LEAD
Product Type	Motion & Position Sensors
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for ADIS16362BMLZ or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The ADIS16362 iSensor® is a complete inertial system that includes a triaxis gyroscope and triaxis accelerometer. Each sensor in the ADIS16362 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 over a temperature range of −20°C to +70°C.

The ADIS16362 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 in navigation systems. An improved SPI interface and register structure provide faster data collection and configuration control. The ADIS16362 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.

This compact module is approximately 23 mm × 23 mm × 23 mm and provides a flexible connector interface that enables multiple mounting orientation options.

Ovaga Technologies Limited   **Email: sales@ovaga.com**

Features

Triaxis digital gyroscope with digital range scaling

Tight orthogonal alignment: <0.05°

Triaxis digital accelerometer: ±1.7 g

Wide sensor bandwidth: 330 Hz

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

Calibration temperature range: −20°C to +70°C

SPI-compatible serial interface

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

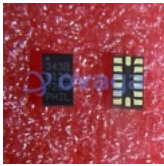Operating temperature range: −40°C to +105°C

Application

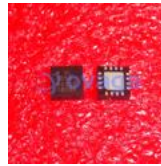Medical instrumentation

Robotics

Platform control

Navigation

Related Products

ADXL343BCCZ

Analog Devices, Inc

LGA-14

ADXL335BCPZ-RL7

Analog Devices, Inc

LFCSP16

ADXL103CE

Analog Devices, Inc

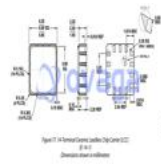CLCC-8

ADIS16488BMLZ

Analog Devices, Inc

MSM24

ADXRS642BBGZ

Analog Devices, Inc

CBGA-32

ADXL357BEZ

Analog Devices, Inc

LCC-14

ADXL346ACCZ-RL7

Analog Devices, Inc

LGA16

ADXL345BCCZ-RL7

Analog Devices, Inc

LGA-14