

ADIS16265BCCZ

Data Sheet

Ic sensor gyro progr 10mv 20lga

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

Package/Case LGA-20

Product Type Motion & Position Sensors

RoHS Rohs

Lifecycle

Please submit RFQ for ADIS16265BCCZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

Images are for reference only

RFO

General Description

The ADIS16260 and ADIS16265 are programmable digital gyroscopes that combine industry-leading MEMS and signal processing technology in a single compact package. They provide accuracy performance that would require full motion calibration with any other MEMS gyroscope in their class. When power is applied, the ADIS16260 and ADIS16265 automatically start up and begin sampling sensor data, without requiring configuration commands from a system processor. An addressable register structure and a common serial peripheral interface (SPI) provide simple access to sensor data and configuration settings. Many digital processor platforms support the SPI with simple firmware-level instructions.

The ADIS16265 provide several programmable features for in-system optimization. The sensor bandwidth switch (50 Hz and 330 Hz), Bartlett window FIR filter length, and sample rate settings provide users with controls that enable noise vs. bandwidth optimization. The digital input/output lines offer options for a data ready signal that helps the master processor efficiently manage data coherency, an alarm indicator signal for triggering master processor interrupts, and a general-purpose function for setting and monitoring system-level digital controls/conditions.

The ADIS16260 and ADIS16265 are drop-in replacements for the ADIS1625x family and come in LGA packages (11.2 mm \times 11.2 mm \times 5.5 mm) that meet Pb-free solder reflow profile requirements, per JEDEC J-STD-020. They have an extended operating temperature range of -40° C to $+105^{\circ}$ C.

Features

Yaw rate gyroscope with range scaling $\pm 80^{\circ}/\text{sec}$, $\pm 160^{\circ}/\text{sec}$, and $\pm 320^{\circ}/\text{sec}$ settings

No external configuration required to start data collection

Start-up time: 165 ms

Sleep mode recovery time: 2.5 ms

Factory-calibrated sensitivity and bias

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

SPI-compatible serial interface

Relative angle displacement output

Embedded temperature sensor

Programmable operation and control

Automatic and manual bias correction controls

Sensor bandwidth selection: 50 Hz/330 Hz

Sample rate: 256 SPS/2048 SPS settings

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

Single-command self-test

Single-supply operation: 4.75~V to 5.25~V

3.3 V compatible digital lines

2000 g shock survivability

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

Related Products

Application

Platform control and stabilization

Navigation

Medical instrumentation

Robotics



ADXL343BCCZ
Analog Devices, Inc
LGA-14



Analog Devices, Inc LFCSP16

ADXL335BCPZ-RL7



ADXL103CE
Analog Devices, Inc
CLCC-8



ADXRS642BBGZ Analog Devices, Inc CBGA-32



ADXL346ACCZ-RL7
Analog Devices, Inc
LGA16



Analog Devices, Inc MSM24

ADIS16488BMLZ



ADXL357BEZ
Analog Devices, Inc
LCC-14



ADXL345BCCZ-RL7
Analog Devices, Inc
LGA-14