LTC2480IDD#PBF

Data Sheet

1-Channel Single ADC Delta-Sigma 7.5sps 16-bit Serial Automotive 10-Pin DFN EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	DFN-10
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	

Images are for reference only

Please submit RFQ for LTC2480IDD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The LTC2480 combines a 16-bit plus sign No Latency ΔΣ™ analog-to-digital converter with patented Easy Drive™ technology. The patented sampling scheme eliminates dynamic input current errors and the shortcomings of onchip buffering through automatic cancellation of differential input current. This allows large external source impedances and input signals, with rail-to-rail input range to be directly digitized while maintaining exceptional DC accuracy.

The LTC2480 includes on-chip programmable gain and an oscillator. The LTC2480 can be configured to provide a programmable gain from 1 to 256 in 8 steps, measure an external signal or internal temperature sensor and reject line frequencies. 50Hz, 60Hz or simultaneous 50Hz/60Hz line frequency rejection can be selected as well as a 2x speed-up mode.

The LTC2480 allows a wide common mode input range (0V to VCC) independent of the reference voltage. The reference can be as low as 100mV or can be tied directly to VCC. The LTC2480 includes an on-chip trimmed oscillator eliminating the need for external crystals or oscillators. Absolute accuracy and low drift are automatically maintained through continuous, transparent, offset and full-scale calibration.

Features

Extended Temperature Range of –40°C to 125°C

Easy Drive Technology Enables Rail-to-Rail Inputs with Zero Differential Input Current

Directly Digitizes High Impedance Sensors with Full Accuracy

Programmable Gain from 1 to 256

GND to VCC Input/Reference Common Mode Range

Programmable 50Hz, 60Hz or Simultaneous 50Hz/60Hz Rejection Mode

2ppm (0.25LSB) INL, No Missing Codes

1ppm Offset and 15ppm Full-Scale Error

Selectable 2x Speed Mode (15Hz Using Internal Oscillator)

No Latency: Digital Filter Settles in a Single Cycle

Single Supply 2.7V to 5.5V Operation

Internal Oscillator

Available in a Tiny (3mm × 3mm) 10-Lead DFN Package and 10-Lead MSOP Package

Application

Direct Sensor Digitizer

Weight Scales

Direct Temperature Measurement

Strain Gauge Transducers

Instrumentation

Industrial Process Control

DVMs and Meters

Related Products

[LTC1860IMS8#PBF](#)

Analog Devices, Inc

MSOP-8

[LTC2351IUH-14#PBF](#)

Analog Devices, Inc

QFN-32

LT1171CQ

Analog Devices, Inc

TO-263

LTC2600CGN#PBF

Analog Devices, Inc

SSOP16

LTC2485IDD#PBF

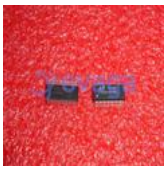
Analog Devices, Inc

DFN-10

LTC2642CMS-16#PBF

Analog Devices, Inc

10MSOP



LTC2418IGN#PBF

Analog Devices, Inc

SSOP28

LTC1865AIMS#PBF

Analog Devices, Inc

MSOP-1