

24-Bit ADC with Easy Drive Input Current Cancellation and I2C Interface; Package: DFN; No of Pins: 10; Temperature Range: -40°C to +85°C

|               |                                     |
|---------------|-------------------------------------|
| Manufacturers | <a href="#">Analog Devices, Inc</a> |
| Package/Case  | DFN-10                              |
| Product Type  | Data Conversion ICs                 |
| RoHS          | Pb-free Halide free                 |
| Lifecycle     |                                     |



Images are for reference only

Please submit RFQ for LTC2485IDD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC2485 combines a 24-bit plus sign No Latency  $\Delta\Sigma^{\text{TM}}$  analog-to-digital converter with patented Easy Drive technology and I2C digital interface. The patented sampling scheme eliminates dynamic input current errors and the shortcomings of on-chip 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 LTC2485 includes an on-chip oscillator. The LTC2485 can be configured through an I2C interface to reject line frequencies. 50Hz, 60Hz or simultaneous 50Hz/60Hz line frequency rejection can be selected as well as a 2x speed-up mode.

The LTC2485 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 LTC2485 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

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

Directly Digitizes High Impedance Sensors with Full Accuracy

GND to VCC Input/Reference Common Mode Range

2-Wire I2C Interface

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

No Latency: Digital Filter Settles in a Single Cycle

Single Supply 2.7V to 5.5V Operation

Internal Oscillator

Six Addresses Available and One Global Address for Synchronization

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

## Application

Direct Sensor Digitizer

Weight Scales

Direct Temperature Measurement

Strain Gauge Transducers

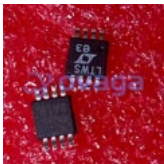
Instrumentation

Industrial Process Control

DVMs and Meters



## Related Products



[LTC1860IMS8#PBF](#)

Analog Devices, Inc  
MSOP-8



[LT1171CQ](#)

Analog Devices, Inc  
TO-263



[LTC2351IUH-14#PBF](#)

Analog Devices, Inc  
QFN-32



[LTC2600CGN#PBF](#)

Analog Devices, Inc  
SSOP16



[LTC2642CMS-16#PBF](#)

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10MSOP



[LTC2418IGN#PBF](#)

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SSOP28



[LTC1865AIMS#PBF](#)

Analog Devices, Inc  
MSOP-1



[LTC2203IUk](#)

Analog Devices, Inc  
QFN48