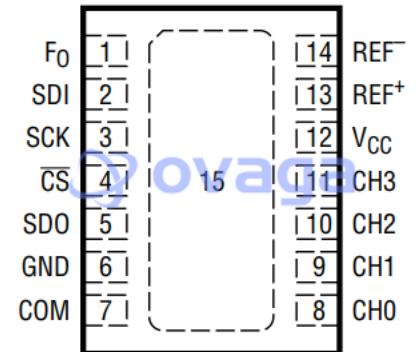


16-Bit 2-/4-Channel Delta Sigma ADC with PGA and Easy Drive Input Current Cancellation;
 Package: DFN; No of Pins: 14; Temperature Range: 0°C to +70°C

Manufacturers	Analog Devices, Inc
Package/Case	DFN-14
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2486CDE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2486 is a 4-channel (2-channel differential), 16-bit, No Latency $\Delta\Sigma^{\text{TM}}$ ADC with Easy DriveTM technology. 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 rail-to-rail input signals to be directly digitized while maintaining exceptional DC accuracy.

The LTC2486 includes programmable gain, a high accuracy temperature sensor, and an integrated oscillator. This device can be configured to measure an external signal (from combinations of 4 analog input channels operating in single ended or differential modes) or its internal temperature sensor. It can be programmed to reject line frequencies of 50Hz, 60Hz, or simultaneous 50Hz/60Hz, provide a programmable gain from 1 to 256 in 8 steps, and configured to double its output rate. The integrated temperature sensor offers 1/2°C resolution and 2°C absolute accuracy.

The LTC2486 allows a wide common mode input range (0V to VCC), independent of the reference voltage. Any combination of single-ended or differential inputs can be selected and the first conversion after a new channel selection is valid.

Features

Up to 2 Differential or 4 Single-Ended Inputs

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

Directly Digitizes High Impedance Sensors with Full Accuracy

600nV RMS Noise

Programmable Gain from 1 to 256

Integrated High Accuracy Temperature Sensor

GND to VCC Input/Reference Common Mode Range

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

2ppm INL, No Missing Codes

1ppm Offset and 15ppm Full-Scale Error

2x Speed Mode/Reduced Power Mode (15Hz Using Internal Oscillator and 80 μ A at 7.5Hz Output)

No Latency: Digital Filter Settles in a Single Cycle, Even After a New Channel is Selected

Single Supply 2.7V to 5.5V Operation (0.8mW)

Internal Oscillator

Tiny 4mm \times 3mm DFN Package

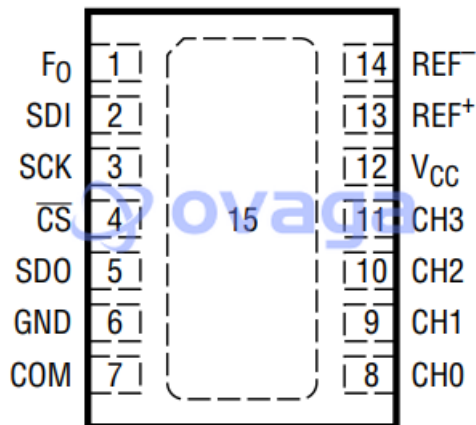
Application

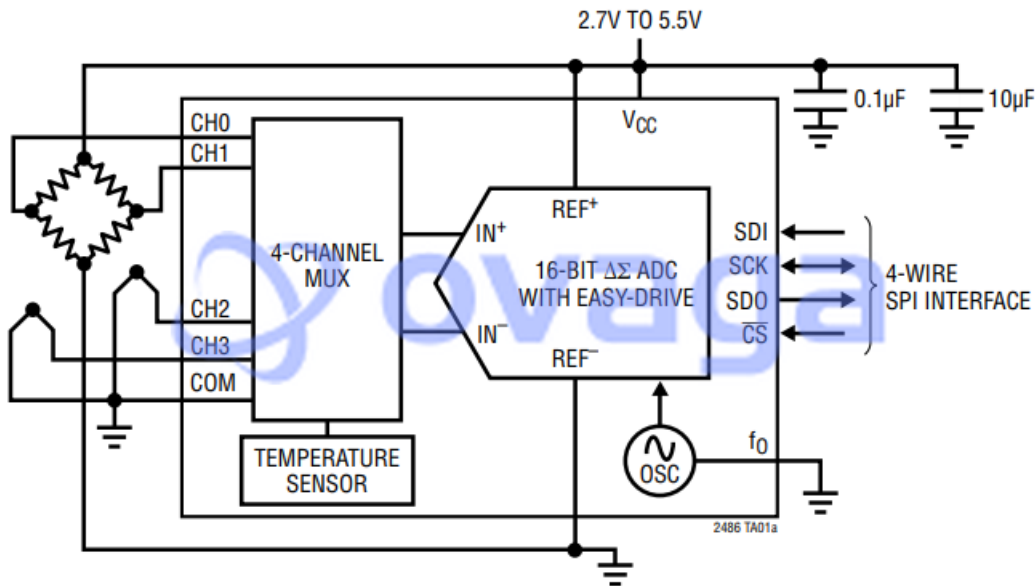
Direct Sensor Digitizer

Direct Temperature Measurement

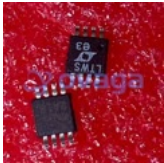
Instrumentation

Industrial Process Control





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



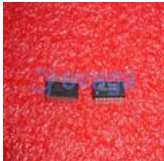
[LTC2485IDD#PBF](#)

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