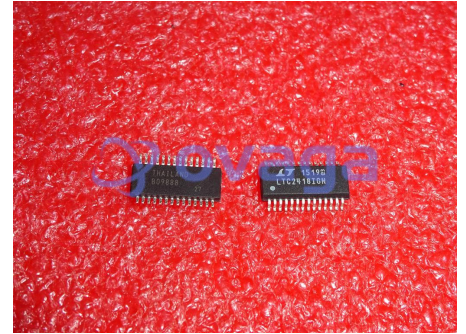


8-/16-Channel 24-Bit No Latency Delta Sigma ADCs; Package: SSOP; No of Pins: 28;
Temperature Range: -40°C to +85°C

Manufacturers	Analog Devices, Inc
Package/Case	SSOP28
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2418IGN#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2414/LTC2418 are 8-/16-channel (4-/8-differential) micropower 24-bit $\Delta\Sigma$ analog-to-digital converters. They operate from 2.7V to 5.5V and include an integrated oscillator, 2ppm INL and 0.2ppm RMS noise. They use delta-sigma technology and provide single cycle settling time for multiplexed applications. Through a single pin, the LTC2414/LTC2418 can be configured for better than 110dB differential mode rejection at 50Hz or 60Hz $\pm 2\%$, or they can be driven by an external oscillator for a user-defined rejection frequency. The internal oscillator requires no external frequency setting components.

The LTC2414/LTC2418 accept any external differential reference voltage from 0.1V to VCC for flexible ratiometric and remote sensing measurement applications. They can be configured to take 4/8 differential channels or 8/16 single-ended channels. The full-scale bipolar input range is from -5VREF to 0.5VREF. The reference common mode voltage, VREFCM, and the input common mode voltage, VINCM, may be independently set within GND to VCC. The DC common mode input rejection is better than 140dB.

The LTC2414/LTC2418 communicate through a flexible 4-wire digital interface that is compatible with SPI and MICROWIRE protocols.

Features

8-/16-Channel Single-Ended or 4-/8-Channel Differential Inputs (LTC2414/LTC2418)

Low Supply Current (200 μ A, 4 μ A Autosleep)

Differential Input and Differential Reference with GND to VCC Common Mode Range

2ppm INL, No Missing Codes

2.5ppm Full-Scale Error and 0.5ppm Offset

0.2ppm Noise

No Latency: Digital Filter Settles in a Single Cycle. Each Conversion Is Accurate, Even After a New Channel is Selected

Single Supply 2.7V to 5.5V Operation

Internal Oscillator—No External Components Required

110dB Min, 50Hz/60Hz Notch Filter

Application

Direct Sensor Digitizer

Weight Scales

Direct Temperature Measurement

Gas Analyzers

Strain Gauge Transducers

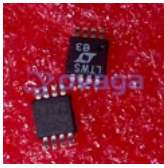
Instrumentation

Data Acquisition

Industrial Process Control



Related Products



[LTC1860IMS8#PBF](#)

Analog Devices, Inc
MSOP-8



[LT1171CQ](#)

Analog Devices, Inc
TO-263



[LTC2485IDD#PBF](#)

Analog Devices, Inc
DFN-10



[LTC1865AIMS#PBF](#)

Analog Devices, Inc
MSOP-1



[LTC2351IUH-14#PBF](#)

Analog Devices, Inc
QFN-32



[LTC2600CGN#PBF](#)

Analog Devices, Inc
SSOP16



[LTC2642CMS-16#PBF](#)

Analog Devices, Inc
10MSOP



[LTC2203IUK](#)

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QFN48