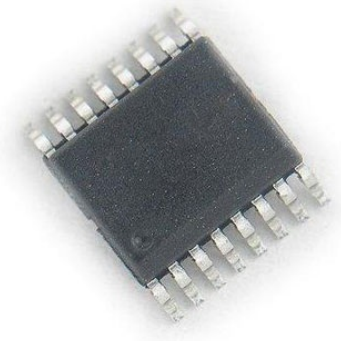


Analogue to Digital Converter, Delta Sigma, 24 bit, 3.5 kSPS, Differential, Serial, Single, 4.4 V

Manufacturers	Analog Devices, Inc
Package/Case	SSOP16
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2440IGN#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2440 is a high speed 24-bit No Latency $\Delta\Sigma^{\text{TM}}$ ADC with 5ppm INL and 5 μ V offset. It uses proprietary Delta Sigma architecture enabling variable speed and resolution with no latency. Ten speed/resolution combinations (6.9Hz/ 200nVRMS to 3.5kHz/25 μ VRMS) are programmed through a simple serial interface. Alternatively, by tying a single pin HIGH or LOW, a fast (880Hz/2 μ VRMS) or ultralow noise (6.9Hz, 200nVRMS, 50/60Hz rejection) speed/resolution combination can be easily selected. The accuracy (offset, full-scale, linearity, drift) and power dissipation are independent of the speed selected. Since there is no latency, a speed/resolution change may be made between conversions with no degradation in performance.

Following each conversion cycle, the LTC2440 automatically enters a low power sleep state. Power dissipation may be reduced by increasing the duration of this sleep state. For example, running at the 3.5kHz conversion speed but reading data at a 100Hz rate draws 240 μ A average current (1.1mW) while reading data at a 7Hz output rate draws only 25 μ A (125 μ W). The LTC2440 communicates through a flexible 3-wire or 4-wire digital interface that is compatible with the LTC2410 and is available in a narrow 16-lead SSOP package.

Features

Up to 3.5kHz Output Rate

Selectable Speed/Resolution

2 μ V_{RMS} Noise at 880Hz Output Rate

200nV_{RMS} Noise at 6.9Hz Output Rate with Simultaneous 50/60Hz Rejection

0.0005% INL, No Missing Codes

Autosleep Enables 20 μ A Operation at 6.9Hz

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

No Latency, Each Conversion is Accurate Even After an Input Step

Internal Oscillator—No External Components

Pin Compatible with the LTC2410

24-Bit ADC in Narrow 16-Lead SSOP Package

Application

High Speed Multiplexing

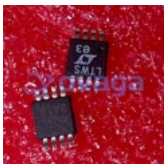
Weight Scales

Auto Ranging 6-Digit DVMS

Direct Temperature Measurement

High Speed Data Acquisition

Related Products



[LTC1860IMS8#PBF](#)

Analog Devices, Inc
MSOP-8



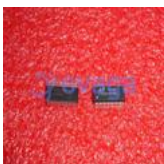
[LT1171CQ](#)

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[LTC2418IGN#PBF](#)

Analog Devices, Inc
SSOP28



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Analog Devices, Inc
QFN-32



[LTC2600CGN#PBF](#)

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SSOP16



[LTC2642CMS-16#PBF](#)

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