

IC ADC SAR 24BIT 2MSPS 16MSOP

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|---------------|-------------------------------------|
| Manufacturers | Analog Devices, Inc |
| Package/Case | MSOP-16 |
| Product Type | Data Conversion ICs |
| RoHS | Pb-free Halide free |
| Lifecycle | |



Images are for reference only

Please submit RFQ for LTC2380CMS-24#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2380-24 is a low noise, low power, high speed 24-bit successive approximation register (SAR) ADC with an integrated digital averaging filter. Operating from a 2.5V supply, the LTC2380-24 has a $\pm V_{REF}$ fully differential input range with V_{REF} ranging from 2.5V to 5.1V. The LTC2380-24 consumes only 28mW and achieves ± 3.5 ppm INL maximum and no missing codes at 24 bits.

The LTC2380-24 has an easy to use integrated digital averaging filter that can average 1 to 65536 conversion results real-time, dramatically improving dynamic range from 101dB at 1.5Msps to 145dB at 30.5sps. No separate programming interface or configuration register is required.

The high speed SPI-compatible serial interface supports 1.8V, 2.5V, 3.3V and 5V logic while also featuring a daisychain mode. The LTC2380-24 automatically powers down between conversions, reducing power dissipation at lower sampling rates.

Features

Guaranteed 24-Bits No Missing Codes

Integrated Digital Filter with Real-Time Averaging

Low Power: 28mW at 2Msps

100dB SNR (Typ) at 1.5Msps

145dB Dynamic Range (Typ) at 30.5sps

50Hz/60Hz Rejection

Digital Gain Compression (DGC)

Guaranteed Operation to 85°C

Single 2.5V Supply

Fully Differential Input Range Up to $\pm 5V$

1.8V to 5V SPI-Compatible Serial I/O with Daisy-Chain Mode

16-Lead MSOP and 4mm \times 3mm DFN Packages

Application

Seismology

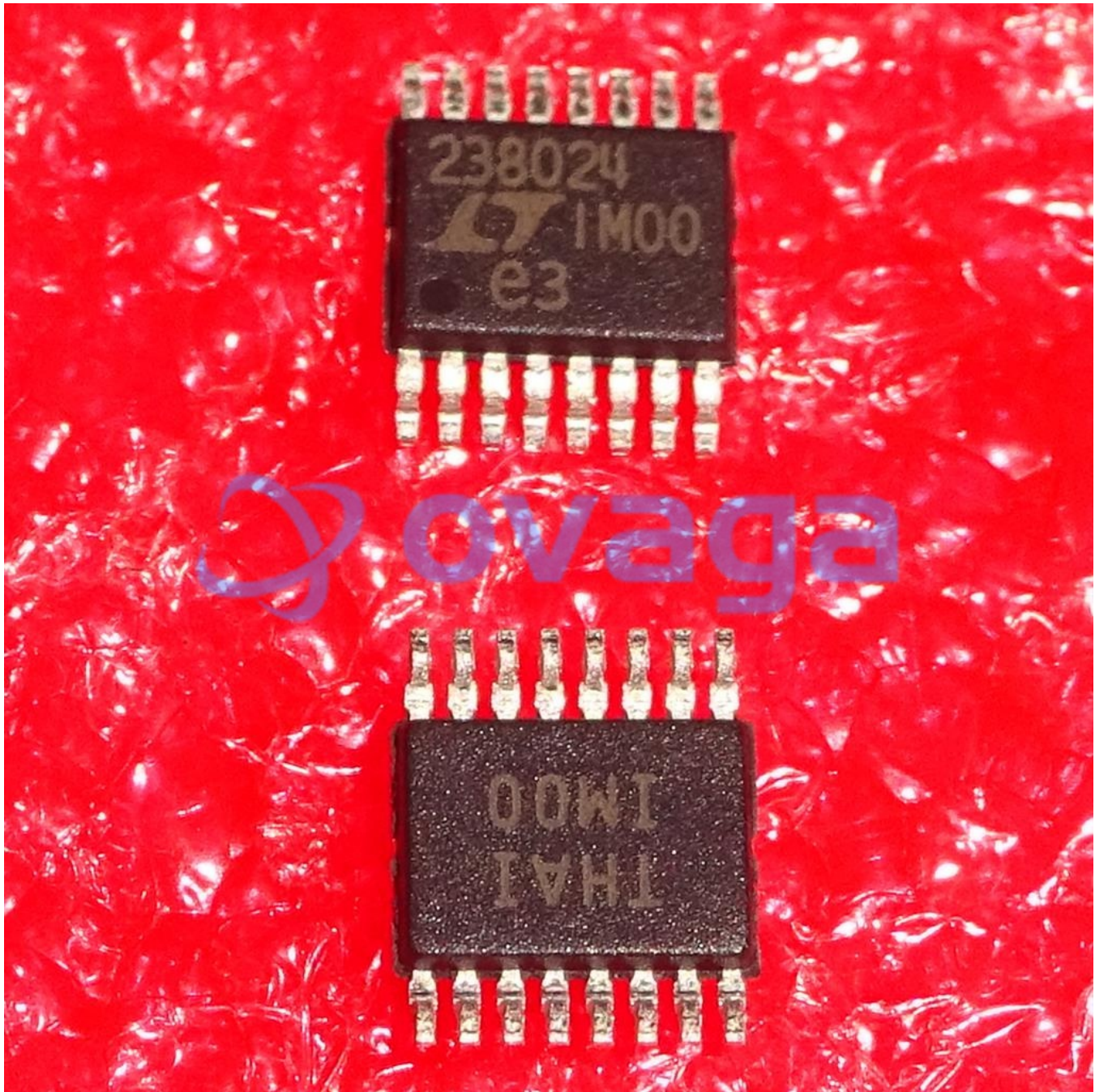
Energy Exploration

Medical Imaging

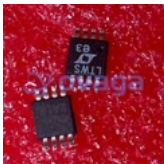
High Speed Data Acquisition

Industrial Process Control

ATE



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



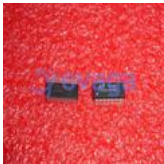
[LTC2485IDD#PBF](#)

Analog Devices, Inc
DFN-10



[LTC2642CMS-16#PBF](#)

Analog Devices, Inc
10MSOP



[LTC2418IGN#PBF](#)

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SSOP28



[LTC1865AIMS#PBF](#)

Analog Devices, Inc
MSOP-1