

8-Channel, 16-Bit, 100ksps SoftSpan A/D Converters with Shutdown; Package: SSOP; No of Pins: 28; Temperature Range: -40°C to +85°C

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	28-SSOP (0.209, 5.30mm Width)
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC1859IG#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC1857/LTC1858/LTC1859 are 8-channel, low power, 12-/14-/16-bit, 100ksps, analog-to-digital converters (ADCs). These SoftSpan™ ADCs can be software programmed for 0V to 5V, 0V to 10V, ±5V or ±10V input spans and operate from a single 5V supply. The 8-channel multiplexer can be programmed for single-ended inputs or pairs of differential inputs or combinations of both. In addition, all channels are fault protected to ±25V. A fault condition on any channel will not affect the conversion result of the selected channel.

An onboard high performance sample-and-hold and precision reference minimize external components. The low 40mW power dissipation is made even more attractive with two user selectable power shutdown modes. DC specifications include ±3LSB INL for the LTC1859, ±1.5LSB INL for the LTC1858 and ±1LSB for the LTC1857.

The internal clock is trimmed for 5µs maximum conversion time and the sampling rate is guaranteed at 100ksps. A separate convert start input and data ready signal (BUSY) ease connections to FIFOs, DSPs and microprocessors.

## Features

Sample Rate: 100ksps

8-Channel Multiplexer with  $\pm 25V$  Protection

Single 5V Supply

Software-Programmable Input Ranges:

0V to 5V, 0V to 10V,  $\pm 5V$  or  $\pm 10V$

Single Ended or Differential

Power Dissipation: 40mW (Typ)

SPI/MICROWIRE™ Compatible Serial I/O

Power Shutdown: Nap and Sleep

Signal-to-Noise Ratio: 87dB (Typ) for the LTC1859

Operates with Internal or External Reference

Internal Synchronized Clock

28-Pin SSOP Package

## Application

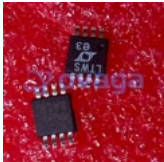
Industrial Process Control

Multiplexed Data Acquisition Systems

High Speed Data Acquisition for PCs

Digital Signal Processing

## Related Products



### [LTC1860IMS8#PBF](#)

Analog Devices, Inc  
MSOP-8



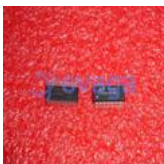
### [LT1171CQ](#)

Analog Devices, Inc  
TO-263



### [LTC2485IDD#PBF](#)

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DFN-10



### [LTC2418IGN#PBF](#)

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SSOP28



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### [LTC2642CMS-16#PBF](#)

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