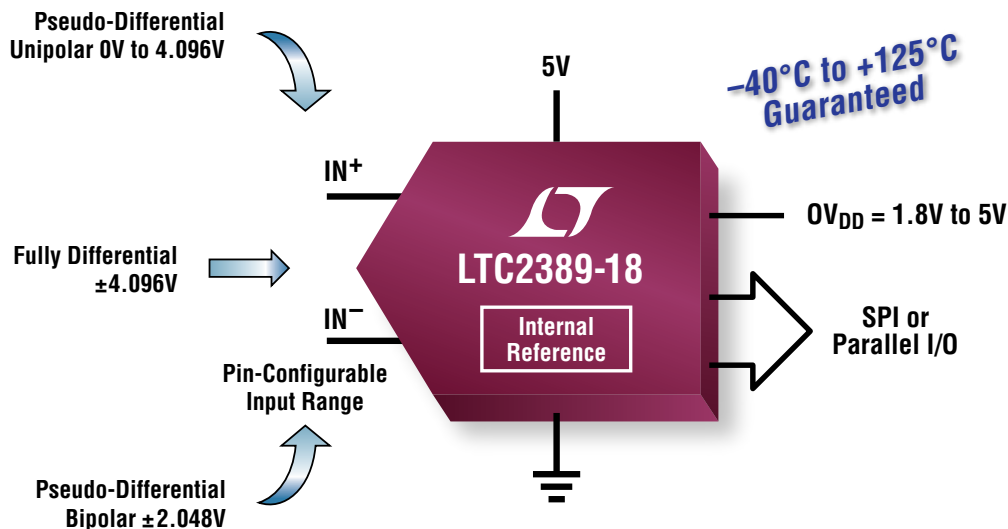


# 18-Bit 2.5Mps SAR ADC

## 100dB SNR

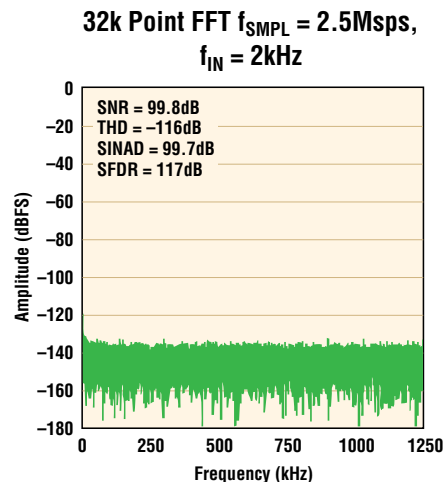


### All-in-One ADC with Configurable Input Ranges and Digital I/O

The LTC<sup>®</sup>2389 18-bit/16-bit, 2.5Mps pin- and timing-compatible, no-latency SAR ADCs feature unrivaled 100dB SNR at 18-bits and 96dB SNR at 16-bits. This all-in-one ADC includes a pin-configurable analog input range, adding flexibility to the input signal chain design and a serial and parallel digital interface. The precision 20ppm/°C (max) internal reference with buffer reduces external components and saves board space.

#### Pin-Compatible Family

	2.5Mps
18-Bit 100dB SNR	2389-18
16-Bit 96dB SNR	2389-16
Power Consumption	162.5mW



#### Features

- 2.5Mps Throughput Rate
- 100dB SNR (typ) at  $f_{\text{IN}} = 2\text{kHz}$
- $\pm 3\text{LSB}$  INL (max),  $\pm 0.9\text{LSB}$  DNL (max)
- Pin-Configurable Analog Input Range:
  - Fully Differential  $\pm 4.096\text{V}$
  - Pseudo-Differential Unipolar 0V to 4.096V
  - Pseudo-Differential Bipolar  $\pm 2.048\text{V}$
- Internal 20ppm/°C (max) Reference
- No Pipeline Delay, No Cycle Latency
- 48-pin 7mm x 7mm LQFP and QFN Packages

[www.linear.com/product/LTC2389](http://www.linear.com/product/LTC2389)  
1-800-4-LINEAR

LT, LT, LTC, LTM, Linear Technology and the Linear logo are registered trademarks of Linear Technology Corporation. All other trademarks are the property of their respective owners.

