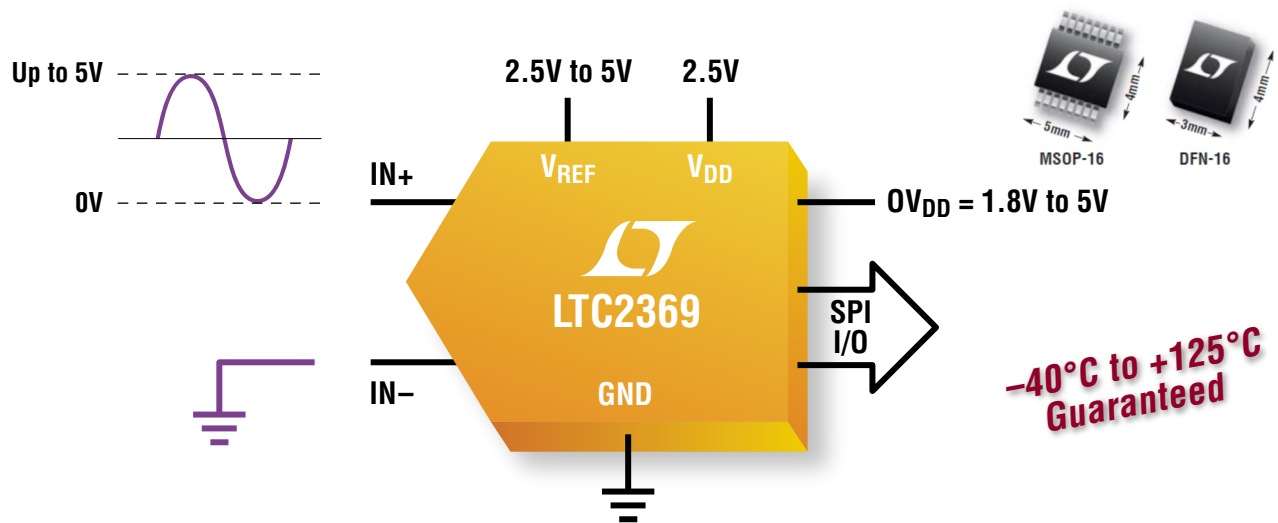


# 18-Bit, 1.6MSPS Pseudo-Differential SAR ADC



## 96.5dB SNR Performance with 18mW Power Dissipation

The LTC<sup>®</sup>2369 family of 18- and 16-bit pseudo-differential SAR ADCs feature 96.5dB SNR at 18 bits and 94dB SNR at 16 bits from 250ksps to 2MSPS. The pseudo-differential input simplifies the ADC driver requirement and reduces cost, complexity and power in designs. The simple serial I/O with explicit Busy and Chain pins makes it easy to use. The small size, low power operation makes it a good choice for battery-operated and portable or compact ADC applications.

### Features

- 1.6MSPS Throughput Rate
- 96.5dB SNR (Typ) at  $f_{IN} = 2\text{kHz}$
- $\pm 2.5\text{LSB}$  INL (Max),  $\pm 0.5\text{LSB}$  DNL (Max)
- 120dB THD (Typ) at  $f_{IN} = 2\text{kHz}$
- Low Power: 18mW at 1.6MSPS, 18 $\mu\text{W}$  at 1.6ksps
- Pseudo-Differential Unipolar Input Range: 0V to V<sub>REF</sub>
- 40°C to 125°C Guaranteed Temperature Range
- Internal Conversion Clock
- 16-Lead MSOP and 4mm x 3mm DFN Packages

## Complete 18- and 16-Bit Pin-Compatible Fully/Pseudo-Differential SAR ADC Family

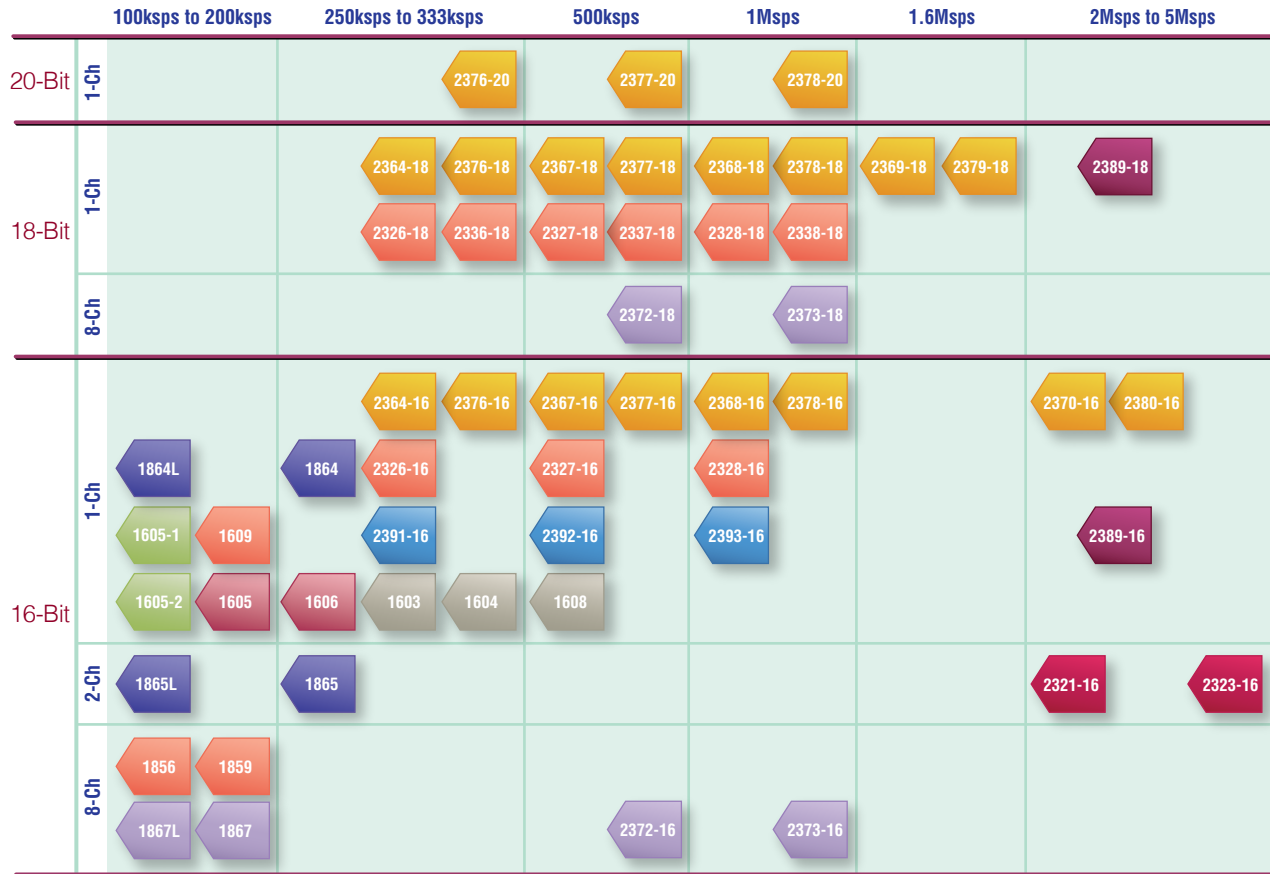
		250ksps	500ksps	1MSPS	1.6MSPS	2MSPS
18-Bit	Fully Differential 101dB SNR	2376-18	2377-18	2378-18	2379-18	
	Pseudo-Differential 96.5dB SNR	2364-18	2367-18	2368-18	2369-18	
16-Bit	Fully Differential 96dB SNR	2376-16	2377-16	2378-16		2380-16
	Pseudo-Differential 94dB SNR	2364-16	2367-16	2368-16		2370-16
Power Consumption		3.4mW	6.8mW	13.5mW	18mW	19mW








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# High Precision SAR ADCs



16-Bit to 20-Bit Resolution, 100ksps Up to 5Msps






## Serial

-  Pseudo- or Fully Differential Pin-Compatible ADCs
-  ±10V True Bipolar Inputs
-  8-Channel MUX'd Input ADCs
-  3V/5V Supply  $\mu$ Power ADCs
-  3.3V/5V Supply Simultaneous Sampling ADCs

## Serial/Parallel

-  Pseudo- or Fully Differential Pin-Compatible ADCs
-  Fully Differential Pin-Compatible ADCs

## Parallel

-  ±10V True Bipolar Inputs
-  0V to 4V, ±4V Unipolar/True Bipolar Inputs
-  ±2.5V True Bipolar Inputs