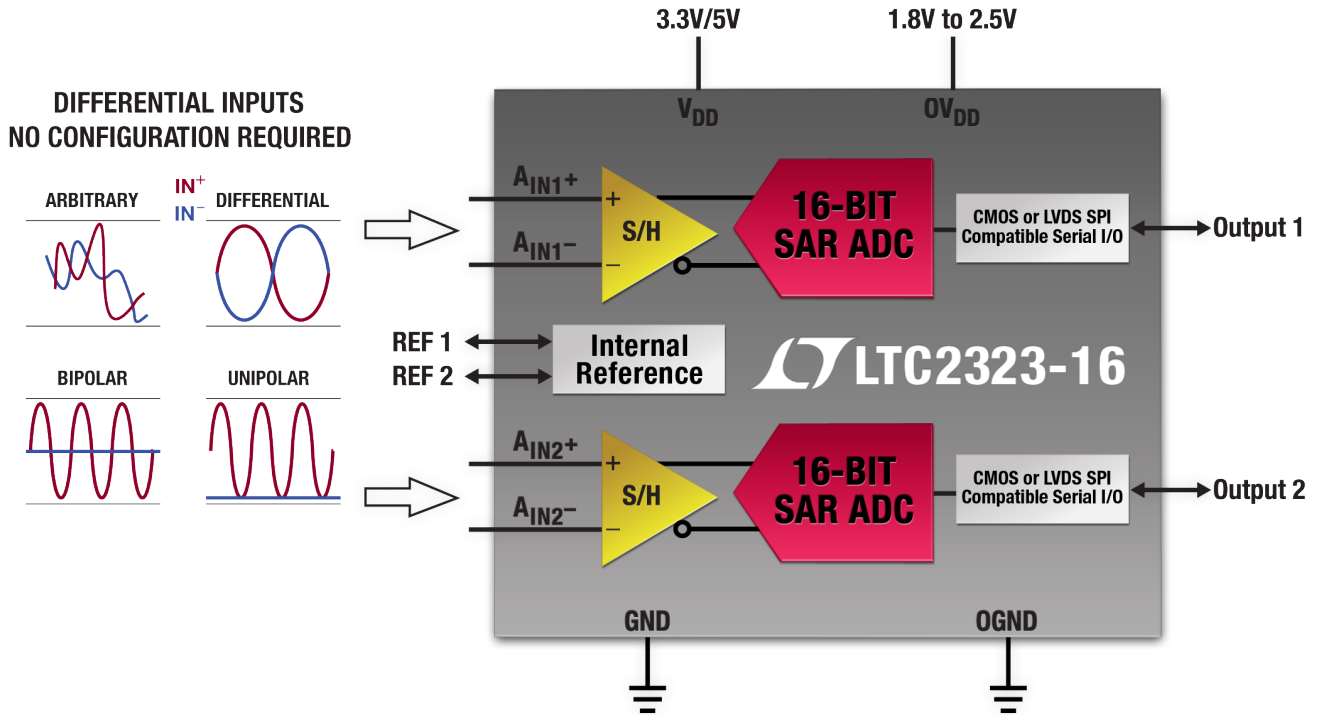


# Dual 16-Bit 5Mps SAR ADC



## Simultaneous Sampling ADC with Wide Input Common Mode Range

The LTC<sup>®</sup>2323-16 is part of a family of dual simultaneous sampling, 16-, 14- and 12-bit 5Mps SAR ADCs offering a wide input common mode range. The flexible differential inputs can digitize a wide variety of analog signals, including pseudo-differential unipolar and bipolar signals, and signals with an arbitrary relationship to each other, with no configuration required. The low drift, integrated precision bandgap reference with guaranteed 20ppm/°C maximum temperature coefficient and small 20mm<sup>2</sup> QFN package saves space in high density designs.

### Features

- Up to 5Mps Throughput Rate
- 8V<sub>P-P</sub> Differential Inputs with Rail-to-Rail Common Mode
- 81dB SNR, -89dB THD at  $f_{IN} = 500\text{kHz}$  (16 Bits)
- $\pm 4\text{LSB}$  INL (Typ),  $\pm 12\text{LSB}$  (Max)
- Low Drift (20ppm/°C Max), 2.048V or 4.096V Internal Reference
- Single 3.3V or 5V Operation
- No Cycle Latency (LTC2321)
- Low Power Dissipation:
  - 40mW/Ch (5Mps, 5V, CMOS Outputs)
  - 48mW/Ch (5Mps, 5V, LVDS Outputs)
- CMOS or LVDS SPI-Compatible Serial I/O
- Guaranteed Operation from -40°C to 125°C
- 28-Lead (4mm × 5mm) QFN Package

	2Mps	5Mps
16-Bit 81dB SNR	2321-16	2323-16
14-Bit 80dB SNR	2321-14	2323-14
12-Bit 73dB SNR	2321-12	2323-12



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# General Purpose SAR ADCs

8-Bit to 14-Bit Resolution, 6ksps to 5Mps

