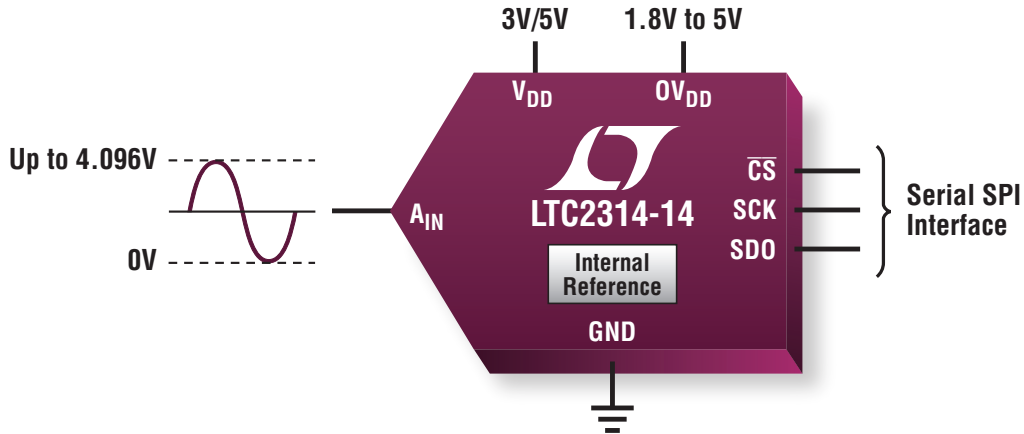


14-Bit 4.5Mps SAR ADC

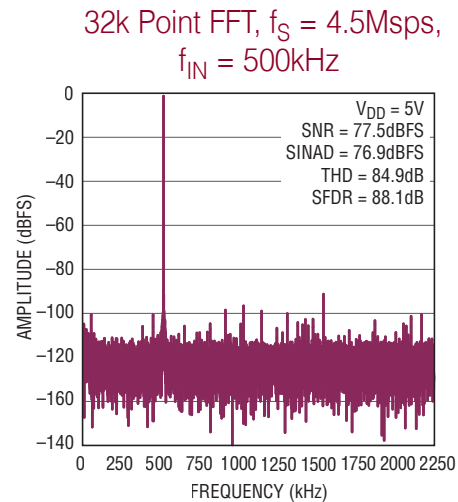


20ppm/°C Max Integrated Reference in 8mm² TSOT

The LTC[®]2314-14 leads a family of highly integrated 14-/12-bit SAR ADCs from 500ksps to 5Mps. Available in tiny 8-lead TSOT-23 packages, these ADCs integrate a precision bandgap reference with guaranteed 20ppm/°C maximum temperature coefficient and an internal reference buffer into an 8mm² footprint, saving space in high density designs. They offer the flexibility of 3V or 5V supply operation and low power consumption, including nap and sleep modes.

Features

- Up to 5Mps Throughput Rate
- 77.5dB SNR, -85dB THD (14 Bits)
- ±3.75LSB INL Max, ±0.99LSB DNL Max (14 Bits)
- Internal Reference: 20ppm/°C Max, 2.048V/4.096V Span
- Low Power: 31mW at 4.5Mps and 5V
- Flexible Supply Range: 3V or 5V Operation
- Guaranteed Operation from -40°C to 125°C
- 8-Lead TSOT-23 Package



Complete 14-Bit/12-Bit Pin Compatible SAR ADC Family

	500ksps	2.5Mps	4.5Mps	5Mps
14-Bit	2312-14	2313-14	2314-14	
12-Bit	2312-12	2313-12		2315-12
Power Consumption 3V/5V	9mW/15mW	14mW/25mW	18mW/31mW	19mW/32mW



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General Purpose SAR ADCs

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

