September 4, 2013

Industry's Fastest 18-Bit SAR A/D Converter Unveiled

NORWOOD, Mass.--(BUSINESS WIRE)-- Analog Devices, Inc. (NASDAQ: ADI) introduced today an 18-bit PulSAR® A/D converter with 5-MSPS throughput that is twice the speed of any available SAR (successive-approximation register) converter. With its industry leading throughput, best-in-class noise floor and high linearity, the AD7960 PulSAR A/D converter was designed for low-power signal chains, multiplexed systems such as digital X-ray, and oversampling applications including spectroscopy, MRI gradient control and gas chromatography.

Unlike other 18-bit A/D converters, which sacrifice power and accuracy to achieve higher sample rates, the AD7960 consumes 39 mW at 5 MSPS and is optimized for excellent DC linearity (+/- 0.8 LSB INL) and AC performance (99dB SNR) even at full throughput. The new converter also features a best-in-class noise floor (22.4 nV/√Hz) relative to its full scale input, which combined with a small package size helps designers meet space, thermal, power and other key design challenges common to high-channel-density systems.

Also today, Analog Devices introduced the AD7961 16-bit PulSAR A/D converter, which achieves excellent SNR (signal-to-noise ratio) performance (95.5 dB) and INL (+/- 0.2 LSB INL) at 5-MSPS.

- Download data sheet, watch the video, order samples and evaluation boards:
  http://www.analog.com/AD7960
  http://www.analog.com/AD7961
- Circuits from the Lab Reference Design:CN0277 High-Precision, 18-bit, 5-MSPS, Low-Power Signal Chain for Data Acquisition:

  http://www.analog.com/en/circuits-from-the-lab/CN0277/vc.html

- Connect with engineers and ADI product experts on EngineerZone™, an online technical support community:
  http://ez.analog.com/community/data_converters

AD7960 and AD7691 PulSAR A/D Converters Target Data Acquisition Systems

The AD7961 and AD7960 PulSAR A/D converters provide a pin-compatible upgrade/downgrade path for 16- and 18 —bit data acquisition applications in instrumentation and healthcare. They include a flexible, low-noise LVDS (low-voltage differential signaling) interface which transfers data off chip at speeds up to 300 MHz.

Related evaluation tools such as reference circuits, development kits and FPGA mezzanine cards include all HDL code and device drivers for easy integration with FPGAs and support faster development in a simplified design environment.

Pricing and Availability

Product	Sample Availability/Full Production	Resolution	SNR (typ)	Temp Range	Price Each Per 1,000	Package
AD7960	NOW	18-bit	99 dB	-40°C to 85°C	$31.00	5 mm x 5 mm 32-lead LFCSP
AD7961	NOW	16-bit	95.5 dB	-40°C to 85°C	$21.00	5 mm x 5 mm 32-lead LFCSP

The AD7960 can be used with the ADA4897 low-power, rail-to-rail output amplifier, the AD8031 rail-to-rail I/O amplifier and the ADR4540 or the ADR4550 voltage references to provide a complete low-power, high-precision signal chain.

About Analog Devices

Innovation, performance, and excellence are the cultural pillars on which Analog Devices has built one of the longest standing, highest growth companies within the technology sector. Acknowledged industry-wide as the world leader in data conversion and signal conditioning technology, Analog Devices serves over 60,000 customers, representing virtually all types of electronic equipment. Analog Devices is headquartered in Norwood, Massachusetts, with design and manufacturing facilities throughout the world. Analog Devices is included in the S&P 500 Index.

Follow ADI on Twitter at http://www.twitter.com/ADI_News

Subscribe to *Analog Dialogue*, ADI's monthly technical journal, at: http://www.analog.com/library/analogDialogue/

PulSAR is a registered trademark of Analog Devices, Inc.

Photos/Multimedia Gallery Available: http://www.businesswire.com/multimedia/home/20130904005025/en/

Analog Devices, Inc.
Grainne Murphy, +353 61-495540
grainne.murphy@analog.com
or
Porter Novelli
Andrew MacLellan, 617-897-8270
andrew.maclellan@porternovelli.com

Source: Analog Devices, Inc.