

8-Channel, 1 MSPS, 12-Bit A/D Converter with Sequencer in 20-Lead TSSOP; Package: TSSOP; No of Pins: 20; Temperature Range: Industrial

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP-20
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7928BRUZ-REEL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The conversion process and data acquisition are controlled using CS and the serial clock signal, allowing the device to easily interface with microprocessors or DSPs. The input signal is sampled on the falling edge of CS and conversion is also initiated at this point. There are no pipeline delays associated with the part.

The AD7908/AD7918/AD7928 use advanced design techniques to achieve very low power dissipation at maximum throughput rates. At maximum throughput rates, the AD7908/AD7918/AD7928 consume 2 mA maximum with 3 V supplies; with 5 V supplies, the current consumption is 2.7 mA maximum.

Through the configuration of the control register, the analog input range for the part can be selected as 0 V to REFIN or 0 V to  $2 \times$  REFIN, with either straight binary or twos complement output coding. The AD7908/AD7918/AD7928 each feature eight single-ended analog inputs with a channel sequencer to allow a preprogrammed selection of channels to be converted sequentially.

The conversion time for the AD7908/AD7918/AD7928 is determined by the SCLK frequency, which is also used as the master clock to control the conversion.

### Product Highlights

**High Throughput with Low Power Consumption.** The AD7908/ AD7918/AD7928 offer up to 1 MSPS throughput rates. At the maximum throughput rate with 3 V supplies, the AD7908/ AD7918/AD7928 dissipate just 6 mW of power maximum.

**Eight Single-Ended Inputs with a Channel Sequencer.** A sequence of channels can be selected, through which the ADC cycles and converts on.

**Single-Supply Operation with VDRIVE Function.** The AD7908/ AD7918/AD7928 operate from a single 2.7 V to 5.25 V supply. The VDRIVE function allows the serial interface to connect directly to either 3 V or 5 V processor systems independent of AVDD.

**Flexible Power/Serial Clock Speed Management.** The conversion rate is determined by the serial clock, allowing the conversion time to be reduced through the serial clock speed increase. The parts also feature various shutdown modes to maximize power efficiency at lower throughput rates.

Current consumption is 0.5  $\mu$ A max when in full shutdown.

No Pipeline Delay. The parts feature a standard successive approximation ADC with accurate control of the sampling instant via a CS input and once off conversion control.

## Features

Fast throughput rate: 1 MSPS

Specified for AVDD of 2.7 V to 5.25 V

Low Power: 6.0 mW max at 1 MSPS with 3 V supply 13.5 mW max at 1 MSPS with 5 V supply

Eight (single-ended) inputs with sequencer

Wide input bandwidth: AD7928, 70 dB min SINAD at 50 kHz input frequency

Flexible power/serial clock speed management

No pipeline delays

High speed serial interface SPI®/QSPI™/MICROWIRE™/DSP compatible

## Related Products



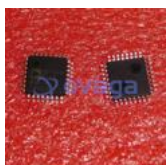
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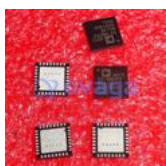
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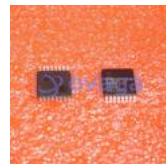
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