

Analogue to Digital Converter, 13 bit, 1 MSPS, Pseudo Differential, Single Ended, Serial, SPI

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP20
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD7328BRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7328 is an 8-channel, 12-bit plus sign, successive approximation ADC designed on the iCMOS (industrial CMOS) process. iCMOS is a process combining high voltage silicon with submicron CMOS and complementary bipolar technologies. It enables the development of a wide range of high performance analog ICs capable of 33 V operation in a footprint that no previous generation of high voltage parts could achieve. Unlike analog ICs using conventional CMOS processes, iCMOS components can accept bipolar input signals while providing increased performance, dramatically reduced power consumption, and reduced package size.

The AD7328 can accept true bipolar analog input signals. The AD7328 has four software-selectable input ranges, ± 10 V, ± 5 V, ± 2.5 V, and 0 V to +10 V. Each analog input channel can be independently programmed to one of the four input ranges. The analog input channels on the AD7328 can be programmed to be single-ended, true differential, or pseudo differential.

The ADC contains a 2.5 V internal reference. The AD7328 also allows for external reference operation. If a 3 V reference is applied to the REFIN/OUT pin, the AD7328 can accept a true bipolar ± 12 V analog input. Minimum ± 12 V VDD and VSS supplies are required for the ± 12 V input range. The ADC has a high speed serial interface that can operate at throughput rates up to 1 MSPS.

Product Highlights

The AD7328 can accept true bipolar analog input signals, ± 10 V, ± 5 V, ± 2.5 V, and 0 V to +10 V unipolar signals

The eight analog inputs can be configured as eight single-ended inputs, four true differential input pairs, four pseudo differential inputs, or seven pseudo differential inputs

1 MSPS serial interface. SPI®-/QSPI™-/DSP-/MICROWIRE™-compatible interface

Low power, 30 mW, at a maximum throughput rate of 1 MSPS

Channel sequencer

Features

12-Bit plus Sign SAR ADC

True Bipolar Input Ranges

Software Selectable Input Ranges: $\pm 10V$, $\pm 5V$, $\pm 2.5V$, 0 to 10V

Eight Analog Input Channels with Channel Sequencer

Single Ended, True Differential and Pseudo Differential Analog Input Capability

High Analog Input Impedance

Low Power: 26 mW

Full Power Signal Bandwidth: >13 MHz

Internal 2.5 V Reference

High Speed Serial Interface - 1 MSPS Throughput

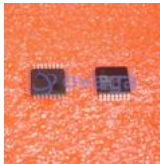
For four and two channel equivalent devices, see AD7324, AD7322

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc
TQPF-32



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



[AD7401YRWZ](#)

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[AD7938BSUZ](#)

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[AD7192BRUZ-REEL](#)

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[AD7124-8BCPZ-RL7](#)

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[AD9680BCPZ-500](#)

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LFCSP-64