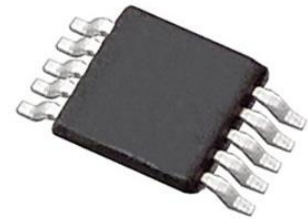


Analog to Digital Converter, 16 bit, 100 kSPS, Pseudo Differential, SPI, Single, 2.375 V

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-10
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7988-1BRMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7988-1/AD7988-5 are 16-bit, successive approximation, analog-to-digital converters (ADC) that operate from a single power supply, VDD. The AD7988-1 offers a 100 kSPS throughput, and the AD7988-5 offers a 500 kSPS throughput. They are low power, 16-bit sampling ADCs with a versatile serial interface port. On the CNV rising edge, they sample an analog input, IN+, between 0 V to VREF with respect to a ground sense, IN-. The reference voltage, REF, is applied externally and can be set independent of the supply voltage, VDD.

The SPI-compatible serial interface also features the ability to daisy-chain several ADCs on a single 3-wire bus using the SDI input. It is compatible with 1.8 V, 2.5 V, 3 V, or 5 V logic using the separate supply, VIO.

The AD7988-1/AD7988-5 generics are housed in a 10-lead MSOP or a 10-lead LFCSP with operation specified from -40°C to +125°C.

## Features

Low power dissipation

400  $\mu$ W at 100 kSPS (VDD only)

700  $\mu$ W at 100 kSPS (total)

16-bit resolution with no missing codes

Throughput: 100 kSPS/500 kSPS options

INL:  $\pm 0.6$  LSB typical,  $\pm 1.25$  LSB maximum

SINAD: 91.5 dB at 10 kHz

THD:  $-114$  dB at 10 kHz

Pseudo differential analog input range

0 V to VREF with VREF from 2.5 V to 5.5 V

No pipeline delay

Single-supply 2.5 V operation with 1.8 V/2.5 V/3 V/5 V logic interface

Proprietary SPI-/QSPI<sup>™</sup>-/MICROWIRE<sup>™</sup>-/DSP-compatible serial interface

Daisy-chain multiple ADCs

10-lead MSOP and 10-lead, 3 mm  $\times$  3 mm LFCSP, same space as SOT-23

Wide operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

## Application

Battery-powered equipment

Low power data acquisition systems

Portable medical instruments

ATE equipment

Data acquisitions

Communications

## Related Products



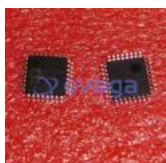
[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



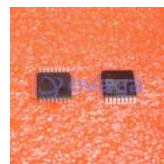
[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



[AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



[AD7266BSUZ](#)

Analog Devices, Inc  
TQPF-32



[AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



[AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc

LFCSP-32



[AD9680BCPZ-500](#)

Analog Devices, Inc

LFCSP-64