

Fast, Precision Comparator; Package: SOIC; No of Pins: 8; Temperature Range: Commercial

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-8
Product Type Delay)	Comparators ; High Speed Comparators (<100ns Propagation
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD790JRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7902 is a dual 16-bit, successive approximation, analog-to-digital converter (ADC) that operates from a single power supply, VDDx, per ADC. It contains two low power, high speed, 16-bit sampling ADCs and a versatile serial port interface (SPI). On the CNVx rising edge, the AD7902 samples an analog input, IN+ in the range of 0 V to VREF with respect to a ground sense, IN-. The externally applied reference voltage of the REFx pins (VREF) can be set independently from the supply voltage pins, VDDx. The power of the device scales linearly with throughput.

Using the SDIx inputs, the SPI-compatible serial interface can also daisy-chain multiple ADCs on a single 3-wire bus and provide an optional busy indicator. It is compatible with 1.8 V, 2.5 V, 3 V, or 5 V logic, using the separate VIOx supplies.

The AD7902 is available in a 20-lead QSOP package with operation specified from -40°C to +125°C.

## Features

16-bit resolution with no missing codes

Throughput: 1 MSPS

Lowpower dissipation 7.0 mW at 1 MSPS (VDD1 and VDD2 only) 12.0 mW at 1 MSPS (total) 140  $\mu$ W at 10 kSPS

INL:  $\pm 1.0$  LSB typical,  $\pm 2.5$  LSB maximum

Pseudodifferential analog input range 0 V to VREF with VREF between 2.4 V to 5.1 V Allows use of any input range Easy to drive with the ADA4841-1/ADA4841-2

SINAD: 91 dB at 1 kHz

THD:  $-105$  dB at 1 kHz

No pipeline delay

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

Serial port interface (SPI) QSPI/MICROWIRE/DSP compatible

20-lead QSOP package

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

## Application

Battery-powered equipment

Communications

Automated test equipment (ATE)

Data acquisition

Medical instrumentation

Redundant measurement

Simultaneous sampling



## Related Products



### [ADCMP573BCPZ](#)

Analog Devices, Inc  
QFN



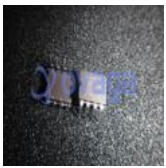
### [AD790SQ](#)

Analog Devices, Inc  
CDIP-8



### [AD790JN](#)

Analog Devices, Inc  
PDIP-8



### [AD9696TQ](#)

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### [AD96687BQ](#)

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### [AD8561AR](#)

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SOP-8