

1-Channel Single ADC SAR 500ksps 12-bit Parallel/Serial 24-Pin SOIC W Tube

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-24
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7892ARZ-1 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7892 is a high speed, low power, 12-bit A/D converter that operates from a single +5 V supply. The part contains a 1.47  $\mu$ s successive approximation ADC, an on-chip track/hold amplifier, an internal +2.5 V reference and on-chip versatile interface structures that allow both serial and parallel connection to a microprocessor. The part accepts an analog input range of  $\pm 10$  V or  $\pm 5$  V (AD7892-1), 0 V to +2.5 V (AD7892-2) and  $\pm 2.5$  V (AD7892-3). Overvoltage protection on the analog inputs for the AD7892-1 and AD7892-3 allows the input voltage to go to  $\pm 17$  V or  $\pm 7$  V respectively without damaging the ports.

The AD7892 offers a choice of two data output formats: a single, parallel, 12-bit word or serial data. Fast bus access times and standard control inputs ensure easy parallel interface to microprocessors and digital signal processors. A high speed serial interface allows direct connection to the serial ports of microcontrollers and digital signal processors.

In addition to the traditional dc accuracy specifications such as linearity, full-scale and offset errors, the part is also specified for dynamic performance parameters including harmonic distortion and signal-to-noise ratio.

The AD7892 is fabricated in Analog Devices' Linear Compatible CMOS (LC<sup>2</sup>MOS) process, a mixed technology process that combines precision bipolar circuits with low-power CMOS logic. It is available in a 24-pin, 0.3" wide, plastic or hermetic DIP or in a 24-pin SOIC.

## Features

Fast 12-Bit ADC with 1.47  $\mu$ s Conversion Time

600 kSPS Throughput Rate (AD7892-3)

500 kSPS Throughput Rate (AD7892-1, AD7892-2)

Single Supply Operation

On-Chip Track/Hold Amplifier

High Speed Serial and Parallel Interface

Low Power, 60 mW typ

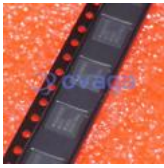
Selection of Input Ranges:

0 V to +2.5 V for AD7892-2

Overvoltage Protection on Analog Inputs (AD7892-1 and AD7892-3)

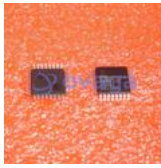


## Related Products



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