

Analog to Digital Converters - ADC IC 10-Bit 4CH 1 Msps W/ Sequencer

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP-16
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7914BRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7904/AD7914/AD7924 are, respectively, 8-bit, 10-bit, and 12-bit, high speed, low power, 4-channel successive approximation ADCs. The parts operate from a single 2.7 V to 5.25 V power supply and feature throughput rates up to 1 MSPS. The parts contain a low noise, wide bandwidth track-and-hold amplifier that can handle input frequencies in excess of 8 MHz.

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 AD7904/AD7914/AD7924 use advanced design techniques to achieve very low power dissipation at maximum throughput rates. At maximum throughput rates, the AD7904/AD7914/AD7924 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 two's complement output coding. The AD7904/AD7914/AD7924 each feature four single-ended analog inputs with a channel sequencer to allow a pre-programmed selection of channels to be converted sequentially.

The conversion time for the AD7904/AD7914/AD7924 is determined by the SCLK frequency, which is also used as the master clock to control the conversion.

## Features

Fast throughput rate: 1 MSPS

Specified for AVDD of 2.7 V to 5.25 V

Low power: 6 mW maximum at 1 MSPS with 3 V supplies 13.5 mW maximum at 1 MSPS with 5 V supplies

4 single-ended inputs with sequencer

Wide input bandwidth: AD7924, 70 dB SNR at 50 kHz input frequency

Flexible power/serial clock speed management

No pipeline delays

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

Shutdown mode: 0.5 μA maximum

16-lead TSSOP package

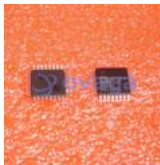
Qualified for automotive applications

## Related Products



### [ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



### [AD7266BSUZ](#)

Analog Devices, Inc  
TQFP-32



### [AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



### [AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



### [AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



### [AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



### [AD7124-8BCPZ-RL7](#)

Analog Devices, Inc  
LFCSP-32



### [AD9680BCPZ-500](#)

Analog Devices, Inc  
LFCSP-64