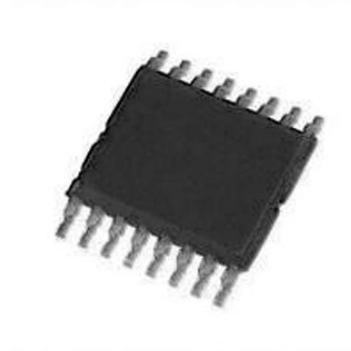


Differential Input, Dual, 5 MSPS, 12-Bit, SAR ADC

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 AD7356BRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7356 is a dual, 12-bit, high speed, low power, successive approximation ADC that operates from a single 2.5 V power supply and features throughput rates up to 5 MSPS. The part contains two ADCs, each preceded by a low noise, wide bandwidth track-and-hold circuit that can handle input frequencies in excess of 110 MHz.

The conversion process and data acquisition use standard control inputs allowing for easy interfacing to microprocessors or DSPs. The input signal is sampled on the falling edge of CS; a conversion is also initiated at this point. The conversion time is determined by the SCLK frequency.

The AD7356 uses advanced design techniques to achieve very low power dissipation at high throughput rates. With a 2.5 V supply and a 5 MSPS throughput rate, the part consumes typically 14 mA. The part also offers a flexible power/throughput rate management option.

The analog input range for the part is the differential commonmode  $\pm V_{REF}/2$ . The AD7356 has an on-chip 2.048 V reference that can be overdriven when an external reference is preferred.

The AD7356 is available in a 16-lead thin shrink small outline package (TSSOP).

### Product Highlights

**Two Complete ADC Functions.** These functions allow simultaneous sampling and conversion of two channels. The conversion result of both channels is simultaneously available on separate data lines or in succession on one data line if only one serial port is available.

**High Throughput with Low Power Consumption.** The AD7356 offers a 5 MSPS throughput rate with 36 mW power consumption.

**No Conversion Latency.** The AD7356 features two standard successive approximation ADCs with accurate control of the sampling instant via a CS input and, once off, conversion control.

## Features

Dual 12-bit SAR ADC

Simultaneous Sampling

Throughput rate: 5 MSPS per channel

Specified for VDD at 2.5 V

No conversion latency

Power dissipation: 36 mW at 5 MSPS

On-chip reference: 2.048 V  $\pm$  0.25%, 6ppm/°C

Dual conversion with read

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

Available in a 16-lead TSSOP

## Application

Data acquisition systems

Motion control

I and Q demodulation

## Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



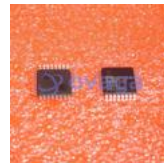
[AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc  
LFCSP-32



[AD7266BSUZ](#)

Analog Devices, Inc  
TQPF-32



[AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



[AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



[AD9680BCPZ-500](#)

Analog Devices, Inc  
LFCSP-64