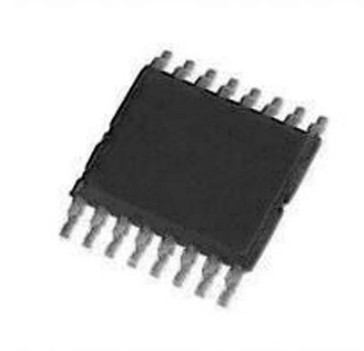


Analogue to Digital Converter, SAR, 24 bit, 128 kSPS, Differential, Serial, Single, 2.375 V

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 AD7766BRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7766/AD7766-1/AD7766-2 are high performance, 24-bit, oversampled SAR analog-to-digital converters (ADCs). The AD7766/AD7766-1/AD7766-2 combine the benefits of a large dynamic range and input bandwidth, consuming 15 mW, 10.5 mW, and 8.5 mW power, respectively, and are contained in a 16-lead TSSOP package.

Ideal for ultralow power data acquisition (such as PCI- and USB-based systems), the AD7766/AD7766-1/AD7766-2 provide 24-bit resolution. The combination of exceptional SNR, wide dynamic range, and outstanding dc accuracy make the AD7766/AD7766-1/AD7766-2 ideally suited for measuring small signal changes over a wide dynamic range. This is particularly suitable for applications where small changes on the input are measured on larger ac or dc signals. In such an application, the AD7766/AD7766-1/AD7766-2 accurately gather both ac and dc information.

The AD7766/AD7766-1/AD7766-2 include an on-board digital filter (complete with linear phase response) that acts to eliminate out-of-band noise by filtering the oversampled input voltage. The oversampled architecture also reduces front-end anti-alias requirements. Other features of the AD7766/AD7766-1/AD7766-2 include a SYNC/PD (synchronization/power-down) pin, allowing the synchronization of multiple AD7766/AD7766-1/AD7766-2 devices. The addition of an SDI pin provides the option of daisy-chaining multiple AD7766/AD7766-1/AD7766-2 devices.

The AD7766/AD7766-1/AD7766-2 operate from a 2.5 V supply using a 5 V reference. The devices operate from -40°C to +105°C.

## Features

Download . Available as Known Good Die and fully guaranteed in data sheet specifications

Oversampled successive approximation (SAR) architecture

High performance ac and dc accuracy, low power

115.5 dB dynamic range, 32 kSPS (AD7766-2)

112.5 dB dynamic range, 64 kSPS (AD7766-1)

109.5 dB dynamic range, 128 kSPS (AD7766)

Exceptionally low power

8.5 mW, 32 kSPS (AD7766-2)

10.5 mW, 64 kSPS (AD7766-1)

15 mW, 128 kSPS (AD7766)

High dc accuracy

24 bits, no missing codes (NMC)

INL:  $\pm 6$  ppm (typical),  $\pm 15$  ppm (maximum)

Low temperature drift

Zero error drift: 15 nV/°C

Gain error drift: 0.4 ppm/°C

See data sheet for additional features

## Application

Low power PCI/USB data acquisition systems

Low power wireless acquisition systems

Vibration analysis

Instrumentation

High precision medical acquisition

## Related Products



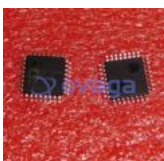
[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



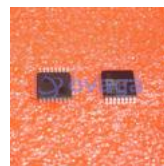
[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



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TQFP-32



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TSSOP-24



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc

LFCSP-32



[AD9680BCPZ-500](#)

Analog Devices, Inc

LFCSP-64