

## AD7767BRUZ

Data Sheet

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

Manufacturers Analog Devices, Inc

Package/Case TSSOP-16

Product Type Data Conversion ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD7767BRUZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Ideal for ultralow power data acquisition (such as PCI- and USB-based systems), the AD7767/AD7767-1/AD7767-2 provide 24-bit resolution. The combination of exceptional SNR, wide dynamic range, and outstanding dc accuracy make the AD7767/AD7767-1/AD7767-2 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 AD7767/AD7767-1/AD7767-2 accurately gather both ac and dc information.

The AD7767-1/AD7767-2 include an on-board digital filter (complete with linear phase response) that acts to elimi-nate out-of-band noise by filtering the oversampled input voltage. The oversampled architecture also reduces front-end antialias requirements. Other features of the AD7767 include a SYNC/PD (synchronization/power-down) pin, allowing the synchronization of multiple AD7767 devices. The addition of an SDI pin provides the option of daisy chaining multiple AD7767 devices.

The AD7767/AD7767-1/AD7767-2 operate from a 2.5 V supply using a 5 V reference. The devices operate from -40°C to +105°C.

## **Features**

Oversampled successive approximation (SAR) architecture

High performance ac and dc accuracy, low power115.5 dB dynamic range, 32 kSPS (AD7767-2)112.5 dB dynamic range, 64 kSPS (AD7767-1)109.5 dB dynamic range, 128 kSPS (AD7767)—118 dB THD

Exceptionally low power8.5 mW, 32 kSPS (AD7767-2)10.5 mW, 64 kSPS (AD7767-1)15 mW, 128 kSPS (AD7767)

High dc accuracy24 bits, no missing codes (NMC)INL: ±3 ppm (typical), ±7.6 ppm (maximum)

Low temperature driftZero error drift: 15 nV/°CGain error drift: 0.4 ppm/°C

On-chip low-pass FIR filter

Linear phase responsePass-band ripple: ±0.005 dBStop-band attenuation: 100 dB

2.5 V supply with 1.8 V/2.5 V/3 V/3.6 V logic interface options

Flexible interfacing optionsSynchronization of multiple devicesDaisy-chain capabilityPower-down function

Temperature range: -40°C to +105°C

## **Related Products**



ADAS3022BCPZ
Analog Devices, Inc
LFCSP-40



Analog Devices, Inc PDIP-28

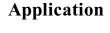
AD574AJNZ



AD7938BSUZ
Analog Devices, Inc
TQFP-32



AD7124-8BCPZ-RL7
Analog Devices, Inc
LFCSP-32



Low power PCI/USB data acquisition systems

Low power wireless acquisition systems

Vibration analysis

Instrumentation

High precision medical acquisition



AD7266BSUZ

Analog Devices, Inc
TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



Analog Devices, Inc LFCSP-64

AD9680BCPZ-500