

AD7766BRUZ-2

Data Sheet

Analogue to Digital Converter, 24 bit, 32 kSPS, Differential, Serial, Single, 2.375 V

Manufacturers Analog Devices, Inc

Package/Case TSSOP-16

Product Type Data Conversion ICs

RoHS Pb-free Halide free

Please submit RFQ for AD7766BRUZ-2 or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

RFO

General Description

Lifecycle

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 alarge 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 USBbasedsystems), the AD7766/AD7766-1/AD7766-2 provide 24-bitresolution. The combination of exceptional SNR, wide dynamicrange, and outstanding dc accuracy make the AD7766/AD7766-1/AD7766-2 ideally suited for measuring small signal changes over awide dynamic range. This is particularly suitable for applicationswhere small changes on the input are measured on larger ac ordc 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 antialias 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 daisychaining multiple AD7766/AD7766-1/AD7766-2 devices.

The AD7766/AD7766-1/AD7766-2 operate from a 2.5 V supplyusing 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: ± 6 ppm (typical), ± 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



AD7938BSUZ
Analog Devices, Inc
TQFP-32



Analog Devices, Inc TQPF-32

AD7266BSUZ



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



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



Analog Devices, Inc LFCSP-64