

AD7780BRUZ

Data Sheet

ADC, 24BIT, 16.7SPS, Resolution (Bits):24bit, Sampling Rate:16.7SPS, Supply Voltage Type:Single, Supply Voltage Min:2.7V, Supply Voltage Max:5.25V

Manufacturers Analog Devices, Inc

Package/Case TSSOP16

Product Type Data Conversion ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD7780BRUZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Consuming only $330 \,\mu\text{A}$, the AD7780 is particularly suitable for portable or battery-operated products where very low power is required. The AD7780 also has a power-down mode that allows the user to switch off the power to the bridge sensor and power down the AD7780 when not converting, thus increasing the battery life of the product.

For ease of use, all the features of the AD7780 are controlled by dedicated pins. Each time a data read occurs, eight status bits are appended to the 24-bit conversion. These status bits contain a pattern sequence that can be used to confirm the validity of the serial transfer.

The on-chip PGA has a gain of 1 or 128, supporting a full-scale differential input of ± 5 V or ± 39 mV. The device has two filter response options. The filter response at the 16.7 Hz update rate provides superior dynamic performance. The settling time is 120 ms at this update rate. At the 10 Hz update rate, the filter response provides greater than -45 dB of stop-band attenuation. In load cell applications, this stop-band rejection is useful to reject low frequency mechanical vibrations of the load cell. The settling time is 300 ms at this update rate. Simultaneous 50 Hz/60 Hz rejection occurs at both the 10 Hz and 16.7 Hz update rates.

The AD7780 operates with a power supply from 2.7 V to 5.25 V. It is available in a narrow body, 14-lead SOIC package and a 16-lead TSSOP package.

Features

Pin-programmable filter responseUpdate rate: 10 Hz or 16.7 Hz

Pin-programmable in-amp gain

Pin-programmable power-down and reset

Status function

Internal clock oscillator

Internal bridge power-down switch

Current115 μ A typical = 128)

Please see data sheet for additional features

Application

Weigh scales

Pressure Measurement

Industrial Process Control

Portable instrumentation

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



Analog Devices, Inc TSSOP-24



AD9680BCPZ-500
Analog Devices, Inc
LFCSP-64