

3-Channel, Low Noise, Low Power, 24-Bit Sigma Delta ADC with On-Chip In-Amp and Reference; Package: TSSOP; No of Pins: 16; Temperature Range: Industrial

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 AD7793BRUZ-REEL or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7792/AD7793 are low power, low noise, complete analog front ends for high precision measurement applications. The AD7792/AD7793 contain a low noise 16-/24-bit Σ - Δ ADC with three differential analog inputs. The on-chip, low noise instrumentation amplifier means that signals of small amplitude can be interfaced directly to the ADC. With a gain setting of 64, the rms noise is 40 nV when the update rate equals 4.17 Hz.

The devices contain a precision low noise, low drift internal band gap reference and can accept an external differential reference. Other on-chip features include programmable excitation current sources, burnout currents, and a bias voltage generator. The bias voltage generator sets the common-mode voltage of a channel to $AVDD/2$.

The devices can be operated with either the internal clock or an external clock. The output data rate from the parts is software-programmable and can be varied from 4.17 Hz to 470 Hz.

The parts operate with a power supply from 2.7 V to 5.25 V. They consume a current of 400 μ A typical and are housed in a 16-lead TSSOP package.

Features

Up to 23 bits effective resolution

RMS noise

40 nV @ 4.17 Hz

85 nV @ 16.7 Hz

Current: 400 μ A typical

Power-down: 1 μ A maximum

Update rate: 4.17 Hz to 470 Hz

3 differential inputs

Application

Thermocouple measurements

RTD measurements

Thermistor measurements

Gas analysis

Industrial process control

Instrumentation

Portable instrumentation

Blood analysis

Smart transmitters

Liquid/gas chromatography

6-digit DVM

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



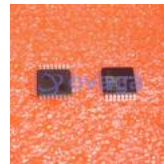
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

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[AD7266BSUZ](#)

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TQPF-32



[AD7401YRWZ](#)

Analog Devices, Inc
SOIC-16



[AD7192BRUZ-REEL](#)

Analog Devices, Inc
TSSOP-24



[AD9680BCPZ-500](#)

Analog Devices, Inc
LFCSP-64