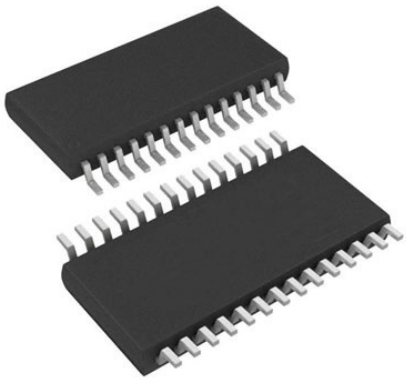
AD7934BRUZ-6

Data Sheet

Analogue to Digital Converter, Multichannel, 12 bit, 1.5 MSPS, Differential, Single Ended, Parallel

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP-28
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7934BRUZ-6 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD7934-6 is a 12-bit, high speed, low power, successive approximation (SAR) analog-to-digital converter (ADC). The part operates from a single 2.7 V to 5.25 V power supply and features throughput rates up to 625 kSPS. The part contains a low noise, wide bandwidth, differential track-and-hold amplifier that handles input frequencies up to 50 MHz.

The AD7934-6 features four analog input channels with a channel sequencer that allows a preprogrammed selection of channels to be converted sequentially. This part can accept either single-ended, fully differential, or pseudo differential analog inputs.

Data acquisition and conversion are controlled by standard control inputs that allow for easy interfacing to microprocessors and DSPs. The input signal is sampled on the falling edge ofCONVST, which is also the point where the conversion is initiated.

The AD7934-6 has an accurate on-chip 2.5 V reference that can be used as the reference source for the analog-to-digital conversion. Alternatively, this pin can be overdriven to provide an external reference.

The AD7934-6 uses advanced design techniques to achieve very low power dissipation at high throughput rates. The part also features flexible power management options. An on-chip control register allows the user to set up different operating conditions, including analog input range and configuration, output coding, power management, and channel sequencing.

Product Highlights

High throughput with low power consumption.

Four analog inputs with a channel sequencer.

Accurate on-chip 2.5 V reference.

Single-ended, pseudo differential, or fully differential analog inputs that are software selectable.

No pipeline delay.

Accurate control of the sampling instant via aCONVST input and once-off conversion control.

Features

Throughput rate: 625 kSPS

Specified for VDD of 2.7 V to 5.25 V

Power consumption 3.6 mW maximum at 625 kSPS with 3 V supplies 7.5 mW maximum at 625 kSPS with 5 V supplies

Software-configurable analog inputs 4-channel single-ended inputs 2-channel fully differential inputs 2-channel pseudo differential inputs

4 analog input channels with a sequencer

Accurate on-chip 2.5 V reference ±0.2% maximum @ 25°C, 25 ppm/°C maximum

70 dB SINAD at 50 kHz input frequency

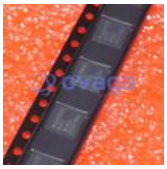
No pipeline delays

High speed parallel interface—word/byte modes

Full shutdown mode: 2 µA maximum

28-lead TSSOP package

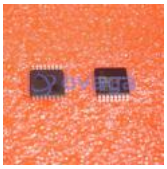
Related Products



ADAS3022BCPZ

Analog Devices, Inc

LFCSP-40



AD7266BSUZ

Analog Devices, Inc

TQPF-32

AD574AJNZ

Analog Devices, Inc

PDIP-28

AD7401YRWZ

Analog Devices, Inc

SOIC-16

AD7938BSUZ

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TQFP-32

AD7192BRUZ-REEL

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TSSOP-24

AD7124-8BCPZ-RL7

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LFCSP-32

AD9680BCPZ-500

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LFCSP-64