

Analogue to Digital Converter, Octal, 18 bit, 200 kSPS, Single Ended, Parallel, Serial, Single

Manufacturers	Analog Devices, Inc
Package/Case	LQFP-64
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7608BSTZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7608 is an 18-bit, 8-channel simultaneous sampling, analog-to-digital data acquisition system (DAS). The part contains analog input clamp protection, a second-order antialiasing filter, a track-and-hold amplifier, an 18-bit charge redistribution successive approximation analog-to-digital converter (ADC), a flexible digital filter, a 2.5 V reference and reference buffer, and high speed serial and parallel interfaces.

The AD7608 operates from a single 5 V supply and can accommodate ± 10 V and ± 5 V true bipolar input signals while sampling at throughput rates up to 200 kSPS for all channels.

The input clamp protection circuitry can tolerate voltages up to ± 16.5 V. The AD7608 has 1 M Ω analog input impedance regardless of sampling frequency. The single supply operation, on-chip filtering, and high input impedance eliminate the need for driver op amps and external bipolar supplies. The AD7608 antialiasing filter has a 3 dB cutoff frequency of 22 kHz and provides 40 dB antialias rejection when sampling at 200 kSPS. The flexible digital filter is pin driven, yields improvements in SNR, and reduces the 3 dB bandwidth.

Features

8 simultaneously sampled inputs

True bipolar analog input ranges: ± 10 V, ± 5 V

Single 5 V analog supply and 2.3 V to 5.25 V VDRIVE

Fully integrated data acquisition solution

Analog input clamp protection

Input buffer with 1 M Ω analog input impedance

Second-order antialiasing analog filter

On-chip accurate reference and reference buffer

18-bit ADC with 200 kSPS on all channels

Oversampling capability with digital filter

Flexible parallel/serial interface

SPI/QSPI[™]/MICROWIRE[™]/DSP compatible

Pin compatible solutions from 14-bits to 18-bits

Performance

7 kV ESD rating on analog input channels

98 dB SNR, -107 dB THD

Low power: 100 mW

Standby mode: 25 mW

64-lead LQFP package

Application

Power line monitoring and protection systems

Multiphase motor controls

Instrumentation and control systems

Multiaxis positioning systems

Data acquisition systems (DAS)

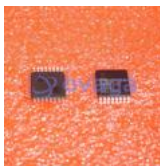


Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc
TQPF-32



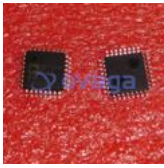
[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



[AD7401YRWZ](#)

Analog Devices, Inc
SOIC-16



[AD7938BSUZ](#)

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[AD7192BRUZ-REEL](#)

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[AD7124-8BCPZ-RL7](#)

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[AD9680BCPZ-500](#)

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