

8-Channel Single ADC SAR 200ksps 14-bit Parallel/Serial 64-Pin LQFP Tray

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	LQFP-64
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7607BSTZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7607 is a 14-bit, 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; a 14-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 AD7607 operates from a single 5 V supply and can accommodate  $\pm 10$  V and  $\pm 5$  V true bipolar input signals while sampling at throughput rates of up to 200 kSPS for all channels. The input clamp protection circuitry can tolerate voltages of up to  $\pm 16.5$  V. The AD7607 has 1 M $\Omega$  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 AD7607 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 and can be used to simplify external filtering.

## Features

8 simultaneously sampled inputs

True bipolar analog input ranges:  $\pm 10$  V,  $\pm 5$  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 $\Omega$  analog input impedance

Second-order antialiasing analog filter

On-chip accurate reference and reference buffer

14-bit ADC with 200 kSPS on all channels

Flexible parallel/serial interface

SPI/QSPI<sup>™</sup>/MICROWIRE<sup>™</sup>/DSP compatible

Pin-compatible solutions from 14 bits to 18 bits

Performance

7 kV ESD rating on analog input channels

Fast throughput rate: 200 kSPS for all channels

85.5 dB SNR at 50 kSPS

INL  $\pm 0.25$  LSB, DNL  $\pm 0.25$  LSB

Low power: 100 mW at 200 kSPS

Standby mode: 25 mW typical

64-lead LQFP package

## Application

Power-line monitoring and protection systems

Multiphase motor control

Instrumentation and control systems

Multiaxis positioning systems

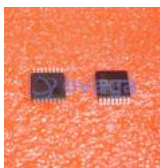
Data acquisition systems (DAS)

## Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc  
TQFP-32



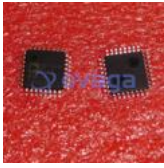
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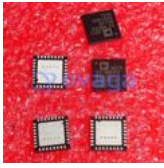
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