AD8628ARZ

Data Sheet

Operational Amplifier, Single, 1 Amplifier, 2.5 MHz, 1 V/µs, 2.7V to 5V, SOIC, 8 Pins

Manufacturers	Analog Devices, Inc
Package/Case	SOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	

Images are for reference only

Please submit RFQ for AD8628ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

This amplifier has ultralow offset, drift, and bias current. The AD8628/AD8629/AD8630 are wide bandwidth auto-zero amplifiers featuring rail-to-rail input and output swing and low noise. Operation is fully specified from 2.7 V to 5 V single supply (±1.35 V to ±2.5 V dual supply).

The AD8628/AD8629/AD8630 provide benefits previously found only in expensive auto-zeroing or chopper-stabilized amplifiers. Using Analog Devices, Inc., topology, these zero-drift amplifiers combine low cost with high accuracy and low noise. No external capacitor is required. In addition, the AD8628/ AD8629/AD8630 greatly reduce the digital switching noise found in most chopper-stabilized amplifiers.

With an offset voltage of only 1 µV, drift of less than 0.005 µV/°C, and noise of only 0.5 µV p-p (0 Hz to 10 Hz), the AD8628/ AD8629/AD8630 are suited for applications where error sources cannot be tolerated. Position and pressure sensors, medical equipment, and strain gage amplifiers benefit greatly from nearly zero drift over their operating temperature range. Many systems can take advantage of the rail-to-rail input and output swings provided by the AD8628/AD8629/AD8630 to reduce input biasing complexity and maximize SNR.

The AD8628/AD8629/AD8630 are specified for the extended industrial temperature range (−40°C to +125°C). The AD8628 is available in tiny 5-lead TSOT, 5-lead SOT-23, and 8-lead narrow SOIC plastic packages. The AD8629 is available in the standard 8-lead narrow SOIC and MSOP plastic packages. The AD8630 quad amplifier is available in 14-lead narrow SOIC and 14-lead TSSOP plastic packages. See the Ordering Guide for automotive grades.

Features

Lowest auto-zero amplifier noise

Low offset voltage: 1 µV

Input offset drift: 0.002 µV/°C

Rail-to-rail input and output swing

5 V single-supply operation

High gain, CMRR, and PSRR: 130 dB

Very low input bias current: 100 pA maximum

Low supply current: 1.0 mA

Overload recovery time: 50 µs

No external components required

Qualified for automotive applications

Application

Automotive sensors

Pressure and position sensors

Strain gage amplifiers

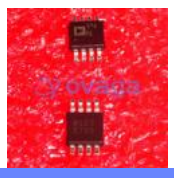
Medical instrumentation

Thermocouple amplifiers

Precision current sensing

Photodiode amplifiers

Related Products



[AD8418BRMZ-RL](#)

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MSOP-8

[ADA4528-2ARMZ-R7](#)

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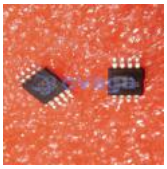

ADA4084-2ARMZ

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MSOP-8

AD8062ARMZ

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MSOP8

AD8567ARUZ

Analog Devices, Inc

TSSOP-14

AD8628AUJZ

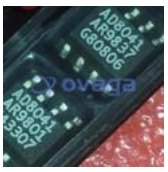
Analog Devices, Inc

SOP23

AD8022ARMZ

Analog Devices, Inc

MSOP-8



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