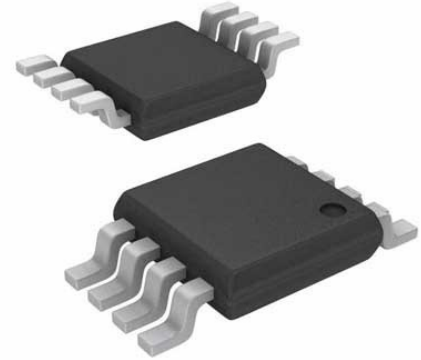


Differential Amplifier, Unity-Gain, 1 Amplifiers, 50  $\mu$ V, 5 MHz, -40  $^{\circ}$ C, 125  $^{\circ}$ C

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8476ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD8476 is a very low power, fully differential precision amplifier with integrated gain resistors for unity gain. It is an ideal choice for driving low power, high performance ADCs as a single-ended-to-differential or differential-to-differential amplifier. It provides a precision gain of 1, common-mode level shifting, low temperature drift, and rail-to-rail outputs for maximum dynamic range.

The AD8476 also provides overvoltage protection from large industrial input voltages up to  $\pm 23$  V while operating on a dual 5 V supply. Power dissipation on a single 5 V supply is only 1.5 mW.

The AD8476 works well with SAR,  $\Sigma$ - $\Delta$ , and pipeline converters. The high current output stage of the part allows it to drive the switched capacitor front-end circuits of many ADCs with minimal error.

Unlike many differential drivers on the market, the AD8476 is a high precision amplifier. With 200  $\mu$ V maximum output offset, 39 nV/ $\sqrt{\text{Hz}}$  noise, and -102 dB THD + N at 10 kHz, the AD8476 pairs well with low power, high accuracy converters.

Considering its low power consumption and high precision, the slew-enhanced AD8476 has excellent speed, settling to 16-bit precision for 250 kSPS acquisition times.

The AD8476 is available in a space-saving 8-lead MSOP package. It is fully specified over the -40 $^{\circ}$ C to +125 $^{\circ}$ C temperature range.

## Features

Very low power- 330  $\mu$ A supply current

Fully differential or single-ended inputs/outputs

Differential output designed to drive precision ADCs- Drives switched capacitor and  $\Sigma$ - $\Delta$  ADCs- Rail-to-rail output

VOCM pin adjusts output common mode

Robust overvoltage up to 18 V beyond supplies

High performance- Suitable for driving 16-bit converter up to 250 kSPS- 39 nV/ $\sqrt{\text{Hz}}$  output noise- 1 ppm/ $^{\circ}\text{C}$  gain drift- 200  $\mu$ V maximum output offset- 10 V/ $\mu$ s slew rate- 5 MHz bandwidth

Single supply: 3 V to 18 V

Dual supplies:  $\pm 1.5$  V to  $\pm 9$  V

## Application

ADC driver

Differential instrumentation amplifier building block

Single-ended-to-differential converter

Battery powered instruments

## Related Products



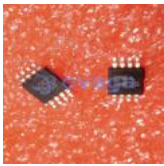
### [AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



### [ADA4528-2ARMZ-R7](#)

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MSOP-8



### [ADA4084-2ARMZ](#)

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### [AD8062ARMZ](#)

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MSOP8



### [AD8567ARUZ](#)

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TSSOP-14



### [AD8628AUJZ](#)

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SOP23



### [AD8022ARMZ](#)

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