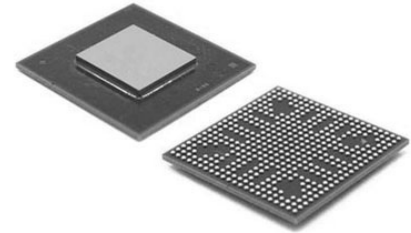


Dual, 0.2  $\mu\text{V}/^\circ\text{C}$  Offset Drift, 105 MHz Low Power, Low Noise, Rail-to-Rail Amplifier

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	10-Lead LFCSP (3mm x 3mm)
Product Type	Amplifier ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ADA4805-2ACPZ-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADA4805-1/ADA4805-2 are high speed voltage feedback, rail-to-rail output amplifiers with an exceptionally low quiescent current of 500  $\mu\text{A}$ , making them ideal for low power, high resolution data conversion systems. Despite being low power, these amplifiers provide excellent overall performance. They offer a high bandwidth of 105 MHz at a gain of +1, a high slew rate of 160  $\text{V}/\mu\text{s}$ , and a low input offset voltage of 125  $\mu\text{V}$  (maximum).

A shutdown pin allows further reduction of the quiescent supply current to 2.9  $\mu\text{A}$ . For power sensitive applications, the shutdown mode offers a very fast turn on time of 3  $\mu\text{s}$ . This allows the user to dynamically manage the power of the amplifier by turning the amplifier off between ADC samples.

The Analog Devices, Inc., proprietary extra fast complementary bipolar (XFCB) process allows for both low voltage and low current noise (5.9  $\text{nV}/\sqrt{\text{Hz}}$ , 0.6  $\text{pA}/\sqrt{\text{Hz}}$ ). The ADA4805-1/ADA4805-2 operate over a wide range of supply voltages from  $\pm 1.5\text{ V}$  to  $\pm 5\text{ V}$ , as well as single 3 V and 5 V supplies, making them ideal for high speed, low power instruments.

The ADA4805-1 is available in a 6-lead SOT-23 and a 6-lead SC70 package. The ADA4805-2 is available in an 8-lead MSOP package. These amplifiers are rated to work over the industrial temperature range of  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$ .

## Features

Low input offset voltage: 125  $\mu\text{V}$  (maximum)

Low input offset voltage drift

0.2  $\mu\text{V}/^\circ\text{C}$  (typical)

1.5  $\mu\text{V}/^\circ\text{C}$  (maximum)

Ultralow supply current: 500  $\mu\text{A}$  per amplifier

Fully specified at >

High speed performance

Slew rate: 160  $\text{V}/\mu\text{s}$

Settling time to 0.1%: 35 ns

Rail-to-rail outputs

See data sheet for additional features

ADA4805-2-EP supports defense and aerospace applications (AQEC standard)

Download the(pdf)

Extended industrial temperature range ( $-55^\circ\text{C}$  to  $+125^\circ\text{C}$ )

Controlled manufacturing baseline

1 assembly/test site

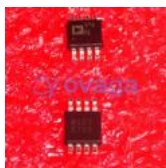
1 fabrication site

Enhanced product change notification

Qualification data available upon request

V62/16621 DSCC Drawing Number

## Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc  
MSOP-8

## Application

High resolution, high precision analog-to-digital converter (ADC) drivers

Battery-powered instrumentation

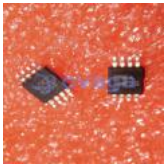
Micropower active filters

Portable point of sales terminals

Active radio frequency identification (RFID) readers

Photo multipliers

ADC reference buffers



[ADA4084-2ARMZ](#)

Analog Devices, Inc  
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc  
MSOP8



[AD8567ARUZ](#)

Analog Devices, Inc  
TSSOP-14



[AD8628AUJZ](#)

Analog Devices, Inc  
SOP23



[AD8022ARMZ](#)

Analog Devices, Inc  
MSOP-8



[AD8041AR](#)

Analog Devices, Inc  
SOP-8