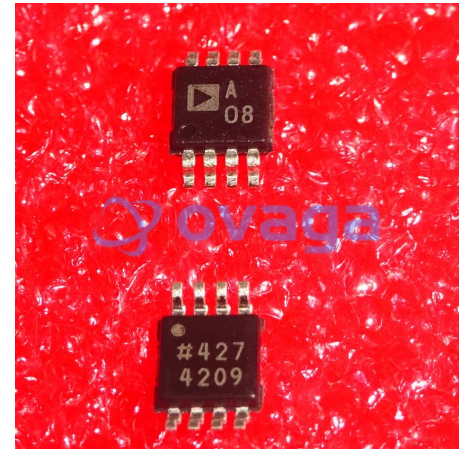


Operational Amplifier, Single, 1 Amplifier, 10 MHz, 2.5 V/ $\mu$ s,  $\pm 5$ V to  $\pm 18$ V, MSOP, 8 Pins

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



Images are for reference only

Please submit RFQ for AD8675ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD8675 precision operational amplifier has ultralow offset, drift, and voltage noise combined with very low input bias currents over the full operating temperature range. The AD8675 is a precision, wide bandwidth op amp featuring rail-to-rail output swings and very low noise. Operation is fully specified from  $\pm 5$  V to  $\pm 15$  V.

The AD8675 features a rail-to-rail output like that of the OP184, but with wide bandwidth and even lower voltage noise, combined with the precision and low power consumption like that of the industry-standard OP07 amplifier. Unlike other low noise, rail-to-rail op amps, the AD8675 has very low input bias current and low input current noise.

With typical offset voltage of only 10  $\mu$ V, offset drift of 0.2  $\mu$ V/ $^{\circ}$ C, and noise of only 0.10  $\mu$ V p-p (0.1 Hz to 10 Hz), the AD8675 is perfectly suited for applications where large error sources cannot be tolerated. For applications with even lower offset tolerances, the proprietary nulling capability allows a combination of both device and system offset errors up to 3.5 mV (referred to the input) to be compensated externally. Unlike previous circuits, the AD8675 accommodates this adjustment without adversely affecting the offset drift, CMRR, and PSRR of the amplifier. Precision instrumentation, PLL, and other precision filter circuits, position and pressure sensors, medical instrumentation, and strain gage amplifiers benefit greatly from the very low noise, low input bias current, and wide bandwidth. Many systems can take advantage of the low noise, dc precision, and rail-to-rail output swing provided by the AD8675 to maximize SNR and dynamic range.

The smaller packages and low power consumption afforded by the AD8675 allow maximum channel density or minimum board size for space-critical equipment.

The AD8675 is specified for the extended industrial temperature range ( $-40^{\circ}$ C to  $+125^{\circ}$ C). The AD8675 amplifier is available in the tiny 8-lead MSOP, and the popular 8-lead, narrow SOIC, RoHS compliant packages. MSOP packaged devices are only available in tape and reel format.

## Features

Very low voltage noise: 2.8 nV/ $\sqrt{\text{Hz}}$

Rail-to-rail output swing

Low input bias current: 2 nA maximum

Very low offset voltage: 75  $\mu\text{V}$  maximum

Low input offset drift: 0.6  $\mu\text{V}/^\circ\text{C}$  maximum

Very high gain: 120 dB

Wide bandwidth: 10 MHz typical

## Application

Precision instrumentation

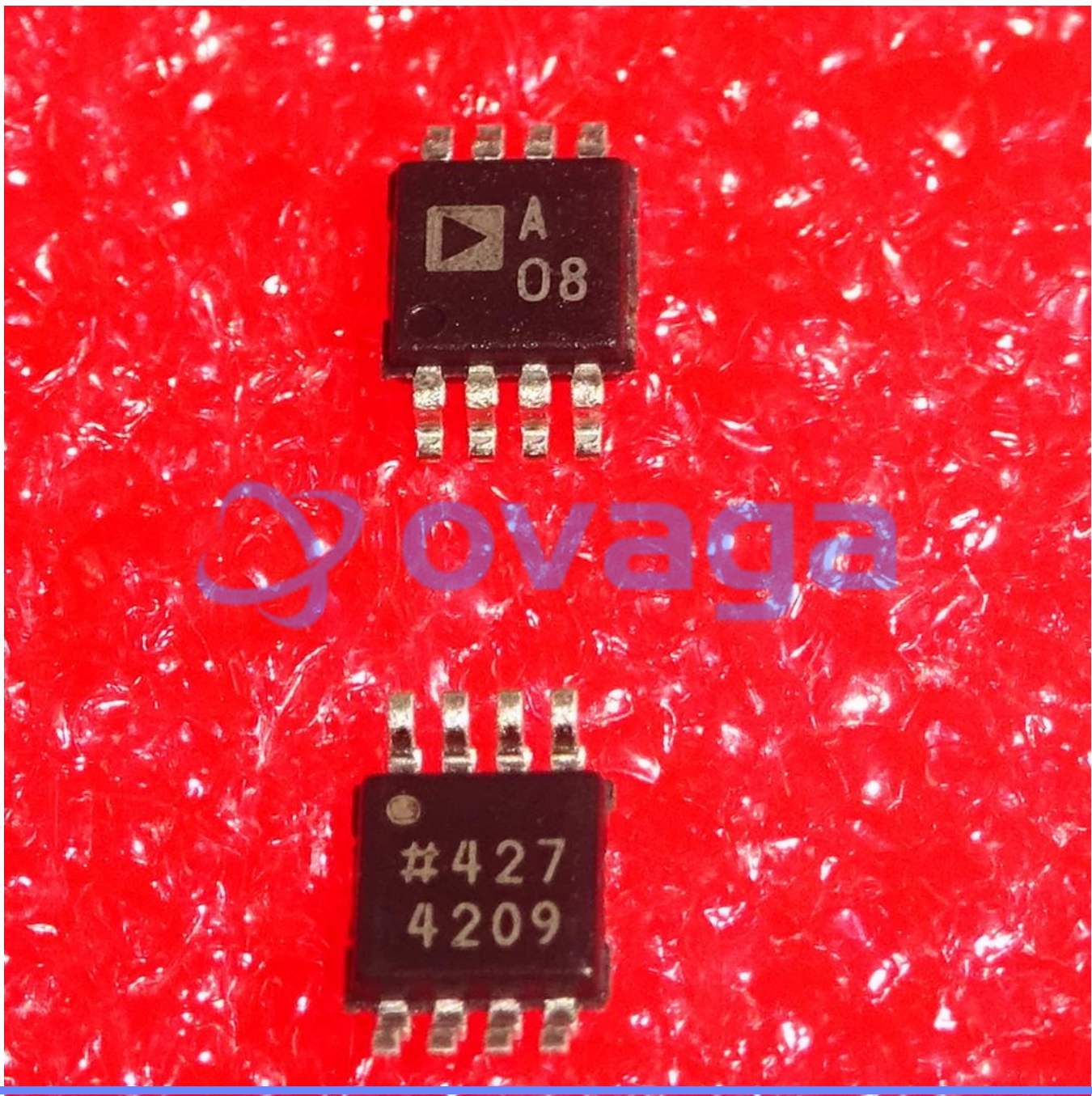
PLL filters

Laser diode control loops

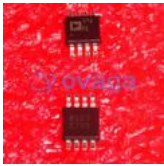
Strain gage amplifiers

Medical instrumentation

Thermocouple amplifiers

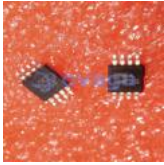


## Related Products



### [AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



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

Analog Devices, Inc  
MSOP-8



### [AD8567ARUZ](#)

Analog Devices, Inc  
TSSOP-14



### [AD8022ARMZ](#)

Analog Devices, Inc  
MSOP-8



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

Analog Devices, Inc  
MSOP-8



### [AD8062ARMZ](#)

Analog Devices, Inc  
MSOP8



### [AD8628AUJZ](#)

Analog Devices, Inc  
SOP23



### [AD8041AR](#)

Analog Devices, Inc  
SOP-8