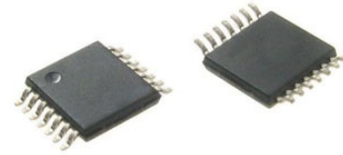


## Precision Amplifiers 24MHz RR Quad

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP-14
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD8648ARUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD8646 and the AD8647 are the dual, and the AD8648 is the quad, rail-to-rail, input and output, single-supply amplifiers featuring low offset voltage, wide signal bandwidth, low input voltage, and low current noise. The AD8647 also has a low power shutdown function.

The combination of 24 MHz bandwidth, low offset, low noise, and very low input bias current makes these amplifiers useful in a wide variety of applications. Filters, integrators, photodiode amplifiers, and high impedance sensors all benefit from the combination of performance features. AC applications benefit from the wide bandwidth and low distortion. The AD8646/AD8647/AD8648 offer high output drive capability, which is excellent for audio line drivers and other low impedance applications. The AD8646 and AD8648 are available for automotive applications (see the Ordering Guide).

Applications include portable and low powered instrumentation, audio amplification for portable devices, portable phone headsets, barcode scanners, and multipole filters. The ability to swing rail to rail at both the input and output enables designers to buffer CMOS ADCs, DACs, ASICs, and other wide output swing devices in single-supply systems.

## Features

Offset voltage: 2.5 mV maximum

Single-supply operation: 2.7 V to 5.5 V

Low noise: 8 nV/ $\sqrt{\text{Hz}}$

Wide bandwidth: 24 MHz

Slew rate: 11 V/ $\mu\text{s}$

Short-circuit output current: 120 mA

Qualified for automotive applications

No phase reversal

Low input bias current: 1 pA

Low supply current per amplifier: 2 mA maximum

Unity gain stable

## Application

Battery-powered instruments

Multipole filters

ADC front ends

Sensors

Barcode scanners

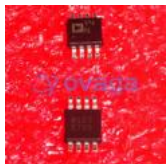
ASIC input or output amplifiers

Audio amplifiers

Photodiode amplifiers

Datapath/mux/switch control

## Related Products



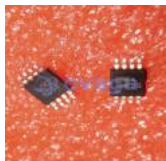
### [AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



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

Analog Devices, Inc  
MSOP-8



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

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### [AD8062ARMZ](#)

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### [AD8567ARUZ](#)

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### [AD8628AUJZ](#)

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### [AD8022ARMZ](#)

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### [AD8041AR](#)

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