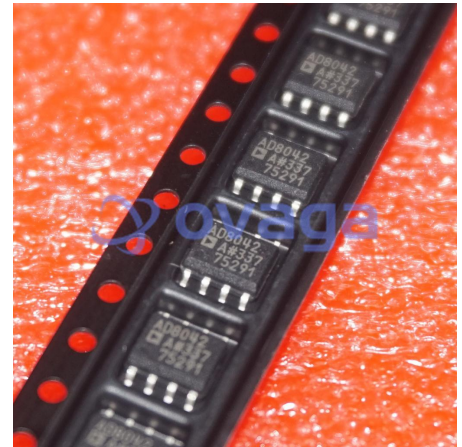


ANALOG DEVICES AD8042ARZ Operational Amplifier, Dual, 2 Amplifier, 160MHz, 200V/ $\mu$ s, 3V to 12V, SOIC, 8Pins

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



Images are for reference only

Please submit RFQ for AD8042ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD8042 is a low power voltage feedback, high speed amplifier designed to operate on +3 V, +5 V or  $\pm$  5 V supplies. It has true single supply capability with an input voltage range extending 200 mV below the negative rail and within 1 V of the positive rail.

The output voltage swing extends to within 30 mV of each rail, providing the maximum output dynamic range. Additionally, it features gain flatness of 0.1 dB to 14 MHz while offering differential gain and phase error of 0.04% and 0.06° on a single 5 V supply. This makes the AD8042 useful for professional video electronics such as cameras, video switchers or any high speed portable equipment. The AD8042's low distortion and fast settling make it ideal for buffering single-supply, high speed Analog-to-Digital converters (ADCs).

The AD8042 offers low power supply current of 12 mA maximum and can run on a single 3.3 V power supply. These features are ideally suited for portable and battery powered applications where size and power are critical.

The wide bandwidth of 160 MHz along with 200 V/ $\mu$ s of slew rate on a single 5 V supply make the AD8042 useful in many general-purpose, high speed applications where single supplies from +3.3 V to +12 V and dual power supplies of up to  $\pm$ 6 V are needed. The AD8042 is available in 8-lead PDIP and SOIC\_N packages.

## Features

Single and quad also available

Fully specified at +3 V, +5 V, and  $\pm 5$  V supplies

Output swings to within 30 mV of either rail

Input voltage range extends 200 mV below ground

High speed and fast settling on 5 V: 160 MHz  $-3$  dB bandwidth

Drives 50 mA 0.5 V from supply rails

No phase reversal with inputs 0.5 V beyond supplies

Low power of 5.2 mA per amplifier

Good video specifications = +2) Gain flatness of 0.1 dB to 14 MHz 0.02% differential gain error 0.04° differential phase error

Low distortion  $-64$  dBc worst harmonic @ 10 MHz

## Application

Video switchers

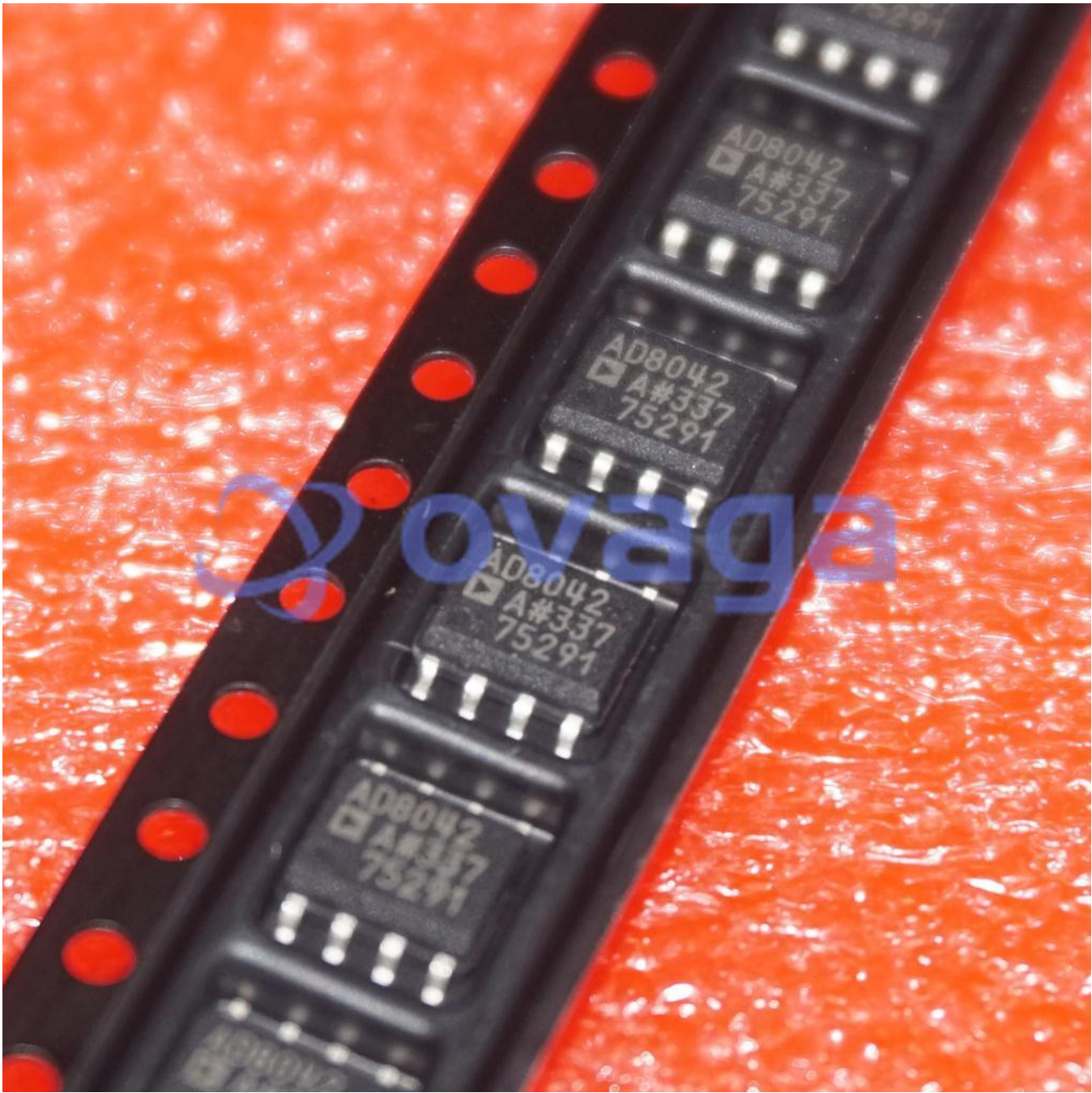
Distribution amplifiers

Analog-to-digital drivers

Professional cameras

CCD Imaging systems

Ultrasound equipment  
(multichannel)

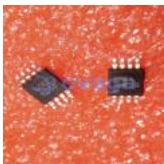


### Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc  
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc  
MSOP-8



[AD8062ARMZ](#)

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MSOP8



[AD8567ARUZ](#)

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[AD8628AUJZ](#)

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