

Operational Amplifier, Single, 1 Amplifier, 160 MHz, 160 V/ μ s, 3V to 12V, SOIC, 8 Pins

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8041ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD8041 is a low power voltage feedback, high speed amplifier designed to operate on +3 V, +5 V or ± 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 50 mV of each rail, providing the maximum output dynamic range. Additionally, it features gain flatness of 0.1 dB to 30 MHz while offering differential gain and phase error of 0.03% and 0.03° on a single 5 V supply. This makes the AD8041 ideal for professional video electronics such as cameras, video switchers or any high speed portable equipment. The AD8041's low distortion and fast settling make it ideal for buffering high speed A-to-D converters.

The AD8041 has a high speed disable feature useful for multiplexing or for reducing power consumption (1.5 mA). The disable logic interface is compatible with CMOS or open-collector logic. The AD8041 offers low power supply current of 5.8 mA maximum and can run on a single 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 160 V/ μ s of slew rate on a single 5 V supply make the AD8041 useful in many general purpose high speed applications where dual power supplies of up to ± 6 V and single supplies from 3 V to 12 V are needed. The AD8041 is available in 8-lead PDIP and SOIC over the industrial temperature range of -40°C to +85°C.

An evaluation board is available for this product and may be ordered using the following product number: AD8041-EB. Schematic and layout for this evaluation board is contained in the product data sheet.

Features

Fully specified for +3 V, +5 V and ± 5 V Supplies

Output Swings Rail to Rail

Input Voltage Range Extends 200 mV Below Ground

No Phase Reversal with Inputs 1 V Beyond Supplies

Disable/Power-Down Capability

Low Power of 5.2 mA (26 mW on 5 V)

High Speed and Fast Settling on 5 V: 160 MHz -3 dB Bandwidth

30 ns Settling Time to 0.1%

Good Video Specifications = +2) Gain Flatness of 0.1 dB to 30 MHz 0.03% Differential Gain Error 0.03° Differential Phase Error

Low Distortion -69 dBc Worst Harmonic @ 10 MHz

Outstanding Load Drive Capability Drives 50 mA 0.5 V from Supply Rails

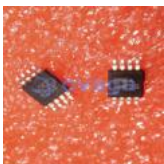
Cap Load Drive of 45 pF

Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

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MSOP-8



[AD8567ARUZ](#)

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