



Data Sheet

Precision Amplifiers 30V Low Noise/Power RRIO Dual

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 ADA4084-2ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADA4084-1 (single), ADA4084-2 (dual), and ADA4084-4 (quad) are single-supply, 10 MHz bandwidth amplifiers featuring rail-to-rail inputs and outputs. They are guaranteed to operate from  $\pm 3 \text{ V}$  to  $\pm 30 \text{ V}$  (or  $\pm 1.5 \text{ V}$ ).

These amplifiers are well suited for single-supply applications requiring both ac and precision dc performance. The combination of wide bandwidth, low noise, and precision makes the ADA4084-1/ADA4084-2/ADA4084-4 useful in a wide variety of applications, including filters and instrumentation.

Other applications for these amplifiers include portable telecommunications equipment, power supply control and protection, and use as amplifiers or buffers for transducers with wide output ranges. Sensors requiring a rail-to-rail input amplifier include Hall effect, piezoelectric, and resistive transducers.

The ability to swing rail to rail at both the input and output enables designers to build multistage filters in single-supply systems and to maintain high signal-to-noise ratios.

The ADA4084-1/ADA4084-2/ADA4084-4 are specified over the industrial temperature range of -40°C to +125°C.

The single ADA4084-1 is available in the 5-lead SOT-23 and 8-lead SOIC; the dual ADA4084-2 is available in the 8-lead SOIC, 8-lead MSOP, and 8-lead LFCSP surface-mount packages; and the ADA4084-4 is offered in the 14-lead TSSOP and 16-lead LFCSP.

The ADA4084-1/ADA4084-2/ADA4084-4 are members of a growing series of high voltage, low noise op amps offered by Analog Devices, Inc.

## **Features**

Rail-to-rail input/output

Low power: 0.625 mA typical per amplifier at  $\pm 15$  V

Gain bandwidth product: 15.9 MHz at>

Unity-gain crossover: 9.9 MHz typical

Low offset voltage: 100 µV maximum (SOIC)

Unity-gain stable

High slew rate: 4.6 V/µs typical

Low noise: 3.9 nV/\dayhtatypical at 1 kHz

Long-term offset voltage drift (10,000 hours):  $3 \mu V$  typical

Temperature hysteresis: 4 µV typical

## **Application**

Battery-powered instrumentation

High-side and low-side sensing

Power supply control and protection

Telecommunications

Digital-to-analog converter (DAC) output amplifiers

Analog-to-digital converter (ADC) input buffers



## **Related Products**



AD8418BRMZ-RL
Analog Devices, Inc
MSOP-8



ADA4084-2ARMZ
Analog Devices, Inc
MSOP-8



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ADA4528-2ARMZ-R7
Analog Devices, Inc
MSOP-8

AD8062ARMZ
Analog Devices, Inc
MSOP8



AD8567ARUZ
Analog Devices, Inc
TSSOP-14



Analog Devices, Inc SOP23

AD8628AUJZ



AD8022ARMZ
Analog Devices, Inc
MSOP-8



AD8041AR
Analog Devices, Inc
SOP-8