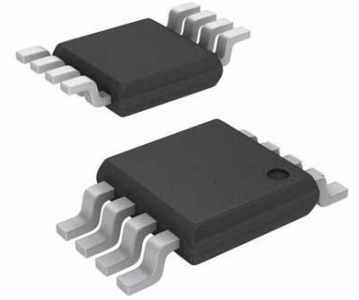


## Op Amp Dual Micropower Amplifier R-R I/O $\pm 15V/30V$ 8-Pin MSOP Tube



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Analog Devices, Inc](#)

**Package/Case:** MSOP8

**Product Type:** Amplifier ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The ADA4096-2 dual and ADA4096-4 quad operational amplifiers feature micropower operation and rail-to-rail input and output ranges. The extremely low power requirements and guaranteed operation from 3 V to 30 V make these amplifiers perfectly suited to monitor battery usage and to control battery charging. Their dynamic performance, including 27 nV/ $\sqrt{\text{Hz}}$  voltage noise density, recommends them for battery-powered audio applications. Capacitive loads to 200 pF are handled without oscillation.

The ADA4096-2 and ADA4096-4 have overvoltage protection inputs and diodes that allow the voltage input to extend 32 V above and below the supply rails, making this device ideal for robust industrial applications. The ADA4096-2 and ADA4096-4 feature a unique input stage that allows the input voltage to exceed either supply safely without any phase reversal or latch-up; this is called overvoltage protection, or OVP.

The dual ADA4096-2 is available in 8-lead LFCSP (2 mm  $\times$  2 mm) and 8-lead MSOP packages. The ADA4096-2 is available in 16-lead LFCSP (3 mm  $\times$  3 mm) and 14-lead TSSOP packages. The ADA4096-2W is qualified for automotive applications and is available in an 8-lead MSOP package.

The ADA4096-2 family is specified over the extended industrial temperature range of ( $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ ) and is part of the growing selection of 30 V, low power op amps from Analog Devices, Inc.

### Key Features

Unity gain stable

Input overvoltage protection, 32V above and below the supply rails

No phase reversal for input voltage up to  $\pm 32\text{V}$  beyond the power supply

60 $\mu\text{A}$ /amplifier Typical low power

300 $\mu\text{V}$  Maximum low offset voltage

120dB Typical large signal voltage gain

### Application

Battery monitoring

Sensor conditioners

Portable power supply controls

Portable instrumentation

### Recommended For You

**AD8309ARUZ**

Analog Devices, Inc  
TSSOP16

**AD524BDZ**

Analog Devices, Inc  
CDIP-16

**AD8221BR**

Analog Devices, Inc  
SOP-8

**AD8221ARZ**

Analog Devices, Inc  
SOP8

**AD627BRZ**

Analog Devices, Inc  
SOP8

**AD622ANZ**

Analog Devices, Inc  
DIP8

**ADA4930-2YCPZ-R7**

Analog Devices, Inc  
LFCSP24

**AD8034ARZ**

Analog Devices, Inc  
SOP8

**AD8561ARZ**

Analog Devices, Inc  
SOP8

**AD633JRZ**

Analog Devices, Inc  
SOP8

**AD632AH**

Analog Devices, Inc  
CAN10

**AD8422BRZ**

Analog Devices, Inc  
SOP8

**ADCMP600BKSZ-R2**

Analog Devices, Inc  
SC70-5

**AD620BN**

Analog Devices, Inc  
DIP8

**AD620BR**

Analog Devices, Inc  
SOP