

ADA4096-4ACPZ-R7

Data Sheet

Operational Amplifier, Quad, 4 Amplifier, 786 kHz, 0.4 V/µs, 3V to 30V, LFCSP, 16 Pins

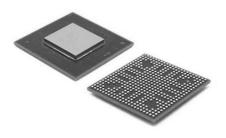
Manufacturers Analog Devices, Inc

Package/Case LFCSP-16

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADA4096-4ACPZ-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

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 $27 \text{ nV/}\sqrt{\text{Hz}}$ 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.

Features

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

No phase reversal for input voltage up to ± 32 V beyond the power supply

Rail-to-rail input and output swing

Low power: $60 \mu A$ per amplifier typical

Unity-gain bandwidth

800 kHz typical at>

550 kHz typical at>

465 kHz typical at>

Single-supply operation: $3\ V$ to $30\ V$

Low offset voltage: 300 µV maximum

Large signal voltage gain: 120 dB typical

Unity gain stable

Qualified for automotive applications

Related Products



AD8418BRMZ-RL Analog Devices, Inc

MSOP-8



ADA4084-2ARMZ

Analog Devices, Inc

MSOP-8



AD8567ARUZ

Analog Devices, Inc

TSSOP-14



AD8022ARMZ

Analog Devices, Inc

MSOP-8

Application

Battery monitoring

Sensor conditioners

Portable power supply controls

Portable instrumentation



ADA4528-2ARMZ-R7

Analog Devices, Inc

MSOP-8



AD8062ARMZ

Analog Devices, Inc

MSOP8



AD8628AUJZ

Analog Devices, Inc

SOP23



AD8041AR

Analog Devices, Inc

SOP-8