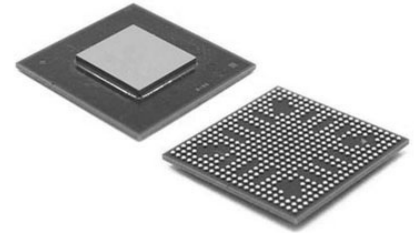


Operational Amplifier, Single, 1 Amplifier, 1.05 GHz, 870 V/ μ s, 5V to 10V, LFCSP, 8 Pins

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP-8
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADA4817-1ACPZ-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADA4817-1 (single) and ADA4817-2 (dual) FastFET™ amplifiers are unity-gain stable, ultrahigh speed, voltage feedback amplifiers with FET inputs. These amplifiers were developed with the Analog Devices, Inc., proprietary eXtra fast complementary bipolar (XFCB) process, which allows the amplifiers to achieve ultralow noise (4 nV/ $\sqrt{\text{Hz}}$; 2.5 fA/ $\sqrt{\text{Hz}}$) as well as very high input impedances.

With 1.3 pF of input capacitance, low noise (4 nV/ $\sqrt{\text{Hz}}$), low offset voltage (2 mV maximum), and 1050 MHz -3 dB bandwidth, the ADA4817-1/ADA4817-2 are ideal for data acquisition front ends as well as wideband transimpedance applications, such as photodiode preamps.

With a wide supply voltage range from 5 V to 10 V and the ability to operate on either single or dual supplies, the ADA4817-1/ADA4817-2 are designed to work in a variety of applications including active filtering and analog-to-digital converter (ADC) driving. The ADA4817-1 is available in a 3 mm \times 3 mm, 8-lead LFCSP and 8-lead SOIC, and the ADA4817-2 is available in a 4 mm \times 4 mm, 16-lead LFCSP. These packages feature a low distortion pinout that improves second harmonic distortion and simplifies circuit board layout. They also feature an exposed pad that provides a low thermal resistance path to the printed circuit board (PCB). The EPAD enables more efficient heat transfer and increases reliability. These products are rated to work over the extended industrial temperature range (-40°C to $+105^{\circ}\text{C}$).

Features

High speed

Slew rate: 870 V/ μ s

0.1% settling time: 9 ns

Input bias current: 2 pA typical

Input capacitance

Common-mode capacitance: 1.3 pF typical

Differential mode capacitance: 0.1 pF typical

Low input noise

Voltage noise: 4 nV/ $\sqrt{\text{Hz}}$ at 100 kHz

Current noise: 2.5 fA/ $\sqrt{\text{Hz}}$ at 100 kHz

Low distortion: -90 dBc at 10 MHz = 1 k Ω)

Linear output current: 40 mA

Supply quiescent current per amplifier: 19 mA typical

Powered down supply quiescent current per amplifier: 1.5 mA typical

Application

Photodiode amplifiers

Data acquisition front ends

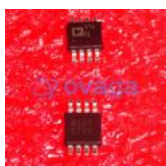
Instrumentation

Filters

ADC drivers

Output buffers

Related Products



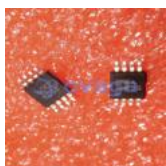
[AD8418BRMZ-RL](#)

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[ADA4084-2ARMZ](#)

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