

Operational Amplifier, Dual, 2 Amplifier, 16.3 MHz, 25 V/ μ s, $\pm 4.5V$ to $\pm 15V$, MSOP, 8 Pins

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



Images are for reference only

Please submit RFQ for ADA4610-2ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADA4610-1/ADA4610-2/ADA4610-4 are precision junction field effect transistor (JFET) amplifiers that feature low input noise voltage, current noise, offset voltage, input bias current, and rail-to-rail output. The ADA4610-1 is a single amplifier, the ADA4610-2 is a dual amplifier, and the ADA4610-4 is a quad amplifier.

The combination of low offset, noise, and very low input bias current makes these amplifiers especially suitable for high impedance sensor amplification and precise current measurements using shunts. With excellent dc precision, low noise, and fast settling time, the ADA4610-1/ADA4610-2/ADA4610-4 provide superior accuracy in medical instruments, electronic measurement, and automated test equipment. Unlike many competitive amplifiers, the ADA4610-1/ADA4610-2/ADA4610-4 maintain fast settling performance with substantial capacitive loads. Unlike many older JFET amplifiers, the ADA4610-1/ADA4610-2/ADA4610-4 do not suffer from output phase reversal when input voltages exceed the maximum common-mode voltage range.

The fast slew rate and great stability with capacitive loads make the ADA4610-1/ADA4610-2/ADA4610-4 ideal for high performance filters. Low input bias currents, low offset, and low noise result in a wide dynamic range for photodiode amplifier circuits. Low noise and distortion, high output current, and excellent speed make the ADA4610-1/ADA4610-2/ ADA4610-4 great choices for audio applications.

The ADA4610-1/ADA4610-2/ADA4610-4 are specified over the $-40^{\circ}C$ to $+125^{\circ}C$ extended industrial temperature range.

The ADA4610-1 is available in an 8-lead SOIC package and in a 5-lead SOT-23 package. The ADA4610-2 is available in 8-lead SOIC, 8-lead MSOP, and 8-lead LFCSP packages. The ADA4610-4 is available in a 14-lead SOIC package and in a 16-lead LFCSP.

Features

Low offset voltage

B grade: 0.4 mV maximum

A grade: 1 mV maximum

Low offset voltage drift

B grade: 2 $\mu\text{V}/^\circ\text{C}$ maximum

A grade: 8 $\mu\text{V}/^\circ\text{C}$ maximum (SOIC, MSOP, LFCSP packages)

Low input bias current: 5 pA typical

Dual-supply operation: $\pm 5\text{ V}$ to $\pm 15\text{ V}$

Low voltage noise: 0.45 μV p-p at 0.1 Hz to 10 Hz

Voltage noise density: 7.30 nV/ $\sqrt{\text{Hz}}$ at $>$

Low THD + N: 0.00025%

No phase reversal

Rail-to-rail output

Unity-gain stable

Long-term offset voltage drift (10,000 hours): 5 μV typical

Temperature hysteresis: 8 μV typical

Application

Instrumentation

Medical instruments

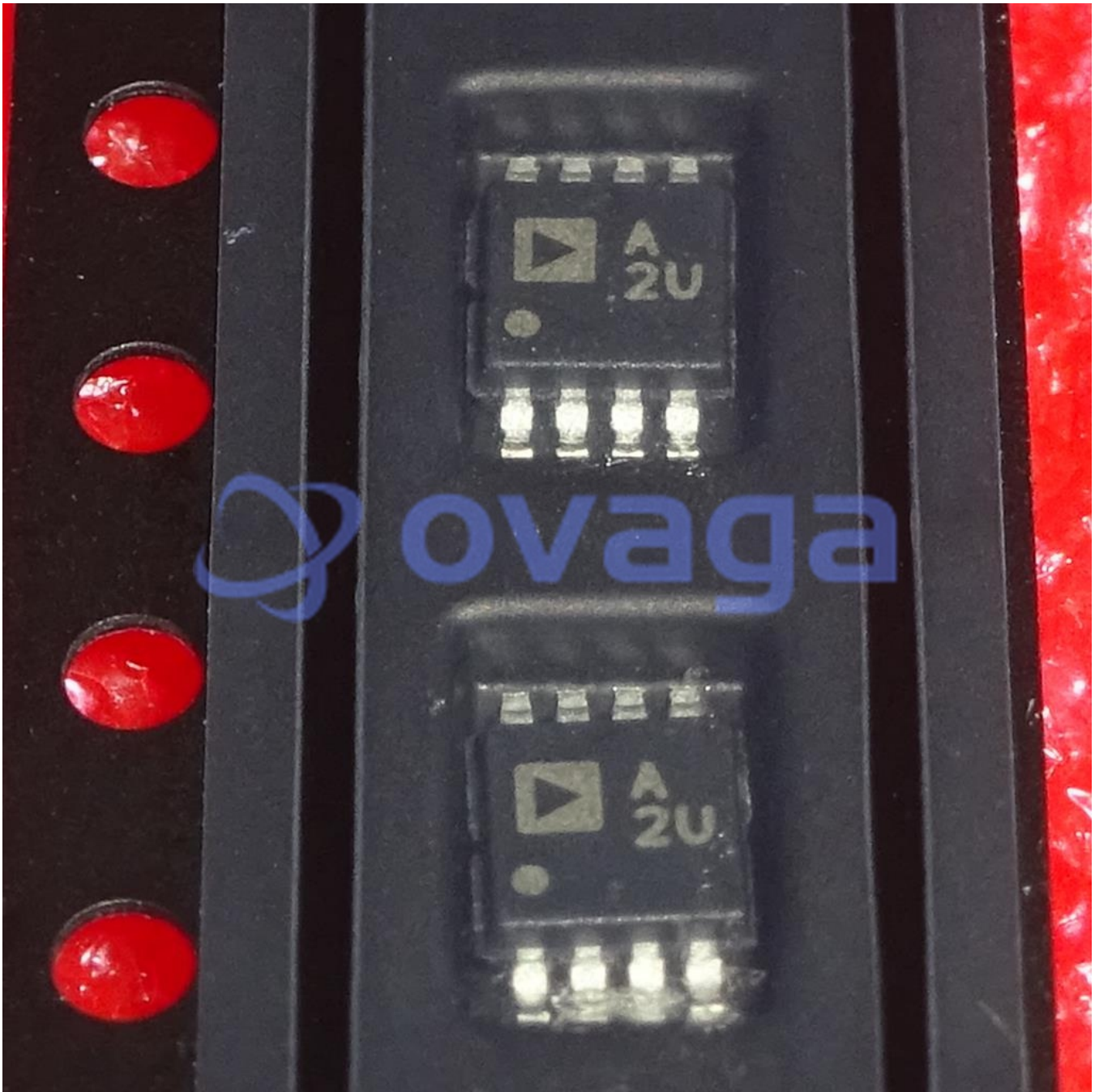
Multipole filters

Precision current measurement

Photodiode amplifiers

Sensors

Audio

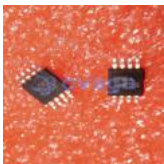


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MSOP-8



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