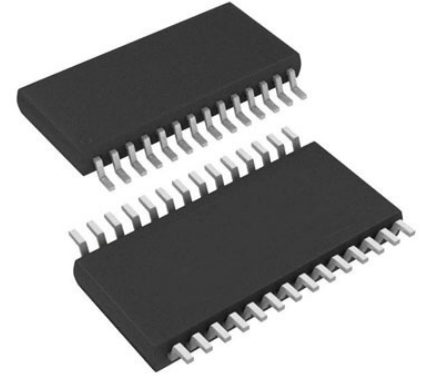


Programmable/Variable Amplifier, 1 Channels, 2 Amplifier, 100 MHz, -40 °C, 85 °C, 4.5V to 5.5V

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP-28
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD8332ARUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD8332 is a dual channel ultralow noise, linear-in-dB, variable gain amplifier (VGA). Optimized for ultrasound systems, they are usable as a low noise variable gain element at frequencies up to 120 MHz.

Included in each channel are an ultralow noise preamplifier (LNA), an X-AMP® VGA with 48 dB of gain range, and a selectable gain postamplifier with adjustable output limiting. The LNA gain is 19 dB with a single-ended input and differential outputs. Using a single resistor, the LNA input impedance can be adjusted to match a signal source without compromising noise performance.

The 48 dB gain range of the VGA makes these devices suitable for a variety of applications. Excellent bandwidth uniformity is maintained across the entire range. The gain control interface provides precise linear-in-dB scaling of 50 dB/V for control voltages between 40 mV and 1 V. Factory trim ensures excellent part-to-part and channel-to-channel gain matching. Differential signal paths result in superb second- and third-order distortion performance and low crosstalk.

The operating temperature range is -40°C to +85°C. The AD8332 is available in a 28-lead TSSOP and 32-lead LFCSP packages.

The AD8332 is a dual version of the single AD8331 and quad AD8334.

Features

Ultralow noise preamplifier (preamp)

Voltage>

Current>

3 dB bandwidth: 100 MHz

Low power: 145 mW/channel

Wide gain range with programmable postamp

7.5 dB to 55.5 dB in HI gain mode

Low output-referred noise: 48 nV/ $\sqrt{\text{Hz}}$ typical

Active input impedance matching

Optimized for 10-bit/12-bit ADCs

Selectable output clamping level

Single 5 V supply operation

AD8332 and AD8334 available in lead frame chip scale package

Application

Ultrasound and sonar time-gain controls

High performance automatic gain control (AGC) systems

I/Q signal processing

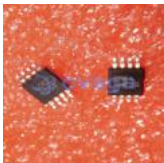
High speed, dual ADC drivers

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



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8628AUJZ](#)

Analog Devices, Inc
SOP23



[AD8041AR](#)

Analog Devices, Inc
SOP-8