

Low Power, Rail-to-Rail Output, Precision JFET Quad Amplifier; Package: SOIC; No of Pins: 14; Temperature Range: Industrial

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-14
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD8643ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD8641/AD8642/AD8643 are low power, precision JFET input amplifier featuring low input bias current and rail-to-rail output. The AD8641 family provides high source impedance, low bias current and low supply current which are key to applications such as ECG/EKG monitors, sleep monitoring, and blood analyzing instruments. The ability to swing rail-to-rail at the output enables designers to buffer wide output swing devices in single supply systems.

The AD8641 family is also ideal for applications utilizing multi-channel boards that require low power to manage heat. Other applications include photodiodes, ATE reference level drivers, battery management, and industrial controls.

The AD8641 family is fully specified over the extended industrial temperature range of -40° to $+125^{\circ}\text{C}$. The AD8641 is available in 5-lead SC70 and 8-lead SOIC packages. The AD8642 is available in 8-lead MSOP and 8-lead SOIC packages. The AD8643 is available in 16-lead 3mm x 3mm LFCSP and 14-lead SOIC packages.

Applications

Medical Instrumentation

Photodiode Amplifiers

Precision Current Sensing

Battery-powered Instruments

Precision Filters

Features

Low Supply Current/Amp: 250 μ A max

Very Low Input Bias Current: 1 pA max

Low Offset Voltage: 750 μ V max

Single-supply Operation: 5 V to 26 V

Dual-supply Operation: \pm 2.5 V to \pm 13 V

Rail-to-rail Output

Unity Gain Stable

3mm x 3mm LFCSP and SOIC

AD8643-EP supports defense and aerospace applications (AQEC standard)

[Download\(pdf\)](#)

Military temperature range (-55°C to $+125^{\circ}\text{C}$)

Controlled manufacturing baseline

1 assembly/test site

1 fabrication site

Enhanced product change notification

Qualification data available on request

V62/12653 DSCC Drawing Number

Application

Medical Instrumentation

Photodiode Amplifiers

Precision Current Sensing

Battery-powered Instruments

Precision Filters

Related Products



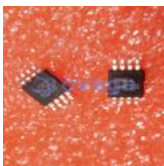
[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8567ARUZ](#)

Analog Devices, Inc
TSSOP-14



[AD8628AUJZ](#)

Analog Devices, Inc
SOP23



[AD8022ARMZ](#)

Analog Devices, Inc
MSOP-8



[AD8041AR](#)

Analog Devices, Inc
SOP-8