

High Performance, 145 MHz FastFET™ Op Amp; Package: SOIC; No of Pins: 8;
Temperature Range: Industrial

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|---------------|-------------------------------------|
| Manufacturers | Analog Devices, Inc |
| Package/Case | SOIC-8 |
| Product Type | Amplifier ICs |
| RoHS | Pb-free Halide free |
| Lifecycle | |



Images are for reference only

Please submit RFQ for AD8065ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD8065/AD80661 FastFET™ amplifiers are voltage feedback amplifiers with FET inputs offering high performance and ease of use. The AD8065 is a single amplifier, and the AD8066 is a dual amplifier. These amplifiers are developed in the Analog Devices, Inc. proprietary XFCB process and allow exceptionally low noise operation (7.0 nV/√Hz and 0.6 fA/√Hz) as well as very high input impedance.

With a wide supply voltage range from 5 V to 24 V, the ability to operate on single supplies, and a bandwidth of 145 MHz, the AD8065/AD8066 are designed to work in a variety of applications. For added versatility, the amplifiers also contain rail-to-rail outputs.

Despite the low cost, the amplifiers provide excellent overall performance. The differential gain and phase errors of 0.02% and 0.02°, respectively, along with 0.1 dB flatness out to 7 MHz, make these amplifiers ideal for video applications. Additionally, they offer a high slew rate of 180 V/μs, excellent distortion (SFDR of -88 dBc @ 1 MHz), extremely high common-mode rejection of -100 dB, and a low input offset voltage of 1.5 mV maximum under warmed up conditions. The AD8065/AD8066 operate using only a 6.4 mA/amplifier typical supply current and are capable of delivering up to 30 mA of load current.

The AD8065/AD8066 are high performance, high speed, FET input amplifiers available in small packages: SOIC-8, MSOP-8, and SOT-23-5. They are rated to work over the industrial temperature range of -40°C to +85°C.

The AD8065WARTZ-R7 is fully qualified for automotive applications. It is rated to operate over the extended temperature range (-40°C to +105°C), up to a maximum supply voltage range of ±5 V only

Features

Qualified for automotive applications

FET input amplifier

1 pA input bias current

Low cost

High speed: 145 MHz, -3 dB bandwidth>

180 V/ μ s slew rate>

Low noise

7 nV/ $\sqrt{\text{Hz}}$ >

0.6 fA/ $\sqrt{\text{Hz}}$ >

Wide supply voltage range: 5 V to 24 V

Single-supply and rail-to-rail output

Low offset voltage 1.5 mV maximum

High common-mode rejection ratio: -100 dB

Excellent distortion specifications

SFDR -88 dBc @ 1 MHz

Low power: 6.4 mA/amplifier typical supply current

No phase reversal

Small packaging: SOIC-8, SOT-23-5, and MSOP-8

Application

Automotive driver assistance systems

Photodiode preamps

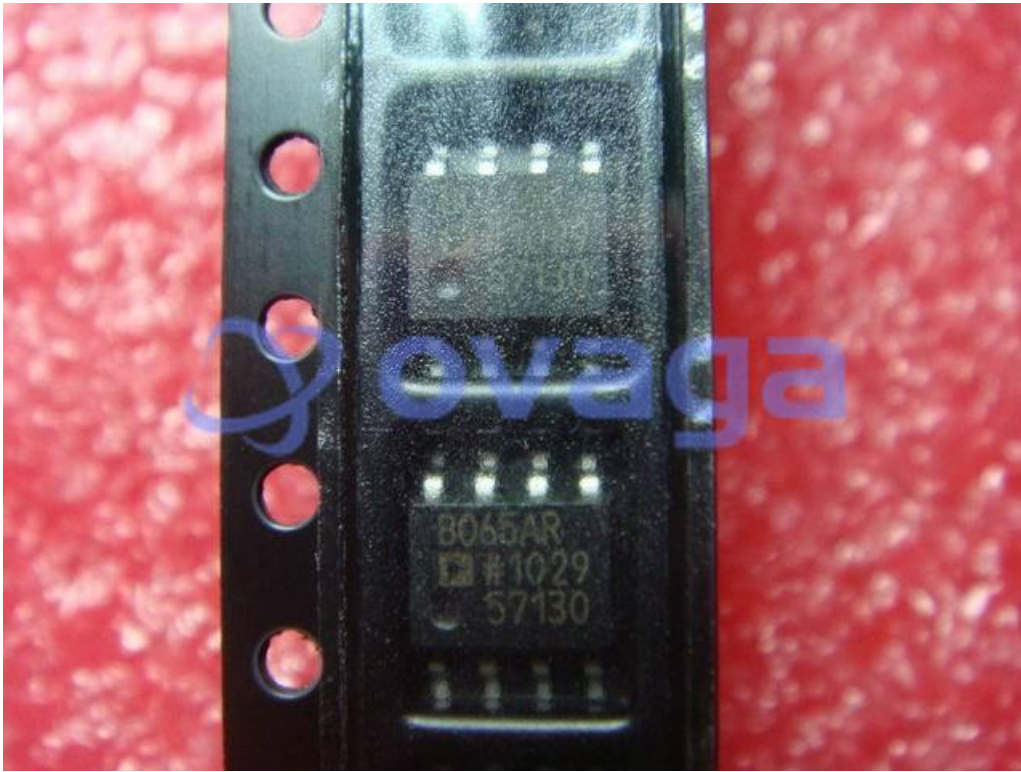
Filters

A/D drivers

Level shifting

Buffering



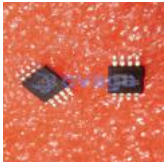


Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc
MSOP-8



[AD8567ARUZ](#)

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TSSOP-14



[AD8022ARMZ](#)

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[ADA4528-2ARMZ-R7](#)

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[AD8062ARMZ](#)

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SOP23



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SOP-8