

Differential Amplifiers IC Ultra Low Distort IF Dual VGA

|               |                                     |
|---------------|-------------------------------------|
| Manufacturers | <a href="#">Analog Devices, Inc</a> |
| Package/Case  | LFCSP-32                            |
| Product Type  | Amplifier ICs                       |
| RoHS          | Rohs                                |
| Lifecycle     |                                     |



Images are for reference only

Please submit RFQ for AD8376ACPZ-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

Using an advanced high speed SiGe process and incorporating proprietary distortion cancellation techniques, the AD8376 achieves 50 dBm output IP3 at 200 MHz.

The AD8376 provides a broad 24 dB gain range with 1 dB resolution. The gain of each channel is adjusted through dedicated 5-pin control interfaces and can be driven using standard TTL levels. The open-collector outputs provide a flexible interface, allowing the overall signal gain to be set by the loading impedance. Thus, the signal voltage gain is directly proportional to the load.

Each channel of the AD8376 can be individually powered on by applying the appropriate logic level to the ENBA and ENBB power enable pins. The quiescent current of the AD8376 is typically 130 mA per channel. When powered down, the AD8376 consumes less than 5 mA and offers excellent input-to-output isolation, lower than -50 dB at 200 MHz.

Fabricated on an Analog Devices, Inc., high speed SiGe process, the AD8376 is supplied in a compact, thermally enhanced, 5 mm × 5mm 32-lead LFCSP package and operates over the temperature range of -40°C to +85°C.

### Applications

Differential ADC drivers

Main and diversity IF sampling receivers

Wideband multichannel receivers

Instrumentation

Data Sheet, Rev. 0, 8/07

## Features

Dual independent digitally controlled VGAs

Bandwidth of 700 MHz (–3 dB)

Gain range: –4 dB to +20 dB

Step size: 1 dB  $\pm$  0.2 dB

Differential input and output

Noise figure: 8.7 dB @ maximum gain

Output IP3 of ~50 dBm at 200 MHz

Output P1dB of 20 dBm at 200 MHz

Dual parallel 5-bit control interface

Provides constant SFDR vs. gain

Power-down control

Single 5 V supply operation

32-lead, 5 mm x 5 mm LFCSP

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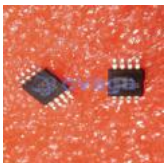


## Related Products



### [AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



### [ADA4084-2ARMZ](#)

Analog Devices, Inc  
MSOP-8



### [AD8567ARUZ](#)

Analog Devices, Inc  
TSSOP-14



### [ADA4528-2ARMZ-R7](#)

Analog Devices, Inc  
MSOP-8



### [AD8062ARMZ](#)

Analog Devices, Inc  
MSOP8



### [AD8628AUJZ](#)

Analog Devices, Inc  
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[AD8022ARMZ](#)

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