

Dual 14-Bit, 20/40/65 MSPS, 3 V Analog-to-Digital Converter; Package: LQFP (7x7mm);
No of Pins: 64; Temperature Range: Industrial

Manufacturers	Analog Devices, Inc
Package/Case	LQFP-64
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD9248BSTZ-20 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD9248 is a dual, 3 V, 14-bit, 20/40/65 MSPS analog to digital converter. It features dual high performance sample-and-hold amplifiers and an integrated voltage reference. The AD9248 uses a multistage differential pipelined architecture with output error correction logic to provide 14-bit accuracy and guarantee no missing codes over the full operating temperature range at up to 65 MSPS data rates.

The wide bandwidth, differential SHA allows for a variety of user-selectable input ranges and offsets including single-ended applications. It is suitable for various applications including multiplexed systems that switch full-scale voltage levels in successive channels and for sampling inputs at frequencies well beyond the Nyquist rate. The AD9248 is suitable for applications in communications, imaging and medical ultrasound.

Dual single-ended independent clock inputs are used to control all internal conversion cycles. A Duty Cycle Stabilizer (DCS) is available on the AD9248-65 and can compensate for wide variations in the clock duty cycle, allowing the converters to maintain excellent performance. The digital output data is presented in either straight binary or twos complement format. Out-of-range signals indicate an overflow condition, which can be used with the most significant bit to determine low or high overflow.

Fabricated on an advanced CMOS process, the AD9248 is available in a space saving 64-pin LQFP and is pin compatible to the AD9238. It is specified over the industrial temperature range (-40°C to +85°C).

APPLICATIONS

Features

Integrated Dual 14-Bit Analog-to-Digital Converters

Single 3 V Supply Operation (2.7 V to 3.6 V)

Low Power: 300 mW at 65 MSPS

Differential Input with 500 MHz 3 dB Bandwidth

Exceptional Cross Talk Immunity > 85 dB

On-Chip Reference and SHA

Flexible Analog Input: 1 V_{p-p} to 2 V_{p-p} Range

Offset Binary or Twos Complement Data Format

Clock Duty Cycle Stabilizer

Output datamux option

Application

Ultrasound equipment

Direct conversion or IF sampling receivers

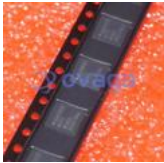
WB-CDMA, CDMA2000, WiMAX

Battery-powered instruments

Hand-held scopemeters

Low cost digital oscilloscopes

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



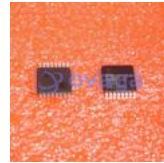
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc
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[AD7266BSUZ](#)

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LFCSP-64