

10-Bit, 40/65/80/105 MSPS 3 V Dual A/D Converter; Package: LQFP; No of Pins: 48;  
Temperature Range: Industrial

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	LQFP48
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD9218BSTZ-40 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD9218 is a dual 10-bit monolithic sampling analog-to-digital converter with on-chip track-and-hold circuits. The product is low cost, low power, and is small and easy to use. The AD9218 operates at a 105 MSPS conversion rate with outstanding dynamic performance over its full operating range. Each channel can be operated independently.

The ADC requires only a single 3.0 V (2.7 V to 3.6 V) power supply and a clock for full operation. No external reference or driver components are required for many applications. The digital outputs are TTL/CMOS compatible and a separate output power supply pin supports interfacing with 3.3 V or 2.5 V logic.

The clock input is TTL/CMOS compatible and the 10-bit digital outputs can be operated from 3.0 V (2.5 V to 3.6 V) supplies. User-selectable options offer a combination of power-down modes, digital data formats, and digital data timing schemes. In power-down mode, the digital outputs are driven to a high impedance state.

### Product Highlights

#### Applications

**Low Power.** Only 275 mW power dissipation per channel at 105 MSPS. Other speed grades proportionally scaled down while maintaining high ac performance.

**Pin Compatibility Upgrade.** Allows easy migration from 8-bit to 10-bit devices. Pin compatible with the 8-bit AD9288 dual ADC.

**Easy to Use.** On-chip reference and user controls provide flexibility in system design.

**High Performance.** Maintains 54 dB SNR at 105 MSPS with a Nyquist input.

**Channel Crosstalk.** Very low at  $-75$  dBc. 6. Fabricated on an Advanced CMOS Process. Available in a 48-lead low profile quad flat package (7 mm  $\times$  7 mm LQFP) specified over the industrial temperature range ( $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ).

## Features

Dual 10-bit, 40 MSPS, 65 MSPS, 80 MSPS, and 105 MSPS ADC

Low power: 275 mW at 105 MSPS per channel

On-chip reference and track-and-hold

300 MHz analog bandwidth each>

1 V p-p or 2 V p-p analog input range each channel

3.0 V single-supply operation (2.7 V to 3.6 V)

Power-down mode for single-channel operation

Twos complement or offset binary output mode

Output data alignment mode

Pin compatible with the 8-bit AD9288

AD9218-EP Supports Defense and Aerospace Applications (AQEC standard)

Download AD9218-EP data sheet (pdf)

Extended industrial temperature range:  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$

Controlled manufacturing baseline

1 assembly/test site

1 fabrication site

Product change notification

Qualification data available on request

V62/19610-01XE DSCC Drawing Number

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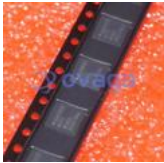
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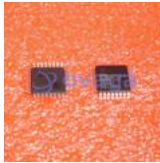




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