

2-Channel Dual ADC Pipelined 65Msps 10-bit Parallel 48-Pin LQFP Tray

Manufacturer: Analog Devices, Inc

Package/Case: QFP

Product Type: Data Conversion ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

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

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° C to $+85^{\circ}$ C).

Key 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 channel

SNR = 57 dB @ 41 MHz, Encode = 80 MSPS

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)

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Extended industrial temperature range: -55°C to +105°C

Controlled manufacturing baseline

1 assembly/test site

1 fabrication site

Product change notification

Qualification data available on request

Application

Battery-powered instruments

Hand-held scopemeters

Low cost digital oscilloscopes

I and Q communications

Ultrasound equipment





Recommended For You

AD7305BRZ

AD9910BSVZ

Analog Devices, Inc

Analog Devices, Inc

Analog Devices, Inc

AD9831ASTZ

SOP20 TQFP100 QFP

AVAQ SEMICONDUCTOR CO., LIMITED

Email: sales@avaq.com

AD5447YRUZ

Analog Devices, Inc

TSSOP

AD537JH

Analog Devices, Inc

CAN10

AD7740YRMZ

Analog Devices, Inc

MSOP8

AD7291BCPZ

Analog Devices, Inc

LFCSP20

AD5302BRMZ

Analog Devices, Inc

MSOP10

AD652AQ

Analog Devices, Inc

DIP

AD9914BCPZ

Analog Devices, Inc

LFCSP

AD9954YSVZ

Analog Devices, Inc

QFP

AD5531BRUZ

Analog Devices, Inc

TSSOP16

AD654JN

Analog Devices, Inc

DIP8

AD73311ARSZ

Analog Devices, Inc

SSOP20

AD2S1205YSTZ

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LQFP44