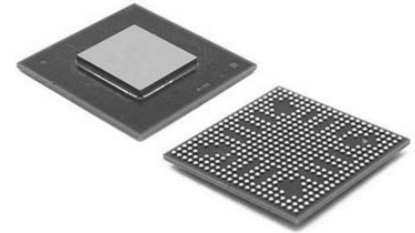


Analog to Digital Converters - ADC Quad 12-Bit 40 MSPS Serial LVDS 1.8V

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP-48
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD9228ABCPZ-40 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD9228 is a quad, 12-bit, 40/65 MSPS analog-to-digital converter (ADC) with an on-chip sample-and-hold circuit designed for low cost, low power, small size, and ease of use. The product operates at a conversion rate of up to 65 MSPS and is optimized for outstanding dynamic performance and low power in applications where a small package size is critical.

The ADC requires a single 1.8 V power supply and LVPECL-/CMOS-/LVDS-compatible sample rate clock for full performance operation. No external reference or driver components are required for many applications.

The ADC automatically multiplies the sample rate clock for the appropriate LVDS serial data rate. A data clock output (DCO) for capturing data on the output and a frame clock output (FCO) for signaling a new output byte are provided. Individual channel power-down is supported and typically consumes <2 mW when all channels are disabled.

The ADC contains several features designed to maximize flexibility and minimize system cost, such as programmable clock and data alignment and programmable digital test pattern generation. The available digital test patterns include built-in deterministic and pseudorandom patterns, along with custom user-defined test patterns entered via the serial port interface (SPI).

The AD9228 is available in an RoHS compliant, 48-lead LFCSP. It is specified over the industrial temperature range of -40°C to +85°C.

PRODUCT HIGHLIGHTS

APPLICATIONS

Small Footprint. Four ADCs are contained in a small, space-saving package.

Low power of 119 mW/channel at 65 MSPS.

Ease of Use. A data clock output (DCO) is provided that operates at frequencies of up to 390 MHz and supports double data rate (DDR) operation.

User Flexibility. The SPI control offers a wide range of flexible features to meet specific system requirements.

Pin-Compatible Family. This includes the AD9287 (8-bit), AD9219 (10-bit), and AD9259 (14-bit).

Features

4 ADCs integrated into 1 package

119 mW ADC power per channel at 65 MSPS

Excellent linearity

Serial LVDS (ANSI-644, default)

Low power, reduced signal option (similar to IEEE 1596.3)

Data and frame clock outputs

Low power, reduced signal option (similar to IEEE 1596.3)

315 MHz full-power analog bandwidth

2 V p-p input voltage range

1.8 V supply operation

Serial port control

Full chip and individual channel power-down modes Flexible bit orientation

Built in and custom digital test pattern generation

Programmable clock and data alignment Programmable output resolution

Standby mode

Full chip and individual channel power-down modes Flexible bit orientation

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Standby mode

Application

Medical imaging and nondestructive ultrasound

Portable ultrasound and digital beam-forming systems

Quadrature radio receivers

Diversity radio receivers

Tape drives

Optical networking

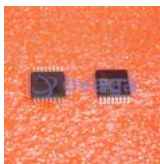
Test equipment

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc
TQPF-32



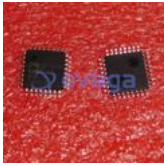
[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



[AD7401YRWZ](#)

Analog Devices, Inc
SOIC-16



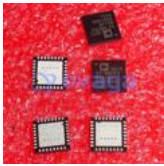
[AD7938BSUZ](#)

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[AD9680BCPZ-500](#)

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