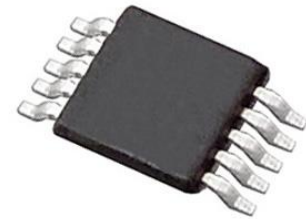


Digital to Analogue Converter, 12 bit, SPI, 2.5V to 5.5V, MSOP, 10 Pins

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-10
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD5324ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD5304/AD5314/AD5324 are quad 8-, 10-, and 12-bit buffered voltage output DACs in 10-lead MSOP and 10-lead LFCSP packages that operate from a single 2.5 V to 5.5 V supply, consuming 500  $\mu$ A at 3 V. Their on-chip output amplifiers allow rail-to-rail output swing to be achieved with a slew rate of 0.7 V/ $\mu$ s. A 3-wire serial interface is used; it operates at clock rates up to 30 MHz and is compatible with standard SPI, QSPI, MICROWIRE, and DSP interface standards.

The references for the four DACs are derived from one reference pin. The outputs of all DACs can be updated simultaneously using the software LDAC function. The parts incorporate a power-on reset circuit, and ensure that the DAC outputs power up to 0 V and remains there until a valid write takes place to the device. The parts contain a power-down feature that reduces the current consumption of the device to 200 nA @ 5 V (80 nA @ 3 V).

The low power consumption of these parts in normal operation makes them ideally suited to portable battery-operated equipment. The power consumption is 3 mW at 5 V, 1.5 mW at 3 V, reducing to 1  $\mu$ W in power-down mode.

## Features

4 buffered 12-Bit DACs in 10-lead MSOP and 10-lead LFCSP

A, W Version:  $\pm 16$  LSB INL, B Version:  $\pm 10$  LSB INL

Low power operation: 500 $\mu$ A @ 3V, 600 $\mu$ A @ 5V

2.5V to 5.5V power supply

Guaranteed monotonic by design over all codes

Power-down to 80nA @ 3V, 200nA @ 5V

Double-buffered input logic

Output range: 0V to VREF

Power-on reset to 0V

See data sheet for additional features

AD5324-EP supports defense and aerospace applications (AQEC standard)

Download(pdf)

Military temperature range ( $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ )

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Enhanced product change notification

Qualification data available on request

V62/12628 DSCC Drawing Number

## Application

Portable battery-powered instruments

Digital gain and offset adjustment

Programmable voltage and current sources

Programmable attenuators

Industrial process controls

## Related Products



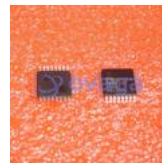
[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



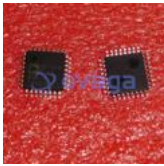
[AD7266BSUZ](#)

Analog Devices, Inc  
TQPF-32



[AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



[AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



[AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc  
LFCSP-32



[AD9680BCPZ-500](#)

Analog Devices, Inc  
LFCSP-64