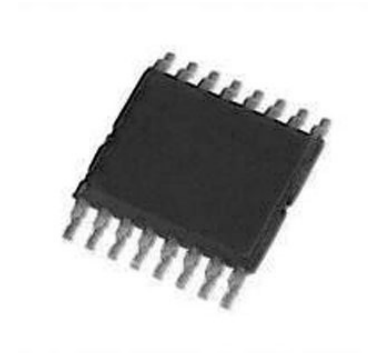


Digital to Analogue Converter, 12 bit, 167 kSPS, 3 Wire, Serial, 2.5V to 5.5V, TSSOP, 16 Pins

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP-16
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD5328BRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD5308/AD5318/AD5328 are octal 8-, 10-, and 12-bit buffered voltage output DACs in a 16-lead TSSOP. They operate from a single 2.5 V to 5.5 V supply, consuming 0.7 mA typical at 3 V. Their on-chip output amplifiers allow the outputs to swing rail-to-rail with a slew rate of 0.7 V/ μ s. The AD5308/AD5318/AD5328 use a versatile 3-wire serial interface that operates at clock rates up to 30 MHz and is compatible with standard SPI, QSPI, MICROWIRE, and DSP interface standards.

The references for the eight DACs are derived from two reference pins (one per DAC quad). These reference inputs can be configured as buffered, unbuffered, or VDD inputs. The parts incorporate a power-on reset circuit, which ensures that the DAC outputs power up to 0 V and remain there until a valid write to the device takes place. The outputs of all DACs may be updated simultaneously using the asynchronous LDAC input. The parts contain a power-down feature that reduces the current consumption of the devices to 400 nA at 5 V (120 nA at 3 V). The eight channels of the DAC may be powered down individually.

All three parts are offered in the same pinout, which allows users to select the resolution appropriate for their application without redesigning their circuit board.

Features

AD5308: 8 buffered 8-bit DACs in 16-lead TSSOP A version: ± 1 LSB INL, B version: ± 0.75 LSB INL

AD5318: 8 buffered 10-bit DACs in 16-lead TSSOP A version: ± 4 LSB INL, B version: ± 3 LSB INL

AD5328: 8 buffered 12-bit DACs in 16-lead TSSOP A version: ± 16 LSB INL, B version: ± 12 LSB INL

Low power operation: 0.7 mA @ 3 V

Power-down to 120 nA @ 3 V, 400 nA @ 5 V

Double-buffered input logic

Guaranteed monotonic by design over all codes

Buffered/unbuffered/VDD reference input options

Output range: 0 V to VREF or 0 V to 2 VREF

Power-on reset to 0 V

Programmability Individual channel power-down Simultaneous update of outputs (LDAC)

Low power, SPI-®, QSPI-™, MICROWIRE-™, and DSP-compatible 3-wire serial interface

Application

Portable battery-powered instruments

Digital gain and offset adjustment

Programmable voltage and current sources

Optical networking

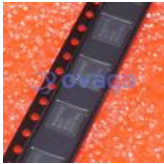
Automatic test equipment

Mobile communications

Programmable attenuators

Industrial process control

Related Products



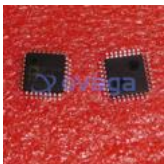
[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



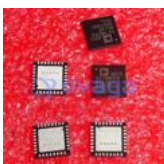
[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



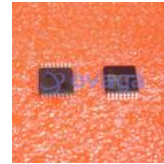
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc
LFCSP-32



[AD7266BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7401YRWZ](#)

Analog Devices, Inc
SOIC-16



[AD7192BRUZ-REEL](#)

Analog Devices, Inc
TSSOP-24



[AD9680BCPZ-500](#)

Analog Devices, Inc
LFCSP-64