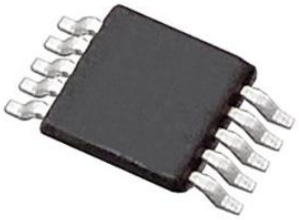
AD5304BRMZ

Data Sheet

2.5 V to 5.5 V, 500 µA, Quad Voltage Output 8-Bit DAC in a 10-Lead Packages; Package: MSOP; No of Pins: 10; Temperature Range: Commercial

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-10
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD5304BRMZ or Email to us: 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 µA 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/µs. 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 µW in power-down mode.

Features

4 buffered 8-Bit DACs in 10-lead MSOP and 10-lead LFCSP

A, W Version: ±1 LSB INL, B Version: ±0.625 LSB INL

Low power operation: 500 µA @ 3 V, 600 µA @ 5 V

2.5 V to 5.5 V power supply

Guaranteed monotonic by design over all codes

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

Double-buffered input logic

Output range: 0 V to VREF

Power-on reset to 0 V

Simultaneous update of outputs (LDAC function)

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

On-chip, rail-to-rail output buffer amplifiers

Temperature range –40°C to +105°C

Qualified for automotive applications

Application

Portable battery-powered instruments

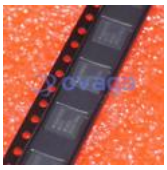
Digital gain and offset adjustment

Programmable voltage and current sources

Programmable attenuators

Industrial process controls

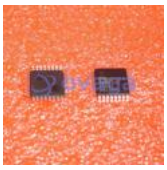
Related Products



ADAS3022BCPZ

Analog Devices, Inc

LFCSP-40



AD7266BSUZ

Analog Devices, Inc

TQPF-32

AD574AJNZ

Analog Devices, Inc

PDIP-28

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