

## AD5312BRMZ

Data Sheet

Digital to Analogue Converter, Dual, 10 bit, 143 kSPS, 3 Wire, Serial, 2.5V to 5.5V, SOP, 10 Pins

Manufacturers <u>Analog Devices, Inc</u>

Package/Case MSOP-10

Product Type Data Conversion ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for AD5312BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD5302/AD5312/AD5322 are dual 8-, 10- and 12-bit buffered voltage output DACs in a 10-lead  $\mu$ SOIC package that operate from a single +2.5 V to +5.5 V supply consuming 230  $\mu$ A at 3 V. Their on-chip output amplifiers allow the outputs to swing rail-to-rail with a slew rate of 0.7 V/ $\mu$ s. The AD5302/ AD5312/AD5322 utilize a versatile 3-wire serial interface which operates at clock rates up to 30 MHz and is compatible with standard SPI<sup>TM</sup>, QSPI<sup>TM</sup>, MICROWIRE<sup>TM</sup> and DSP interface standards.

Product Highlights

Lifecycle

Available in 10-lead MicroSOIC packages

Low power, single supply operation from 2.5 V to 5.5 V supply

Consumes 0.7mW at 3 V and 1.5 mW at 5 V

Rail-to-Rail output with a slew rate of 0.7 V/µs

Utilizes a versatile 3-wire serial interface with clock rates up to 30 MHz

Pin and Software Compatible with the AD5302 (8-Bit) and the AD5322 (12-bit)

**Features** 

Two 10-Bit DACS in One Package

Micropower: 300 µA @ 5 V (including Reference Current)

Power-Down to 200 nA @ 5 V, 50nA @ 3 V

Guaranteed Monotonic by Design

Power-On-Reset to Zero Volts

Buffered/Unbuffered Reference Input Options

O-VREF Output Voltage

Low Power, SPI<sup>TM</sup>, QSPI<sup>TM</sup>, MICROWIRE<sup>TM</sup> and DSP-Compatible 3-Wire Serial Interface

Output Buffer Amplifiers w/ Rail-to-Rail Operation

Simultaneous Update of DAC Outputs via LDAC Pin (Active Low)

Temperature Range: -40°C to 105°C

Three Power-Down Functions

## **Application**

Available in 10-lead MicroSOIC packages

Low power, single supply operation from 2.5 V to 5.5 V supply

Consumes 0.7mW at 3 V and 1.5 mW at 5 V

Rail-to-Rail output with a slew rate of 0.7 V/µs

Utilizes a versatile 3-wire serial interface with clock rates up to 30 MHz

Pin and Software Compatible with the AD5302 (8-Bit) and the AD5322 (12-bit)

## **Related Products**



ADAS3022BCPZ
Analog Devices, Inc
LFCSP-40



AD574AJNZ
Analog Devices, Inc
PDIP-28



AD7938BSUZ
Analog Devices, Inc
TQFP-32



Analog Devices, Inc LFCSP-32

AD7124-8BCPZ-RL7



AD7266BSUZ
Analog Devices, Inc
TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



AD9680BCPZ-500
Analog Devices, Inc
LFCSP-64