

# AD5624BRMZ

Data Sheet

<u>RFO</u>

Digital to Analogue Converter, 12 bit, 287 kSPS, Serial, 2.7V to 5.5V, MSOP, 10 Pins

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 AD5624BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

## **General Description**

The AD5624/AD5664, members of the nanoDAC® family, are low power, quad, 12-, 16-bit buffered voltage-out DACs that operate from a single 2.7 V to 5.5 V supply and are guaranteed monotonic by design.

The AD5624/AD5664 require an external reference voltage to set the output range of the DAC. The part incorporates a power-on reset circuit that ensures the DAC output powers up to 0 V and remains there until a valid write takes place. The parts contain a power-down feature that reduces the current consumption of the device to 480 nA at 5 V and provides software-selectable output loads while in power-down mode.

The low power consumption of these parts in normal operation makes them ideally suited to portable battery-operated equipment. The power consumption is 2.25 mW at 5 V, going down to  $2.4 \mu$ W in power-down mode.

The AD5624/AD5664 on-chip precision output amplifier allows rail-to-rail output swing to be achieved.

The AD5624/AD5664 use a versatile 3-wire serial interface that operates at clock rates up to 50 MHz, and are compatible with standard SPI®, QSPI<sup>TM</sup>, MICROWIRE<sup>TM</sup>, and DSP interface standards.

Product Highlights

Relative accuracy: ±12 LSBs maximum.

Available in 10-lead MSOP and 10-lead, 3 mm × 3 mm, LFCSP\_WD.

Low power, typically consumes 1.32 mW at 3 V and 2.25 mW at 5 V.

Maximum settling time of 4.5  $\mu$ s (AD5624) and 7  $\mu$ s (AD5664).

Applications Process control

Data acquisition systems

Portable battery-powered instruments

Digital gain and offset adjustment

Programmable voltage and current sources

Programmable attenuators

## Features

Low power quad nanoDACs: 12 Bits

Guaranteed monotonic by design

Relative Accuracy: ±12 LSBs max

10-lead MSOP and  $3mm \times 3mm \, LFCSP\_WD$  package

 $2.7\ V$  to  $5.5\ V$  power supply

Power-on reset to zero

Per channel power-down

Serial interface, up to 50MHz

#### **Related Products**



ADAS3022BCPZ Analog Devices, Inc LFCSP-40



AD574AJNZ Analog Devices, Inc PDIP-28



AD7938BSUZ Analog Devices, Inc TOFP-32



TQFP-32 AD7124-8BCPZ-RL7

Analog Devices, Inc LFCSP-32

# Application

Process control Data acquisition systems Portable battery-powered instruments Digital gain and offset adjustment

Programmable voltage and current sources

Programmable attenuators



# 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



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