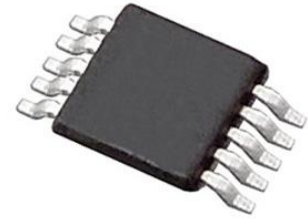


Digital to Analogue Converter, Dual Low Power, 16 bit, 333 kSPS, I2C, 2.7V to 5.5V, SOP, 10 Pins

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 AD5667RBRMZ-2 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD5627R/AD5647R/AD5667R, AD5627/AD5667 members of the nanoDAC® family are low power, dual, 12-, 14-, 16-bit buffered voltage-out DACs with/without on-chip reference. All devices operate from a single 2.7 V to 5.5 V supply, are guaranteed monotonic by design, and have an I2C-compatible serial interface.

The AD5627R/AD5647R/AD5667R have an on-chip reference. The AD5627RBCPZ, AD5647RBCPZ, and AD5667RBCPZ have a 1.25 V, 5 ppm/°C reference, giving a full-scale output range of 2.5 V; the AD56x7RBRMZ have a 2.5 V, 5 ppm/°C reference, giving a full-scale output range of 5 V. The on-chip reference is off at power-up, allowing the use of an external reference. The internal reference is enabled via a software write. The AD5667 and AD5627 require an external reference voltage to set the output range of the DAC.

The AD5627R/AD5647R/AD5667R, AD5627/AD5667 incorporate 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 device contains a per-channel 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 this device in normal operation makes it ideally suited to portable battery-operated equipment. The on-chip precision output amplifier enables rail-to-rail output swing.

The AD5627R/AD5647R/AD5667R, AD5627/AD5667 use a 2-wire I2C-compatible serial interface that operates in standard (100 kHz), fast (400 kHz), and high speed (3.4 MHz) modes.

Features

Low power, smallest pin-compatible, dual nanoDACs

AD5627R/AD5647R/AD5667R 12-/14-/16-bit On-chip 1.25 V/2.5 V, 5 ppm/°C reference

AD5627/AD5667 12-/16-bit External reference only

3 mm x 3 mm LFCSP and 10-lead MSOP

2.7 V to 5.5 V power supply

Guaranteed monotonic by design

Power-on reset to zero scale

Per channel power-down

Hardware LDAC and CLR functions

I2C-compatible serial interface supports standard (100 kHz), fast (400 kHz), and high speed (3.4 MHz) modes

Application

Process control

Data acquisition systems

Portable battery-powered instruments

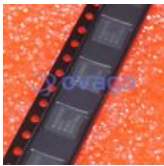
Digital gain and offset adjustment

Programmable voltage and current sources

Programmable attenuators

Data Sheet, Rev. 0, 1/07

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



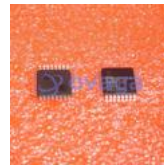
[AD7938BSUZ](#)

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