

## AD5697RBRUZ

Data Sheet

Digital to Analogue Converter, Dual, 12 bit, I2C, 2.7V to 5.5V, TSSOP, 16 Pins

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

Package/Case 16-TSSOP (0.173, 4.40mm Width)

Product Type Data Conversion ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD5697RBRUZ or Email to us; sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD5697R, a member of the nanoDAC+ $^{TM}$  family, is a low power,dual, 12-bit buffered voltage output digital-to-analog converter(DAC). The device includes a 2.5 V, 2 ppm/ $^{\circ}$ C internal reference(enabled by default) and a gain select pin giving a full-scale output of 2.5 V = 2). The AD5697R operates from single 2.7 V to 5.5 V supply, is guaranteed monotonic by design,and exhibits less than 0.1% FSR gain error and 1.5 mV offseterror performance. The device is available in a 3 mm  $\times$  3 mmLFCSP and a TSSOP package.

The AD5697R also incorporates a power-on reset circuit and aRSTSEL pin that ensure that the DAC outputs power up to zeroscale or midscale and remain there until a valid write takesplace. It contains a per channel power-down feature that reduces the current consumption of the device to  $4 \mu A$  at 3 V while inpower-down mode.

The AD5697R uses a versatile 2-wire serial interface that operates at clock rates up to 400 kHz and includes a VLOGIC pin intended for 1.8 V/3 V/5 V logic.

Product Highlights

Precision DC Performance. TUE: ±0.1% of FSR maximumOffset error: ±1.5 mV maximumGain error: ±0.1% of FSR maximum

Low Drift 2.5 V On-Chip Reference.2 ppm/°C typical temperature coefficient5 ppm/°C maximum temperature coefficient

Two Package Options.3 mm × 3 mm, 16-lead LFCSP16-lead TSSOP

**Features** 

Low drift 2.5 V reference: 2 ppm/°C typical

Tiny package: 3 mm × 3 mm, 16-lead LFCSP

Total unadjusted error (TUE): ±0.1% of full-scale range (FSR) maximum

Offset error: ±1.5 mV maximum

Gain error: ±0.1% of FSR maximum

High drive capability: 20 mA, 0.5 V from supply rails

User selectable gain of 1 or 2 (GAIN pin)

Reset to zero scale or midscale (RSTSEL pin)

1.8 V logic compatibility

Low glitch: 0.5 nV-sec

400 kHz I2C-compatible serial interface

Low power: 3.3 mW at 3 V

2.7 V to 5.5 V power supply

## **Application**

Base station power amplifiers

Process controls (programmable logic controller [PLC] I/O cards)

Industrial automation

Data acquisition systems

## **Related Products**



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
TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



AD9680BCPZ-500

Analog Devices, Inc

LFCSP-64