Digital to Analogue Converter, 12 bit, I2C, 2.7V to 5.5V, TSSOP, 14 Pins

Manufacturers	Analog Devices, Inc
Package/Case	TSSOP-14
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	
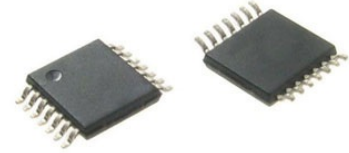
Images are for reference only

Please submit RFQ for AD5625RBRUZ-1 or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The AD5625R/AD5645R/AD5665R and AD5625/AD5665 members of the nanoDAC® family are low power, quad, 12-/14-/16-bit, buffered voltage-out DACs with/without an 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 AD5625R/AD5645R/AD5665R have an on-chip reference. The LFCSP versions of the AD5625R/AD5645R/AD5665R have a 1.25 V or 2.5 V, 10 ppm/°C reference, giving a full-scale output range of 2.5 V or 5 V; the TSSOP versions of the AD5625R/AD5645R/AD5665R have a 2.5 V, 5 ppm/°C reference, giving a full-scale output range of 5 V. The WLCSP has a 1.25 V reference. 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 AD5625/AD5665 require an external reference voltage to set the output range of the DAC.

The device incorporates a power-on reset circuit that ensures that the DAC output powers up to 0 V = VDD) and remains there until a valid write occurs. The on-chip precision output amplifier enables rail-to-rail output swing.

The AD5625R/AD5645R/AD5665R and AD5625/AD5665 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, quad nanoDACs

AD5625R/AD5645R/AD5665R

12-/14-/16-bit nanoDACs

On-chip, 2.5 V, 5 ppm/°C reference in TSSOP

On-chip, 2.5 V, 10 ppm/°C reference in LFCSP

On-chip, 1.25 V, 10 ppm/°C reference in LFCSP

AD5625/AD5665

12-/16-bit nanoDACs

External reference only

3 mm × 3 mm, 10-lead LFCSP; 14-lead TSSOP; and 1.665 mm × 2.245 mm, 12-ball WLCSP

2.7 V to 5.5 V power supply

Guaranteed monotonic by design

Power-on reset to zero scale/midscale

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
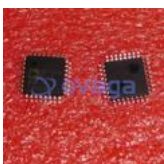
Programmable attenuators

Related Products

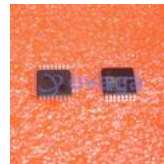|	
ADAS3022BCPZ Analog Devices, Inc LFCSP-40	**AD7266BSUZ** Analog Devices, Inc TQPF-32
AD574AJNZ Analog Devices, Inc PDIP-28	**AD7401YRWZ** Analog Devices, Inc SOIC-16
AD7938BSUZ Analog Devices, Inc TQFP-32	**AD7192BRUZ-REEL** Analog Devices, Inc TSSOP-24

AD7124-8BCPZ-RL7

Analog Devices, Inc

LFCSP-32

AD9680BCPZ-500

Analog Devices, Inc

LFCSP-64