AD5684RARUZ

Data Sheet

Digital to Analogue Converter, Quad, 12 bit, 25 MSPS, SPI, 2.7V to 5.5V, TSSOP, 16 Pins

Manufacturers	Analog Devices, Inc
Package/Case	SOP-16
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for AD5684RARUZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD5684R nanoDAC+™ is a quad, 12-bit, rail-to-rail, voltage output DAC. The device includes a 2.5V, 2ppm/°C internal reference (enabled by default) and a gain select pin giving a full-scale output of 2.5V>

The AD5684R also incorporates a power-on-reset circuit and a RSTSEL pin that ensures the DAC outputs power up to zero-scale or midscale, and remain there until a valid write takes place. Each device contains a per-channel power-down feature that reduces the current consumption of the device to 4 uA at 3 V while in power-down mode.

The AD5684R employs a versatile SPI interface that operates at clock rates up to 50 MHz and includes a VLOGIC pin intended for 1.8V/3V/5V logic.

Product Highlights

High relative accuracy: AD5684R(12-bit): ±1LSB INL max

Low drift on-chip reference: 2.5V, 2ppm/°C temperature drift

Two package options: 3mm × 3mm 16-lead LFCSP or 16-lead TSSOP

Features

High relative accuracy (INL): ±2 LSB maximum at 16 bits

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 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

50 MHz SPI with readback or daisy chain

Low glitch: 0.5 nV-sec

Low power: 3.3 mW at 3 V

2.7 V to 5.5 V power supply

Application

Optical transceivers

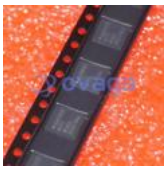
Base-station power amplifiers

Process control (PLC I/O cards)

Industrial automation

Data acquisition systems

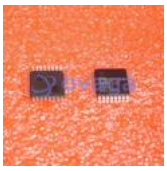
Related Products



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