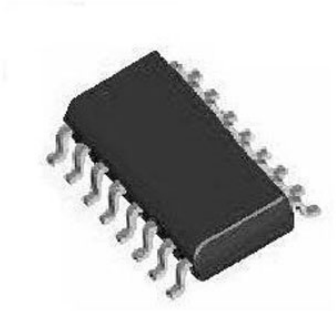
AD7304BRZ

Data Sheet

Digital to Analogue Converter, Quad, 8 bit, SPI, 2.7V to 5.5V, SOIC, 16 Pins

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



Images are for reference only

Please submit RFQ for AD7304BRZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD7304/AD7305 are quad, 8-bit DACs that operate from a single +3 V to +5 V supply or ±5 V supplies. The AD7304 has a serial interface, while the AD7305 has a parallel interface. Internal precision buffers swing rail-to-rail. The reference input range includes both supply rails allowing for positive or negative full-scale output voltages. Operation is guaranteed over the supply voltage range of +2.7 V, +5.5 V to ±5 V consuming less than 9 mW from a +3 V supply. The full-scale voltage output is determined by the external reference input voltage applied. The rail-to-rail VREF input to DAC VOUT allows for a full-scale voltage set equal the positive supply VDD, the negative supply VSS or any value in between.

The AD7304's doubled-buffered serial-data interface offers high-speed, three-wire, SPI and micro controller compatible inputs using data in (SDI), clock (CLK) and chip select (CS) pins.

The parallel input AD7305 uses a standard address decode along with the WR control line to load data into the input registers. The double buffered architecture allows all four input registers to be preloaded with new values followed by a LDAC control strobe which copies all the new data into the DAC registers thereby updating the analog output values. The AD7305 is pin-compatible with the popular industry standard AD7226 when operating from less than +5.5 V.

An internal power ON reset places both parts in the zero-scale state at turn ON. A 40 µA power shutdown (SHDN) feature is activated on both parts by tri-stating the SDI/SHDN pin on the AD7304, and tri-stating the A0/SHDN address pin on the AD7305. The AD7304/AD7305 are specified over the extended industrial (-40°C to +85°C), and the automotive (-40°C to +125°C) temperature ranges.

Features

Four 8-Bit DACs in One Package

Rail-to-Rail REF Input to Voltage Output Swing

Compact 1.1 mm Height TSSOP 16-/20-Lead Package

2.6 MHz Reference Multiplying Bandwidth

Internal Power-On Reset

SPI Serial Interface Compatible - AD7304

Fast Parallel Interface - AD7305

40 µA Power Shutdown

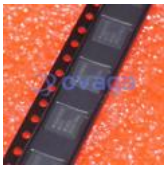
Application

Automotive output span voltage

Instrumentation, digitally controlled calibration

Pin-compatible AD7226 replacement when VDD < 5.5 V

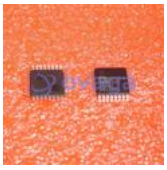
Related Products



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