



Data Sheet

<u>RFO</u>

#### DAC 2-CH R-2R 12-bit Automotive 24-Pin SOIC W Tube

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-24
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7396ARZ or <u>Email to us; sales(a) ovaga.com</u> We will contact you in 12 hours.
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**General Description** 

The AD7396/AD7397 series of dual, pin-compatible, 12- and 10-bit voltage-output digital-to-analog converters save power while operating from +3 V to +5 V supplies. A unique feature of the high-input-resistance, reference inputs is the ability to tie VREF to VDD establishing a full 0 to VDD DAC output swing. Operation is guaranteed over the supply voltage range of +2.7 V to +5.5 V making these devices ideal for battery-operated applications.

A 12-bit wide latch loads with a 45 ns write time allowing interface to fast processors without wait states. The double-buffered input structure enables pre-load of the input registers one at a time, then a single load strobe tied to both LDA+LDB inputs will update both DAC outputs simultaneously. Additionally, an asynchronous RS input sets the output to zero-scale at power on or upon user demand. Power shutdown to sub microamp levels is directly controlled by the active low SHDN pin. While in the power shutdown state register data can still be changed even though the output buffer is in an open circuit state. Upon return to the normal operating state the latest data loaded in the DAC register will establish the output voltage.

Both parts are offered in the same pin out to allow users to select the amount of resolution appropriate for their applications without circuit card changes. Primary applications for the AD7396/AD7397 include: automotive sensor voltage generation and calibration, portable communications, PC peripherals and digitally controlled calibration.

The AD7396 and AD7397 are specified for operation over the extended industrial (-40°C to +85°C) temperature range. The AD7397AN and AD7397AR are specified for the -40°C to +125°C automotive temperature range. AD7396s and AD7397s are available in plastic DIP, and 24-lead SOIC packages. The AD7397ARU is available for ultra-compact applications for example, PCMCIA cards, in a thin 1.1mm height TSSOP-24 package.

The AD7396 and AD7397 are members of a complete family of Micropower consumption, single/dual/quad D/A converters (AD7390 ... AD7398) available with both serial or parallel data loading.

## Features

- Micropower 100µA/DAC
- 0.1 µA Typical Power Shutdown
- Compact 1.1 mm Height TSSOP-24 Lead Package
- Single-Supply +2.7 V to +5.5 V Operation
- AD7396/12-Bit ResolutionAD7397/10-Bit Resolution
- 0.9 LSB Differential Nonlinearity Error



**Related Products** 



#### ADAS3022BCPZ

Analog Devices, Inc LFCSP-40



#### AD7266BSUZ

Analog Devices, Inc TQPF-32



## AD574AJNZ

Analog Devices, Inc PDIP-28



# AD7938BSUZ Analog Devices, Inc TQFP-32



AD7124-8BCPZ-RL7

Analog Devices, Inc LFCSP-32







## AD7401YRWZ

Analog Devices, Inc SOIC-16

### AD7192BRUZ-REEL

Analog Devices, Inc TSSOP-24

#### AD9680BCPZ-500

Analog Devices, Inc LFCSP-64