

Digital to Analogue Converter, 12 bit, 167 kSPS, SPI, 3V to 5V,  $\pm 4.5V$  to  $\pm 5.5V$ , TSSOP, 16 Pins

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP-16
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD7398BRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7398/AD7399 family of quad, 12-bit/10-bit, voltage output digital-to-analog converters (DACs) is designed to operate from a single 3 V to 5 V supply or a dual  $\pm 5$  V supply. Built with the Analog Devices, Inc. robust CBCMOS process, these monolithic DACs offer the user low cost with ease-of-use in single or dual-supply systems.

The applied external reference, VREF, determines the full-scale output voltage. Valid VREF values include  $VSS < VREF < VDD$  that result in a wide selection of full-scale outputs. For multiplying applications, ac inputs can be as large as  $\pm 5$  VP.

A doubled-buffered serial-data interface offers high speed, 3-wire, SPI- and microcontroller-compatible inputs using serial data-in (SDI), clock (CLK), and a chip-select (CS). A common level-sensitive, load-DAC strobe (LDAC) input allows simultaneous update of all DAC outputs from previously loaded input registers. Additionally, an internal power-on reset forces the output voltage to zero at system turn on. An external asynchronous reset (RS) also forces all registers to the zero code state. A programmable power-shutdown feature reduces power dissipation on unused DACs.

Both parts are offered in the same pinout, enabling users to select the appropriate resolution for their application without redesigning the layout. For 8-bit resolution applications, see the pin-compatible AD7304 product.

The AD7398/AD7399 are specified over the extended industrial ( $-40^{\circ}C$  to  $+125^{\circ}C$ ) temperature range. Parts are available in 16-lead, wide body SOIC and ultracompact, thin, 1.1 mm TSSOP packages.

## Features

AD7398 - 12-bit resolution  
AD7399 - 10-bit resolution

Programmable power shutdown

Single (3 V to 5 V) or dual ( $\pm 5$  V) supply operation

3-wire, serial SPI<sup>®</sup>-compatible interface

Internal power-on reset

Double buffered registers for simultaneous multichannel DAC update

Four separate rail-to-rail reference inputs

Thin profile, TSSOP-16 package available

Low tempco: 1.5 ppm/°C

Qualified for automotive applications

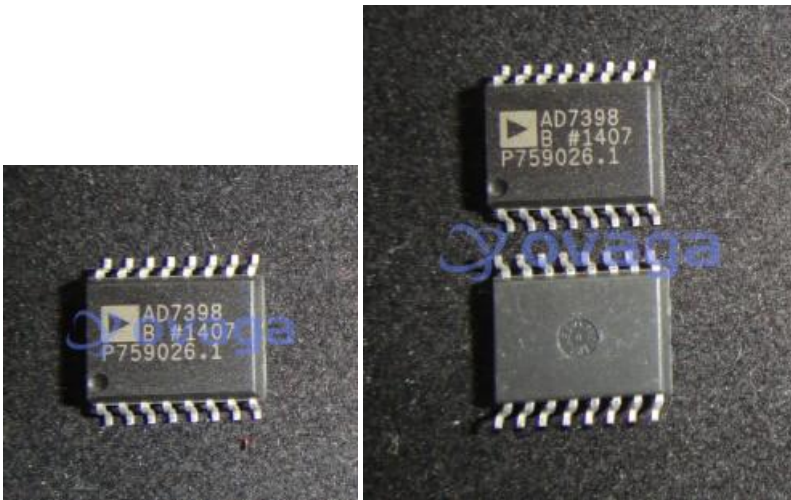
## Application

Automotive output voltage span

Portable communications

Digitally controlled calibration

PC peripherals

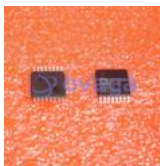


## Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc  
TQPF-32



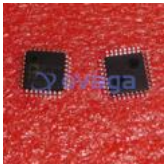
[AD574AJNZ](#)

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SOIC-16



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