

10-bit Serial ADC Pseudo Differential, Single Ended Input, 20-Pin SOIC W

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-20
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7812YRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7811 and AD7812 are high speed, low power, 10-bit A/D converters that operate from a single 2.7 V to 5.5 V supply. The devices contain a 2.3 μ s successive approximation A/D converter, an on-chip track/hold amplifier, a 2.5 V on-chip reference and a high speed serial interface that is compatible with the serial interfaces of most DSPs (Digital Signal Processors) and microcontrollers. The user also has the option of using an external reference by connecting it to the VREF pin and setting the EXTREF bit in the control register. The VREF pin may be tied to VDD. At slower throughput rates the power-down mode may be used to automatically power down between conversions.

The control registers of the AD7811 and AD7812 allow the input channels to be configured as single-ended or pseudo differential. The control register also features a software convert start and a software power-down. Two of these devices can share the same serial bus and may be individually addressed in a multipackage application by hardwiring the device address pin. The AD7811 is available in a small, 16-lead 0.3" wide, plastic dual-in-line package (mini-DIP), in a 16-lead 0.15" wide, small outline IC (SOIC) and in a 16-lead, Thin Shrink Small Outline Package (TSSOP). The AD7812 is available in a small, 20-lead 0.3" wide, plastic dual-in-line package (mini-DIP), in a 20-lead, small outline IC (SOIC) and in a 20-lead, Thin Shrink Small Outline Package (TSSOP).

Features

10-Bit ADC with 2.3 μ s Conversion Time

The AD7812 has Eight Single-Ended Inputs that Can Be Configured as Seven Pseudo Differential Inputs with Respect to a Common, or as Four Independent Pseudo Differential Channels

Onboard Track and Hold

Onboard Reference 2.5 V \pm 2.5%

Operating Supply Range: 2.7 V to 5.5 V

Specifications at 2.7 V-3.6 V and 5 V \pm 10%

DSP-/Microcontroller-Compatible Serial Interface

High Speed Sampling and Automatic Power-Down Modes

Package Address Pin on the AD7811 and AD7812 Allows

Sharing of Serial Bus in Multipackage Applications

Input Signal Range: 0 V to VREF

Reference Input Range: 1.2 V to VDD

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



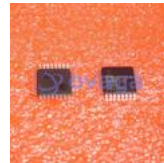
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc
LFCSP-32



[AD7266BSUZ](#)

Analog Devices, Inc
TQPF-32



[AD7401YRWZ](#)

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SOIC-16



[AD7192BRUZ-REEL](#)

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TSSOP-24



[AD9680BCPZ-500](#)

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LFCSP-64