



Data Sheet

Analogue to Digital Converter, 12 bit, 100 kSPS, Serial, Serial, Single, 2.7 V

Manufacturers Analog Devices, Inc

Package/Case SOP8

Product Type Data Conversion ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for AD7896ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD7896 is a fast, 12-bit ADC which operates from a single +2.7 V to 5.5 V supply and is housed in a small 8-pin mini-DIP and 8-pin SOIC. The part contains an 8 µs successive approximation A/D converter, an on-chip track/hold amplifier, an on-chip clock and a high speed serial interface.

Output data from the AD7896 is provided via a high speed, serial interface port. This two-wire serial interface has a serial clock input and a serial data output with the external serial clock accessing the serial data from the part.

In addition to the traditional dc accuracy specifications such as linearity, full-scale and offset errors, the AD7896 is also specified for dynamic performance parameters including harmonic distortion and signal-to-noise ratio.

The part accepts an analog input range of 0 V to VDD and operates from a single +2.7 V to +5.5 V supply consuming only 9 mW typical. The VDD input is also used as the reference for the part so that no external reference is required.

The AD7896 features a high sampling rate mode and, for low power applications, a proprietary automatic power down mode where the part automatically goes into power down once con-version is complete and "wakes up" before the next conversion cycle.

The part is available in a small, 8-pin, 0.3" wide, plastic or hermetic dual-in-line package (mini-DIP) and in an 8-pin, small outline IC (SOIC).

Features

100 kHz Throughput Rate

Fast 12-Bit Sampling ADC with 8 μs Conversion Time

8-Lead PDIP and SOIC

Single 2.7 V to 5.5 V Supply Operation

High Speed, Easy-to-Use Serial Interface

On-Chip Track-and-Hold Amplifier

Analog Input Range Is 0 V to Supply

High Input Impedance

Low Power: 9 mW Typ





Related Products



ADAS3022BCPZ
Analog Devices, Inc
LFCSP-40



AD574AJNZ
Analog Devices, Inc
PDIP-28



AD7266BSUZ
Analog Devices, Inc
TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7938BSUZ
Analog Devices, Inc
TQFP-32



Analog Devices, Inc TSSOP-24

AD7192BRUZ-REEL



AD7124-8BCPZ-RL7
Analog Devices, Inc
LFCSP-32



AD9680BCPZ-500
Analog Devices, Inc
LFCSP-64