

Digital to Analogue Converter, 16 bit, Parallel, 4.75V to 5.25V, $\pm 14.25V$ to $\pm 15.75V$, DIP, 28 Pins

Manufacturers	Analog Devices, Inc
Package/Case	PDIP-28
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7846JNZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7846 is a 16-bit DAC constructed with the Analog Devices, Inc., LC2MOS process. It has VREF+ and VREF- reference inputs and an on-chip output amplifier. These can be configured to give a unipolar output range (0 V to +5 V, 0 V to +10 V) or bipolar output ranges (± 5 V, ± 10 V).

The DAC uses a segmented architecture. The four MSBs in the DAC latch select one of the segments in a 16-resistor string. Both taps of the segment are buffered by amplifiers and fed to a 12-bit DAC, which provides a further 12 bits of resolution. This architecture ensures 16-bit monotonicity. Excellent integral linearity results from tight matching between the input offset voltages of the two buffer amplifiers.

In addition to the excellent accuracy specifications, the AD7846 also offers a comprehensive microprocessor interface. There are 16 data I/O pins, plus control lines (CS, R/W, LDAC and CLR). R/W and CS allow writing to and reading from the I/O latch.

This is the readback function, which is useful in ATE applications. LDAC allows simultaneous updating of DACs in a multi-DAC system and the CLR line will reset the contents of the DAC latch to 00...000 or 10...000 depending on the state of R/W.

This means that the DAC output can be reset to 0 V in both the unipolar and bipolar configurations.

The AD7846 is available in 28-lead plastic, ceramic, and PLCC packages.

Product Highlights

16-Bit MonotonicityThe guaranteed 16-bit monotonicity over temperature makes the AD7846 ideal for closed-loop applications.

ReadbackThe ability to read back the DAC register contents minimizes software routines when the AD7846 is used in ATE systems.

Power DissipationPower dissipation of 100 mW makes the AD7846 the lowest power, high accuracy DAC on the market.

Features

16-bit monotonicity over temperature

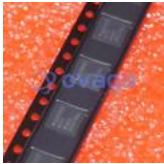
Microprocessor compatible with readback capability

Unipolar or bipolar output

Multiplying capability

Low power (100 mW typical)

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



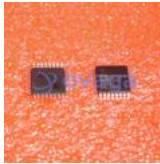
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