

Digital to Analog Converters - DAC IC 16-BIT 30 MSPS D/A Converter

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



Images are for reference only

Please submit RFQ for AD768AR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7680 is a 16-bit, fast, low power, successive approximation ADC. The part operates from a single 2.5 V to 5.5 V power supply and features throughput rates up to 100 kSPS. The part contains a low noise, wide bandwidth track-and-hold amplifier that can handle input frequencies in excess of 7 MHz.

The conversion process and data acquisition are controlled using CS and the serial clock, allowing the devices to interface with microprocessors or DSPs. The input signal is sampled on the falling edge of CS and the conversion is also initiated at this point. There are no pipelined delays associated with the part.

The AD7860 uses advanced design techniques to achieve very low-power dissipation at fast throughput rates. The reference for the part is taken internally from VDD. This allows the widest dynamic input range to the ADC. Thus the analog input range for the part is 0 to VDD. The conversion rate is determined by the SCLK frequency.

Product Highlights

First 16-bit ADC in a SOT-23 package.

High throughput with low power consumption.

Flexible power/serial clock speed management. The conversion rate is determined by the serial clock, allowing the conversion time to be reduced through the serial clock speed increase. This allows the average power consumption to be reduced when a power-down mode is used while not converting. The part also features a shutdown mode to maximize power efficiency at lower throughput rates. Power consumption is 0.5 μ A max when in shutdown.

Reference derived from the power supply.

No pipeline delays.

Features

Fast Throughput Rate: 100 kSPS

Specified for VDD of 2.5 V to 5.5 V

Low Power: 3 mW typ at 100 kSPS with 2.5 V supply 3.9 mW typ at 100 kSPS with 3 V supply 16.7 mW typ at 100 kSPS with 5 V supply

Wide Input Bandwidth: 86 dB SNR at 10 kHz Input Frequency

Flexible Power/Serial Clock Speed Management

No Pipeline Delays

High Speed Serial Interface SPI®/QSPI™/μWire/DSP Compatible

Standby Mode: 0.5 μA max

6-Lead SOT-23 and 8-Lead MSOP packages

Application

Process control

Battery-powered systems: Personal digital assistants Medical instruments Mobile communications

Instrumentation and control systems

Remote data acquisition systems

High speed modems

Optical sensors

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



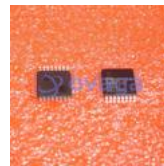
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

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