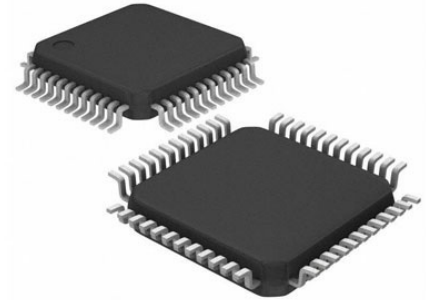


Analogue to Digital Converter, 16 bit, 100 kSPS, Pseudo Differential, Parallel, Serial, Single

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	LQFP-48
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD7660ASTZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7660 is a 16-bit, 100 kSPS, charge redistribution SAR, analog-to-digital converter that operates from a single 5 V power supply. The part contains an internal conversion clock, error correction circuits, and both serial and parallel system interface ports.

The AD7660 is hardware factory-calibrated and is comprehensively tested to ensure ac parameters such as signal-to-noise ratio (SNR) and total harmonic distortion (THD), in addition to the more traditional dc parameters of gain, offset, and linearity.

It is fabricated using Analog Devices' high performance, 0.6 micron CMOS process with correspondingly low cost and is available in a 48-lead LQFP and a tiny 48-lead LFCSP with operation specified from  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

### Product Highlights

**Fast throughput** The AD7660 is a 100 kSPS, charge redistribution, 16-bit SAR ADC with internal error correction circuitry.

**Superior INL** The AD7660 has a maximum integral nonlinearity of 3 LSBs with no missing 16-bit code.

**Single-supply operation** The AD7660 operates from a single 5 V supply and only dissipates 21  $\mu\text{W}$  typical. Its power dissipation decreases with the throughput to, for instance, only 21  $\mu\text{W}$  at a 100 SPS throughput. It consumes 7  $\mu\text{W}$  maximum when in power-down.

**Serial or parallel interface** Versatile parallel or 2-wire serial interface arrangement compatible with both 3 V or 5 V logic.

## Features

Throughput: 100 kSPS

INL: 3 LSB max (0.0046% of full-scale)

16-bit resolution with no missing codes

S/(N+D): 87 dB min at 10 kHz, 90 dB typ at 45 kHz

THD: -96 dB max at 10 kHz

Analog input voltage range: 0 V to 2.5 V

Both AC and DC specifications

No pipeline delay

Parallel and serial 5 V/3 V interface: SPI®/QSPI™/MICROWIRE™/DSP compatible

Single 5 V supply operation

21 mW typical power dissipation, 21 W at 100 SPS

Power-down mode: 7  $\mu$ W max

Package: 48-lead quad flatpack (LQFP)

48-Lead chip scale package (LFCSP)

Pin-to-pin compatible with the AD7664

## Application

Data acquisition

Battery-powered systems

PCMCIA

Instrumentation

Automatic test equipment

Scanners

Medical instruments

Process control

## Related Products



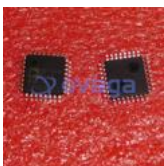
### [ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



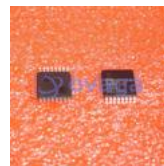
### [AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



### [AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



### [AD7266BSUZ](#)

Analog Devices, Inc  
TQPF-32



### [AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



### [AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc

LFCSP-32



[AD9680BCPZ-500](#)

Analog Devices, Inc

LFCSP-64