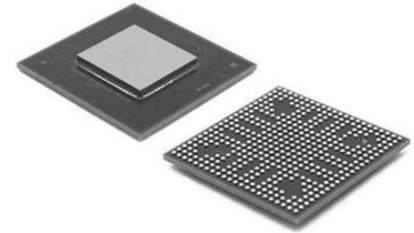


16-Bit, 2.5 MSPS PulSAR 11 mW ADC in QFN; Package: 20 ld LFCSP (4x4mm); No of Pins: 20; Temperature Range: Ind

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	LFCSP-20
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7985BCPZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7985 is a 16-bit, 2.5 MSPS successive approximation analog-to-digital converter (SAR ADC). It contains a low power, high speed, 16-bit sampling ADC, an internal conversion clock, an internal reference (and buffer), error correction circuits, and a versatile serial interface port. On the rising edge of CNV, the AD7985 samples an analog input, IN+, between 0 V and REF with respect to a ground sense, IN-. The AD7985 features a very high sampling rate turbo mode (TURBO is high) and a reduced power normal mode (TURBO is low) for low power applications where the power is scaled with the throughput.

In normal mode (TURBO is low), the SPI-compatible serial interface also features the ability, using the SDI input, to daisy-chain several ADCs on a single 3-wire bus and provide an optional busy indicator. It is compatible with 1.8 V, 2.5 V, and 2.7 V supplies using the separate VIO supply.

The AD7985 is available in a 20-lead LFCSP with operations specified from -40°C to +85°C.

## Features

16-bit resolution with no missing codes

Throughput: 2.5 MSPS (TURBO high), 2.0 MSPS (TURBO low)

Low power dissipation

15.5 mW at 2.5 MSPS, with external reference

28 mW at 2.5 MSPS, with internal reference

INL:  $\pm 0.7$  LSB typical,  $\pm 1.5$  LSB maximum

SNR

88.5 dB, with on-chip reference

90 dB, with external reference

4.096 V internal reference: typical drift of  $\pm 10$  ppm/ $^{\circ}\text{C}$

Pseudo differential analog input voltage range

0 V to VREF with VREF up to 5.0 V

Allows use of any input range

See data sheet for additional features

## Application

Battery-powered equipment

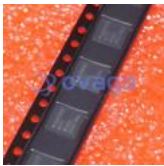
Communications

ATE

Data acquisition systems

Medical instruments

## Related Products



### [ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



### [AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



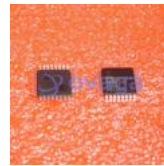
### [AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



### [AD7124-8BCPZ-RL7](#)

Analog Devices, Inc  
LFCSP-32



### [AD7266BSUZ](#)

Analog Devices, Inc  
TQFP-32



### [AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



### [AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



### [AD9680BCPZ-500](#)

Analog Devices, Inc  
LFCSP-64