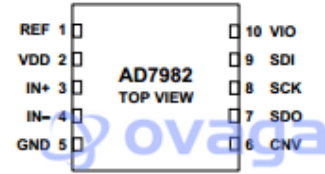


18-Bit, 1 MSPS PulSAR® 7.0 mW ADC in MSOP/QFN; Package: LFCSP (3x3mm); No of Pins: 10; Temperature Range: Industrial

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	LFCSP-10
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



**NOTES**  
 1. THE EXPOSED PAD SHOULD BE CONNECTED TO GND. THIS CONNECTION IS NOT REQUIRED TO MEET THE ELECTRICAL PERFORMANCES.

*Figure 5. 10-Lead QFN (LFCSP) Pin Configuration*

Images are for reference only

Please submit RFQ for AD7982BCPZ-RL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD7982 is an 18-bit, successive approximation, analog-to-digital converter (ADC) that operates from a single power supply, VDD. It contains a low power, high speed, 18-bit sampling ADC and a versatile serial interface port. On the CNV rising edge, the AD7982 samples the voltage difference between the IN+ and IN- pins. The voltages on these pins usually swing in opposite phases between 0 V and VREF. The reference voltage, REF, is applied externally and can be set independent of the supply voltage, VDD. Its power scales linearly with throughput.

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 provides an optional busy indicator. It is compatible with 1.8 V, 2.5 V, 3 V, and 5 V logic, using the separate VIO supply.

The AD7982 is available in a 10-lead MSOP or a 10-lead QFN(LFCSP) with operation specified from -40°C to +85°C.

## Features

18-bit resolution with no missing codes

Throughput: 1 MSPS

Low power dissipation

4 mW at 1 MSPS (VDD only)

7 mW at 1 MSPS (total)

70  $\mu$ W at 10 kSPS

INL:  $\pm 1$  LSB typical,  $\pm 2$  LSB maximum

Dynamic range: 99 dB typical

True differential analog input range:  $\pm V_{REF}$

0 V to  $V_{REF}$  with  $V_{REF}$  between 2.5 V to 5.0 V

Allows use of any input range

Easy to drive with the ADA4941-1 or ADA4940-1

No pipeline delay

Single-supply 2.5 V operation with 1.8 V, 2.5 V, 3 V, and 5 V logic interface

Proprietary serial interface SPI-/QSPI™/ MICROWIRE™-/DSP-compatible

Ability to daisy-chain multiple ADCs and busy indicator

10-Lead MSOP and 3 mm  $\times$  3 mm 10-Lead LFCSP

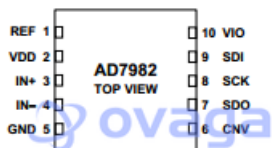
## Application

Battery-powered equipment

Data acquisition systems

Medical instruments

Seismic data acquisition systems



### NOTES

1. THE EXPOSED PAD SHOULD BE CONNECTED TO GND. THIS CONNECTION IS NOT REQUIRED TO MEET THE ELECTRICAL PERFORMANCES.

Figure 5. 10-Lead QFN (LFCSP) Pin Configuration

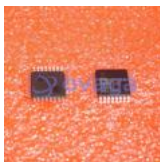
## Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc

LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc

TQFP-32



[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



[AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



[AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



[AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc  
LFCSP-32



[AD9680BCPZ-500](#)

Analog Devices, Inc  
LFCSP-64