



Data Sheet

12-Channel Dual ADC SAR 2Msps 12-bit Serial 32-Pin LFCSP EP Tray

Manufacturers Analog Devices, Inc

Package/Case LFCSP-32

Product Type Data Conversion ICs

RoHS Rohs

Please submit RFQ for AD7266BCPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

Images are for reference only

**RFO** 

## **General Description**

Lifecycle

The AD7266 is a dual, 12-bit, high speed, low power, successive approximation ADC that operates from a single 2.7 V to 5.25 V power supply and features throughput rates up to 2 MSPS. The device contains two ADCs, each preceded by a 3-channel multiplexer, and a low noise, wide bandwidth track-and-hold amplifier that can handle input frequencies in excess of 30 MHz.

The conversion process and data acquisition use standard control inputs allowing easy interfacing to microprocessors or DSPs. The input signal is sampled on the falling edge of CS; conversion is also initiated at this point. The conversion time is determined by the SCLK frequency. There are no pipelined delays associated with the part.

The AD7266 uses advanced design techniques to achieve very low power dissipation at high throughput rates. With 5 V supplies and a 2 MSPS throughput rate, the part consumes 6.2 mA maximum. The part also offers flexible power/throughput rate management when operating in normal mode as the quiescent current consumption is so low.

The analog input range for the part can be selected to be a 0~V to VREF (or  $2 \times VREF$ ) range, with either straight binary or twos complement output coding. The AD7266 has an on-chip 2.5~V reference that can be overdriven when an external reference is preferred. This external reference range is 100~mV to VDD.

## Product Highlights

Two Complete ADC Functions Allow Simultaneous Sampling and Conversion of Two Channels. Each ADC has three fully/pseudo differential pairs, or six single-ended channels, as programmed. The conversion result of both channels is simultaneously available on separate data lines, or in succession on one data line if only one serial port is available.

High Throughput with Low Power Consumption. The AD7266 offers a 1.5 MSPS throughput rate with 11.4 mW maximum power dissipation when operating at 3 V.

The AD7266 offers both a standard 0 V to VREF input range and a  $2 \times V$  input range.

No Pipeline Delay. The part features two standard successive approximation ADCs with accurate control of the sampling instant via a CS input and once off conversion control.

## **Features**

Dual 12-bit, 3-channel ADC

Throughput rate: 2 MSPS

Specified for VDD of 2.7 V to  $5.25~\mathrm{V}$ 

Power consumption: 9 mW at 1.5 MSPS with 3 V supplies 27 mW at 2 MSPS with 5 V supplies

Pin-configurable analog inputs12-channel single-ended inputs 6-channel fully differential inputs6-channel pseudo differential inputs70 dB SNR at 50 kHz input frequency

Accurate on-chip reference: 2.5 V ±0.2% maximum @ 25°C, 20 ppm/°C maximum

Dual conversion with read 437.5 ns, 32 MHz SCLK

High speed serial interface SPI®-/QSPITM-/MICROWIRETM-/DSP-compatible

Shutdown mode: 1 µA maximum

32-lead LFCSP and 32-lead TQFP

## **Related Products**



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
TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



AD9680BCPZ-500
Analog Devices, Inc
LFCSP-64