AD7265BSUZ-REEL7

Data Sheet

Differential/Single-Ended Input, Dual 1 MSPS, 12-Bit, 3-Channel SAR A/D Converter; Package: TQFP (7x7x1.0mm); No of Pins: 32; Temperature Range: Industrial

Manufacturers	Analog Devices, Inc
Package/Case	TQFP-32
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for AD7265BSUZ-REEL7 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD7265 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 of up to 1 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. The AD7265 uses advanced design techniques to achieve very low power dissipation at high throughput rates. With 5 V supplies and a 1 MSPS throughput rate, the part consumes 4 mA maximum. The part also offers flexible power/throughput rate management when operating in normal mode, because 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 × VREF) range, with either straight binary or twos complement output coding. The AD7265 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. The AD7265 is available in 32-lead LFCSP and 32-lead TQFP.

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 AD7265 offers a 1 MSPS throughput rate with 9 mW maximum power dissipation when operating at 3 V.

The AD7265 offers both a standard 0 V to VREF input range and a 2 × V REF 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: 1 MSPS

Specified for VDD of 2.7 V to 5.25 V

Power consumption

7 mW at 1 MSPS with 3 V supplies

17 mW at 1 MSPS with 5 V supplies

Pin-configurable analog inputs

12-channel single-ended inputs

6-channel fully differential inputs

6-channel pseudo differential inputs

70 dB SINAD at 50 kHz input frequency

Accurate on-chip reference: 2.5 V

Dual conversion with read 875 ns, 16 MHz SCLK

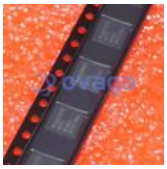
High speed serial interface

SPI®-/QSPI™-/MICROWIRE™-/DSP-compatible

Shutdown mode: 1 μA maximum

32-lead LFCSP and 32-lead TQFP

Related Products



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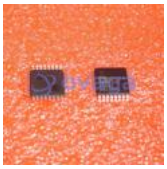
Analog Devices, Inc

LFCSP-40



[AD7266BSUZ]

Analog Devices, Inc

TQPF-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