

## AD7923BRUZ

Data Sheet

4-Channel 200 kSPS, 12-Bit A/D Converter with Sequencer in 16-Lead TSSOP; Package: TSSOP; No of Pins: 16; Temperature Range: Commercial

Manufacturers <u>Analog Devices, Inc</u>

Package/Case TSSOP-16

Product Type Data Conversion ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD7923BRUZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The conversion process and data acquisition are controlled by CS and the serial clock signal, allowing the device to easily interface with microprocessors or DSPs. The input signal is sampled on the falling edge of CS and conversion is also initiated at this point.

The AD7923 uses advanced design techniques to achieve very low power dissipation at maximum throughput rates. At maximum throughput rates, it consumes 1.2 mA maximum with 3 V supplies and 1.5 mA maximum with 5 V supplies.

Through the configuration of the control register, the analog input range can be selected as 0 V to REFIN or 0 V to  $2 \times \text{REFIN}$ , with either straight binary or twos complement output coding. The AD7923 features four single-ended analog inputs with achannel sequencer to allow a preprogrammed selection of channels to be converted sequentially.

The conversion time for the AD7923 is determined by the serial clock, SCLK, frequency, since this is used as the master clock to control the conversion. The conversion time can be as short as 800 ns with a 20 MHz SCLK.

## **Features** Fast throughput rate: 200 kSPS Specified for AVDD of 2.7 V to $5.25~\mathrm{V}$ Low power 3.6 mW max at 200 kSPS with 3 V supply 7.5 mW max at 200 kSPS with 5 V supply 4 (single-ended) inputs with sequencer Wide input bandwidth 70 dB Min SNR at 50 kHz input frequency Flexible power/serial clock speed management No pipeline delays High speed serial interface SPI®-/QSPITM-/MICROWIRETM-/DSP-compatible Shutdown mode: $0.5 \mu A max$ 16-lead TSSOP package Qualified for automotive applications AD7923-EP supports defense and aerospace applications (AQEC standard) Download (pdf) Military temperature range (-55°C to +125°C)

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Product change notification

Qualification data available on request

V62/12647 DSCC Drawing Number

## **Related Products**



ADAS3022BCPZ
Analog Devices, Inc
LFCSP-40



Analog Devices, Inc TQPF-32

AD7266BSUZ



AD574AJNZ
Analog Devices, Inc
PDIP-28



AD7938BSUZ
Analog Devices, Inc
TQFP-32



AD7124-8BCPZ-RL7
Analog Devices, Inc
LFCSP-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



Analog Devices, Inc
TSSOP-24



AD9680BCPZ-500

Analog Devices, Inc

LFCSP-64