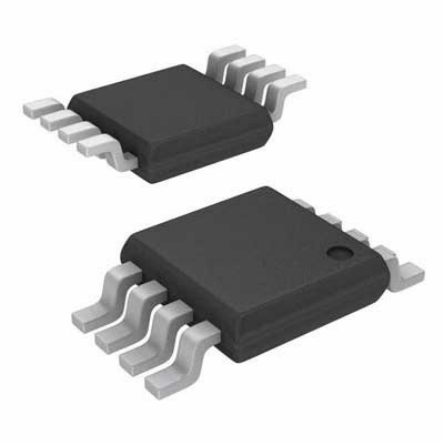
AD7921ARMZ

Data Sheet

Analogue to Digital Converter, Dual, 12 bit, 250 kSPS, Single Ended, Serial, SPI, Single, 2.35 V

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-8
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7921ARMZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD7911/AD7921 are 10-bit and 12-bit, high speed, low power, 2-channel, successive-approximation ADCs respectively. The parts operate from a single 2.35 V to 5.25 V power supply and feature throughput rates up to 250 kSPS. The parts contain a low-noise, wide bandwidth track/hold amplifier, which can handle input frequencies in excess of 6 MHz.

The conversion process and data acquisition are controlled using CS and the serial clock, allowing the devices to interface with microprocessors or DSPs. The input signal is sampled on the falling edge of CS and the conversion is also initiated at this point. There are no pipeline delays associated with the part.

The channel to be converted is selected through the DIN pin and the mode of operation is controlled by CS. The serial data stream from the DOUT pin has a channel identifier bit, which provides information about the channel converted.

The AD7911/AD7921 use advanced design techniques to achieve very low power dissipation at high throughput rates.

The reference for the part is taken internally from VDD. This allows the widest dynamic input range to the ADC. Thus the analog input range for the part is 0 to VDD.

The conversion rate is determined by the SCLK.

Features

Specified for VDD of 2.35 V to 5.25 V

Low Power:4 mW typ at 250 kSPS with 3 V Supplies13.5 mW typ at 250 kSPS with 5 V Supplies

Wide Input Bandwidth:71.5 dB Minimum SNR at 100 kHz Input Frequency

Flexible Power/Serial Clock Speed Management

Throughput Rate: 250 kSPS

No Pipeline Delays

High Speed Serial Interface SPI®/QSPI™/MICROWIRE™/DSP Compatible

Standby Mode: 1 µA max

8-Lead TSOT Package

8-Lead MSOP Package

Application

Battery-powered systems:

Personal digital assistants

Medical instruments

Mobile communications

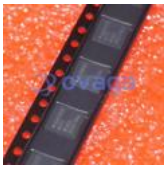
Instrumentation and control systems

Data acquisition systems

High speed modems

Optical sensors

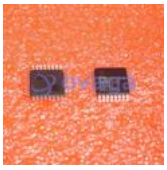
Related Products



ADAS3022BCPZ

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