

AD7298BCPZ

Data Sheet

Analogue to Digital Converter, Temp. Sensor Associated, 12 bit, 1 MSPS, Single Ended, Serial

Manufacturers

Analog Devices, Inc

Package/Case

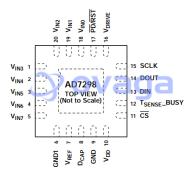
LFCSP-20

Product Type

Data Conversion ICs

RoHS

Rohs



Images are for reference only

Please submit RFQ for AD7298BCPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The AD7298 is a 12-bit, high speed, low power, 8-channel, successive approximation ADC with an internal temperature sensor. The part operates from a single 3.3 V power supply and features throughput rates up to 1 MSPS. The device contains a low noise, wide bandwidth track-and-hold amplifier that can handle input frequencies in excess of 30 MHz.

The AD7298 offers a programmable sequencer, which enables the selection of a pre-programmable sequence of channels for conversion. The device has an on-chip 2.5 V reference that can be disabled to allow the use of an external reference.

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The AD7298 includes a high accuracy band gap temperature sensor, which is monitored and digitized by the 12-bit ADC to give a resolution of 0.25°C. The device offers a 4-wire serial interface compatible with SPI and DSP interface standards.

The AD7298 uses advanced design techniques to achieve very low power dissipation at high throughput rates. The part also offers flexible power/throughput rate management options. The part is offered in a 20-lead LFCSP package.

Product Highlights

Ideally suited to monitoring system variables in a variety of systems including telecommunications, process and industrial control.

High Throughput rate of 1 Msps per channel with Low Power Consumption.

Eight Single-Ended Inputs with a Channel Sequencer. A consecutive sequence of channels can be selected on which the ADC cycles and converts.

Integrated temperature sensor with 0.25°C resolution.

Features

12 bit SAR ADC8 single-ended inputsChannel sequencer functionalityFast throughput of 1MspsAnalog Input Range 0 to 2.5V

12-bit temperature-to-digital converter

Temperature sensor accuracy of ± 1 °C

Temperature range: -40°C to +125°C

Specified for VDD of 2.8 V to 3.6V

Logic Voltage>

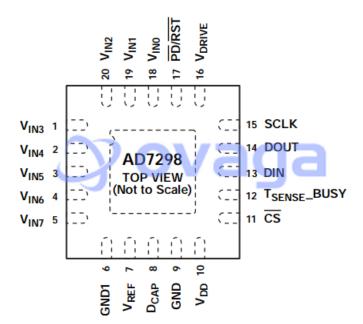
Power-down current : <10 μA

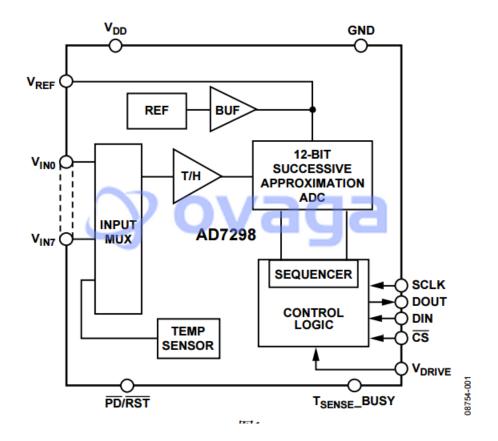
Internal 2.5V Reference

Internal Power on Reset

High speed serial interface SPI

20-lead LFCSP





Related Products



ADAS3022BCPZ

Analog Devices, Inc LFCSP-40



AD574AJNZ

Analog Devices, Inc PDIP-28



AD7938BSUZ

Analog Devices, Inc TQFP-32



<u>AD7124-8BCPZ-RL7</u>

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