
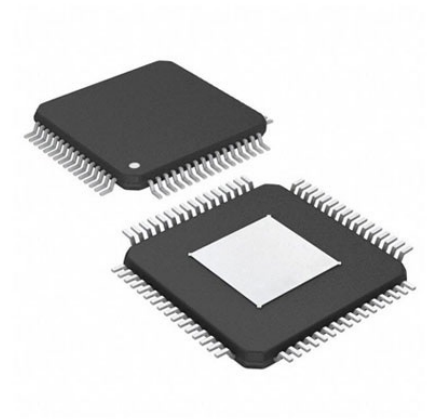


AFE General Purpose 8 ADC 24bit 5V 64-Pin TQFP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	TQFP-64
Product Type:	Data Conversion ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The ADS1299-4, ADS1299-6, and ADS1299 devices are a family of four-, six-, and eight-channel, low-noise, 24-bit, simultaneous-sampling delta-sigma ($\Delta\Sigma$) analog-to-digital converters (ADCs) with a built-in programmable gain amplifier (PGA), internal reference, and an onboard oscillator. The ADS1299-x incorporates all commonly-required features for extracranial electroencephalogram (EEG) and electrocardiography (ECG) applications. With its high levels of integration and exceptional performance, the ADS1299-x enables the creation of scalable medical instrumentation systems at significantly reduced size, power, and overall cost.

The ADS1299-x has a flexible input multiplexer per channel that can be independently connected to the internally-generated signals for test, temperature, and lead-off detection. Additionally, any configuration of input channels can be selected for derivation of the patient bias output signal. Optional SRB pins are available to route a common signal to multiple inputs for a referential montage configuration. The ADS1299-x operates at data rates from 250 SPS to 16 kSPS. Lead-off detection can be implemented internal to the device using an excitation current sink or source.

Multiple ADS1299-4, ADS1299-6, or ADS1299 devices can be cascaded in high channel count systems in a daisy-chain configuration. The ADS1299-x is offered in a TQFP-64 package specified from -40°C to $+85^{\circ}\text{C}$.

Key Features

Up to Eight Low-Noise PGAs and Eight High-Resolution Simultaneous-Sampling ADCs

Input-Referred Noise: 1 μ V

PP

Input Bias Current: 300 pA

Data Rate: 250 SPS to 16 kSPS

CMRR: -110 dB

Programmable Gain: 1, 2, 4, 6, 8, 12, or 24

Unipolar or Bipolar Supplies:

Analog: 4.75 V to 5.25 V

Digital: 1.8 V to 3.6 V

Built-In Bias Drive Amplifier,

Lead-Off Detection, Test Signals

Built-In Oscillator

Internal or External Reference

Flexible Power-Down, Standby Mode

Pin-Compatible with the ADS129x

Operating Temperature Range: -40°C to $+85^{\circ}\text{C}$

Recommended For You

ADS8326IDGKT

Texas Instruments, Inc

MSOP8

ADS7816U

Texas Instruments, Inc

SOP8

ADS1110A0IDBVR

Texas Instruments, Inc

SOT23-6

ADS1015BQDGSRQ1

Texas Instruments, Inc

VSSOP-10

ADS7805UB

Texas Instruments, Inc

SOP28

ADS774KU

Texas Instruments, Inc

SOP28

ADS7846E

Texas Instruments, Inc

SSOP16

ADS8344NB

Texas Instruments, Inc

SSOP20

ADS1254E

Texas Instruments, Inc

SSOP20

ADS7842E

Texas Instruments, Inc

SSOP28

ADS1282IPW

Texas Instruments, Inc

TSSOP-28

ADS7843E/2K5

Texas Instruments, Inc

SSOP16

ADS1226IRGVT

Texas Instruments, Inc

QFN16

ADS825E

Texas Instruments, Inc

SSOP28

ADS7825U

Texas Instruments, Inc

SOP28