

Analog to Digital Converters - ADC Bipolar 1MSPS 16 bit DAS

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP-40
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADAS3023BCPZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADAS3023 is a complete 16-bit, successive approximation-based, analog-to-digital data acquisition system. This device is capable of simultaneously sampling up to 500 kSPS for two channels, 250 kSPS for four channels, 167 kSPS for six channels, and 125 kSPS for eight channels, and manufactured on the Analog Devices, Inc., proprietary iCMOS® high voltage industrial process technology.

The ADAS3023 integrates eight channels of low leakage track-and-hold design, a programmable gain instrumentation amplifier (PGIA) stage with a high common-mode rejection offering four differential input ranges, a precision low drift 4.096 V reference and buffer, and a 16-bit charge redistribution PulSAR® successive approximation register (SAR) analog-to-digital converter (ADC). The ADAS3023 is factory calibrated and can resolve differential input ranges of up to ± 20.48 V when using ± 15 V supplies.

The ADAS3023 simplifies design challenges by eliminating signal buffering, level shifting, amplification and attenuation, common-mode rejection, settling time, or any of the other analog signal conditioning challenges, and allows smaller form factor, faster time to market, and lower costs.

The ADAS3023 is available in a 40-lead LFCSP with operation specified from -40°C to $+85^{\circ}\text{C}$.

Features

Ease of use, 16-bit complete data acquisition system

Simultaneous sampling selection of 2, 4, 6, and 8 channels

Differential input voltage range: ± 20.48 V maximum

High impedance 8-channel input: >500 M Ω

High input common-mode rejection: 95.0 dB

User-programmable input ranges

On-chip 4.096 V reference and buffer

No latency/pipeline delay (SAR architecture)

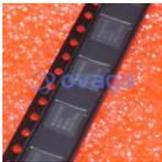
Serial 4-wire 1.8 V to 5 V SPI-/SPORT-compatible interface

40-lead LFCSP package (6 mm \times 6 mm): -40°C to $+85^{\circ}\text{C}$





Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



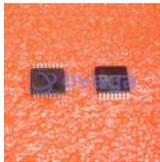
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc
LFCSP-32



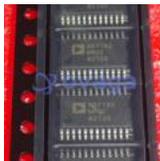
[AD7266BSUZ](#)

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