

1-Channel Single ADC Pipelined 100Msps 16-bit Parallel 100-Pin TQFP EP Tray

Manufacturers	Analog Devices, Inc
Package/Case	TQFP-100
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD9446BSVZ-100 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADC requires 3.3 V and 5.0 V power supplies and a low voltage differential input clock for full performance operation. No external reference or driver components are required for many applications. Data outputs are LVDS-compatible (ANSI-644) or CMOS-compatible and include the means to reduce the overall current needed for short trace distances.

Optional features allow users to implement various selectable operating conditions, including data format select and output data mode.

The AD9446 is available in a 100-lead surface-mount plastic package (100-lead TQFP/EP) specified over the industrial temperature range (-40°C to +85°C).

PRODUCT HIGHLIGHTS

APPLICATIONS

True 16 bit linearity.

High performance: outstanding SNR performance for baseband IFs in data acquisition, instrumentation, magnetic resonance imaging, and radar receivers.

Ease of use: On-chip reference and high input impedance track-and-hold. An output clock simplifies data capture.

Packaged in a Pb-free, 100-lead TQFP/EP.

Clock duty cycle stabilizer (DCS) maintains overall ADC performance over a wide range of clock pulse widths.

OR (out-of-range) outputs indicate when the signal is beyond the selected input range.

Features

100 MSPS guaranteed sampling rate (AD9446-100)

83.6 dBFS SNR with 30 MHz input (3.8 V p-p input, 80 MSPS)

82.6 dBFS SNR with 30 MHz input (3.2 V p-p input, 80 MSPS)

89 dBc SFDR with 30 MHz input (3.2 V p-p input, 80 MSPS)

95 dBFS 2-tone SFDR with 9.8 MHz and 10.8 MHz (100 MSPS)

60 fsec rms jitter

Excellent linearity

2.0 V p-p to 4.0 V p-p differential full-scale input

Buffered analog inputs

LVDS outputs (ANSI-644 compatible) or CMOS outputs

Data format select (offset binary or twos complement)

Output clock available

3.3 V and 5 V supply operation

Application

MRI receivers

Multi-carrier, multimode cellular receivers

Antenna array positioning

Power amplifier linearization

Broadband wireless

Radar, infrared imaging

Communications instrumentation

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