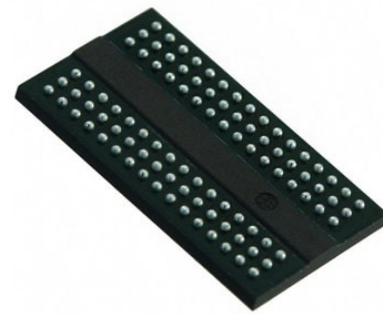


IC ADC 14BIT PIPELINED 196BGA

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	196-LFBGA
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD9684BBPZ-500 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD9684 is a dual, 14-bit, 500 MSPS ADC. The device has an on-chip buffer and a sample-and-hold circuit designed for low power, small size, and ease of use. This product is designed for sampling wide bandwidth analog signals. The AD9684 is optimized for wide input bandwidth, a high sampling rate, excellent linearity, and low power in a small package.

The dual ADC cores feature a multistage, differential pipelined architecture with integrated output error correction logic. Each ADC features wide bandwidth buffered inputs, supporting a variety of user selectable input ranges. An integrated voltage reference eases design considerations. Each ADC data output is internally connected to an optional decimate by 2 block.

The analog input and clock signals are differential inputs. Each ADC data output is internally connected to two digital downconverters (DDCs). Each DDC consists of four cascaded signal processing stages: a 12-bit frequency translator (NCO), and three half-band decimation filters supporting a divide by factor of two, four, and eight.

## Features

LVDS digital outputs

1.1 W total power per channel at 500MSPS (default)

Noise

1.25V, 2.50 V and 3.3V supply operation

No missing codes

Internal analog-to-digital converter (ADC) voltage reference

See data sheet for additional features

## Application

Communications

Diversity multi-band, multi-mode digital receivers  
3G/4G, TD-SCDMA, WCDMA, MC-GSM, LTE

General-purpose software radios

Ultrawideband satellite receiver

Instrumentation (spectrum analyzers, network analyzers, integrated RF test solutions)

Radar

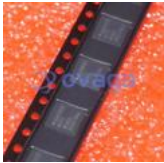
Digital oscilloscopes

High speed data acquisition systems

DOCSIS CMTS upstream receive paths

HFC digital reverse path receivers

## Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



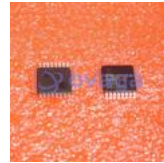
[AD7938BSUZ](#)

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