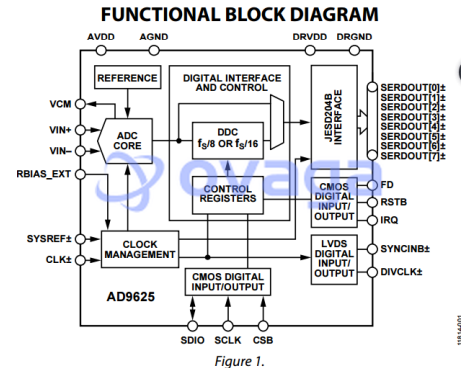


Analog to Digital Converters - ADC 12 Bit 2.5Gsp/s ADC operating +/-1.2 3V

Manufacturers	<a href="http://www.analog.com">Analog Devices, Inc</a>
Package/Case	BGA-196
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD9625BBPZ-2.5 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD9625 is a 12-bit monolithic sampling analog-to-digital converter (ADC) that operates at conversion rates of up to 2.6 giga samples per second (GSPS). This product is designed for sampling wide bandwidth analog signals up to the second Nyquist zone. The combination of wide input bandwidth, high sampling rate, and excellent linearity of the AD9625 is ideally suited for spectrum analyzers, data acquisition systems, and a wide assortment of military electronics applications, such as radar and jamming/antijamming measures.

The analog input, clock, and SYSREF± signals are differential inputs. The JESD204B-based high speed serialized output is configurable in a variety of one-, two-, four-, six-, or eight-lane configurations. The product is specified over the industrial temperature range of -40°C to +85°C.

## PRODUCT HIGHLIGHTS

### APPLICATIONS

High performance: exceptional SFDR in high sample rate applications, direct RF sampling, and on-chip reference.

Flexible digital data output formats based on the JESD204B specification.

Control path SPI interface port that supports various product features and functions, such as data formatting, gain, and offset calibration values.

## Features

12-bit 2.5 GSPS ADC, no missing codes

Noise spectral

Differential analog input: 1.2 V

P-P

Differential clock input

3.2 GHz analog input bandwidth, full power

High speed 6- or 8-lane JESD204B serial output Subclass 1: 6.50 Gbps at 2.6 GSPS

Two independent decimate by 8 or decimate by 16 filters with 10-bit NCOs

Supply voltages: 1.3 V, 2.5 V

Flexible digital output modes

Built-in selectable digital test patterns

Timestamp feature

Conversion error rate < 10

Flexible digital output modes

Built-in selectable digital test patterns

## Application

Spectrum analyzers

Military communications

Radar

High performance digital storage oscilloscopes

Active jamming/antijamming

Electronic surveillance and countermeasures

# FUNCTIONAL BLOCK DIAGRAM

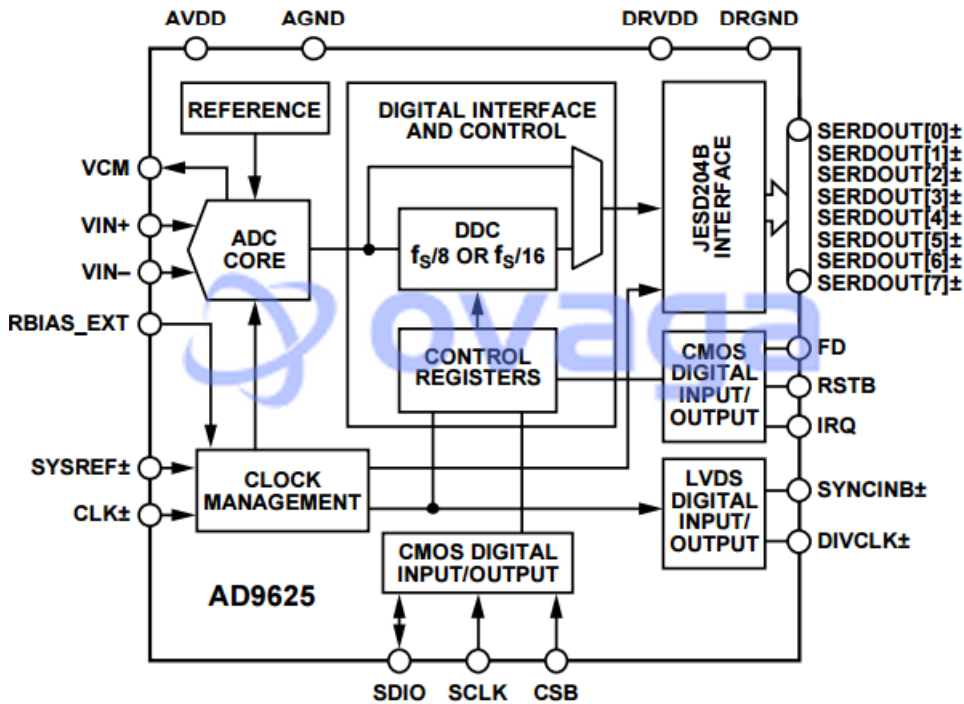


Figure 1.

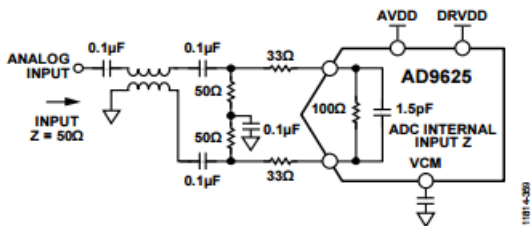


Figure 74. Input Network Example for Passive Balun with High Bandwidth

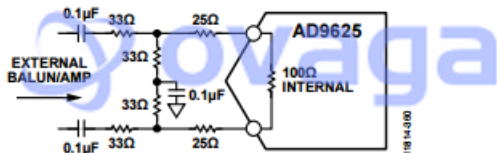


Figure 75. Input Network Example for Passive Balun and >2 GHz ADC Bandwidth

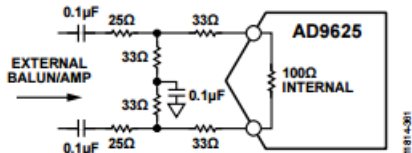


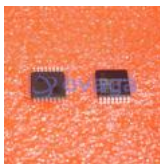
Figure 76. Input Network Example for Passive Balun and <2 GHz ADC Bandwidth

## Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc  
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc  
TQPF-32



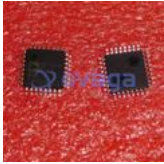
[AD574AJNZ](#)

Analog Devices, Inc  
PDIP-28



[AD7401YRWZ](#)

Analog Devices, Inc  
SOIC-16



[AD7938BSUZ](#)

Analog Devices, Inc  
TQFP-32



[AD7192BRUZ-REEL](#)

Analog Devices, Inc  
TSSOP-24



[AD7124-8BCPZ-RL7](#)

Analog Devices, Inc  
LFCSP-32



[AD9680BCPZ-500](#)

Analog Devices, Inc  
LFCSP-64