

# AD9430BSVZ-170

Data Sheet

12-Bit, 170/210 MSPS 3.3 V A/D Converter; Package: TQFP-ED(w/ 6.5mm exposed pad); No of Pins: 100; Temperature Range: Industrial

Manufacturers	Analog Devices, Inc
Package/Case	TQFP-100
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free



Images are for reference only

Please submit RFQ for AD9430BSVZ-170 or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

### **General Description**

Lifecycle

The AD9430 is a 12-bit monolithic sampling analog-to-digital converter optimized for high performance, low power, and ease of use. The product operates up to a 210 MSPS conversion rate and is optimized for outstanding dynamic performance in wideband carrier and broadband systems. All necessary functions, including a track-and-hold (T/H) and reference are included on the chip to provide a complete conversion solution.

The ADC requires a 3.3 V power supply and a differential ENCODE clock for full performance operation. The digital outputs are TTL/CMOS or LVDS compatible and support either twos complement or offset binary format. Separate output power supply pins support interfacing with 3.3 V or 2.5 V CMOS logic.

Two output buses support demultiplexed data up to 105 MSPS rates in CMOS mode. A data sync input is supported for proper output data port alignment in CMOS mode and a data clock output is available for proper output data timing. In LVDS mode, the chip provides data at the ENCODE clock rate.

Fabricated on an advanced BiCMOS process, the AD9430 is available in a 100-lead surface-mount plastic package (100 e-PAD TQFP) specified over the industrial temperature range (-40°C to +85°C).

#### APPLICATIONS

#### PRODUCT HIGHLIGHTS

High performance. Maintains 65 dB SNR @ 210 MSPS with a 65 MHz input.

Low power. Consumes only 1.3 W @ 210 MSPS.

Ease of use. LVDS output data and output clock signal allow interface to current FPGA technology. The on-chip reference and sample-andhold provide flexibility in system design. Use of a single 3.3 V supply simplifies system power supply design.

Out of range (OR) feature. The OR output bit indicates when the input signal is beyond the selected input range.

Pin compatible with 10 bit AD0/11 (LVDS onk)

## Features

IN	
ENOB of 10.6 @ f	
IN	
Excellent Linearity:	
Two Output Data Options:	
Demultiplexed 3.3 V CMOS Outputs Each @ 105 MSPS	
Interleaved or Parallel Data Output Option	
LVDS at 210 MSPS	
IN	
700 MHz Full Power Analog Bandwidth	
Power>	
1.5 V Input Voltage Range	
3.3 V Supply Operation	
Output Data Format Option	
Data Sync Input and Data Clock Output Provided	
Clock Duty Cycle Stabilizer	

# Application

Wireless and Wired Broadband Communications

Cable Reverse Path

Communications Test Equipment

Radar and Satellite Subsystems

Power Amplifier Linearization





#### **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









Analog Devices, Inc TSSOP-24

AD7192BRUZ-REEL

AD7266BSUZ

AD7401YRWZ

Analog Devices, Inc

TQPF-32

SOIC-16

Analog Devices, Inc

AD9680BCPZ-500

Analog Devices, Inc LFCSP-64