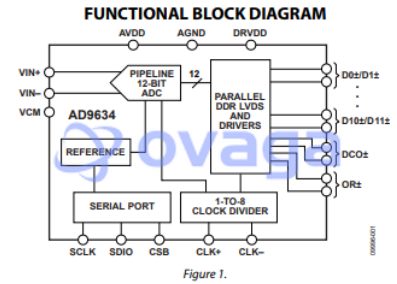


1-Channel Single ADC Pipelined 170Msps 12-bit Parallel/LVDS 32-Pin LFCSP EP Tray

| | |
|---------------|-------------------------------------|
| Manufacturers | Analog Devices, Inc |
| Package/Case | LFCSP-32 |
| Product Type | Data Conversion ICs |
| RoHS | Rohs |
| Lifecycle | |



Images are for reference only

Please submit RFQ for AD9634BCPZ-170 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD9634 is a 12-bit, analog-to-digital converter (ADC) with sampling speeds of up to 250 MSPS. The AD9634 is designed to support communications applications where low cost, small size, wide bandwidth, and versatility are desired.

The ADC core features a multistage, differential pipelined architecture with integrated output error correction logic. The ADC features wide bandwidth inputs that can support a variety of user-selectable input ranges. An integrated voltage reference eases design considerations. A duty cycle stabilizer (DCS) is provided to compensate for variations in the ADC clock duty cycle, allowing the converter to maintain excellent performance.

The ADC output data are routed directly to the external 12-bit LVDS output port.

Flexible power-down options allow significant power savings, when desired.

Programming for setup and control is accomplished using a 3-wire, SPI-compatible serial interface.

The AD9634 is available in a 32-lead LFCSP and is specified over the industrial temperature range of -40°C to $+85^{\circ}\text{C}$. This product is protected by a U.S. patent.

PRODUCT HIGHLIGHTS

APPLICATIONS

Integrated 12-bit, 170 MSPS/210 MSPS/250 MSPS ADC.

Fast overrange and threshold detect.

Proprietary differential input maintains excellent SNR performance for input frequencies up to 350 MHz.

3-pin, 1.8V SPI port for register programming and readback.

Pin compatibility with the AD9642, allowing a simple migration up to 14 bits, and with the AD6672.

Features

IN

and 250 MSPS

IN

and 250 MSPS

IN

Total Power consumption: 360 @ 250 MSPS

1.8 V supply voltages

LVDS (ANSI-644 levels) outputs

Integer 1-to-8 input clock divider (625 MHz maximum input)

Sample rates of up to 250 MSPS

IF sampling frequencies of up to 350 MHz

Internal ADC voltage reference

Flexible analog input range 1.4 V p-p to 2.0 V p-p (1.75 V p-p nominal)

See data sheet for additional features

Application

Communications

Diversity radio systems

Multimode digital receivers (3G)

TD-SCDMA, WiMax, WCDMA, CDMA2000, GSM, EDGE, LTE

I/Q demodulation systems

Smart antenna systems

General-purpose software radios

Ultrasound equipment

Broadband data applications

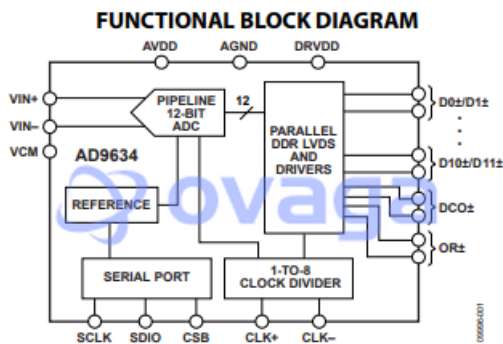


Figure 1.

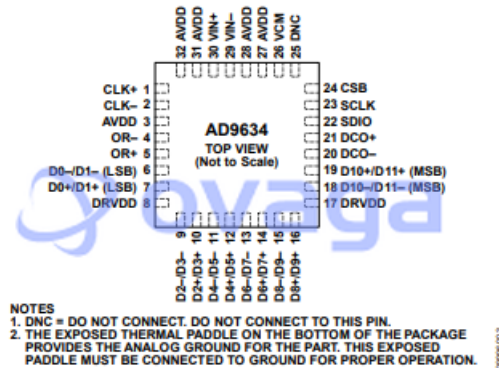


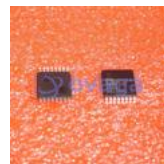
Figure 3. Pin Configuration

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