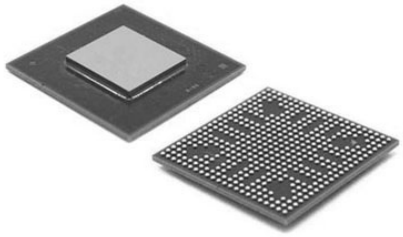
AD9257BCPZ-65

Data Sheet

Analog to Digital Converters - ADC 14 Bit 65Msps 1.8V Octal ADC

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP-64
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD9257BCPZ-65 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD9257S-CSL is an octal, 14-bit, 65 MSPS analog-to-digital converter (ADC) with an on-chip sample-and-hold circuit designed for low cost, low power, small size, and ease of use. The product operates at a conversion rate of up to 65 MSPS and is optimized for outstanding dynamic performance and low power in applications where a small package size is critical.

The ADC requires a single 1.8 V power supply and low voltage, positive emitter-coupled logic (LVPECL)-/ CMOS-/low voltage differential signaling (LVDS)-compatible sample rate clock for full performance operation. No external reference or driver components are required for many applications.

The ADC automatically multiplies the sample rate clock for the appropriate LVDS serial data rate. A data clock output (DCO) for capturing data on the output and a frame clock output (FCO) for signaling a new output byte are provided. Individual channel power-down is supported and typically consumes 1 mW when all channels are disabled. The ADC contains several features designed to maximize flexibility and minimize system cost, such as programmable clock and data alignment and programmable digital test pattern generation. The available digital test patterns include built-in deterministic and pseudorandom patterns, along with custom user-defined test patterns entered via the serial port interface (SPI).

The AD9257S-CSL is available in an RoHS-compliant, 64-lead lead frame chip scale package (LFCSP). The device is specified over the −55°C to +125°C temperature range. This product is protected by a U.S. patent. Additional application and technical information can be found in the Commercial Space Products Program brochure and the AD9257 data sheet.

PRODUCT HIGHLIGHTS

APPLICATIONS

Small Footprint. Eight ADCs are contained in a small, space-saving package.

Low Power of 55 mW/Channel at 65 MSPS with Scalable Power Options.

Ease of Use. A DCO is provided that operates at frequencies of up to 455 MHz and supports double data rate (DDR) operation.

User Flexibility. The SPI control offers a wide range of flexible features to meet specific system requirements.

Pin Compatible with the AD9637 (12-Bit Octal ADC).

Features

Low power: 55 mW per channel at 65 MSPS with scalable power options

Serial LVDS (ANSI-644, default)

Low power, reduced signal option (similar to IEEE 1596.3)

Data and frame clock outputs

650 MHz full power analog bandwidth

2 V p-p input voltage range

1.8 V supply operation

Serial port control

Full chip and individual channel power-down modes

Flexible bit orientation

Built-in and custom digital test pattern generation

Programmable clock and data alignment

Programmable output resolution

Standby mode

Low power, reduced signal option (similar to IEEE 1596.3)

Full chip and individual channel power-down modes

Flexible bit orientation

Built-in and custom digital test pattern generation

Programmable clock and data alignment

Programmable output resolution

Standby mode

Military temperature range (−55°C to +125°C)

Wafer diffusion lot traceability

Radiation lot acceptance test (RLAT)

Total ionizing dose (TID)

Application

Low Earth orbit (LEO) space payloads

Quadrature and diversity radio receiver

Optical imaging

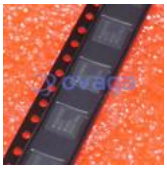
Radiation benchmark

Single event latch-up (SEL)

Total ionizing dose (TID)

Single event latch-up (SEL)

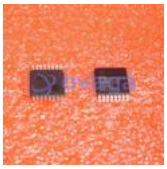
Related Products



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