

AD8284WCSVZ

Data Sheet

<u>RFO</u>

Radar Receive Path AFE - 4-Channel Mux

Manufacturers	Analog Devices, Inc	The set
Package/Case	TQFP64	MANNAN CHARACTER
Product Type	Data Conversion ICs	
RoHS	Pb-free Halide free	
Lifecycle		Images are for reference only

Please submit RFQ for AD8284WCSVZ or Email to us: sales@oyaga.com We will contact you in 12 hours.

General Description

The AD8284 is an integrated analog front end designed for low cost, compact size, flexibility, and ease of use. It contains a 4-channel differential multiplexer (mux), a 1-channel low noise preamplifier (LNA) with a programmable gain amplifier (PGA) and an antialiasing filter (AAF), as well as one direct-to-ADC channel, all integrated with a single, 12-bit analog-to-digital converter (ADC). The AD8284 also incorporates a saturation detection circuit for high frequency overvoltage conditions that would otherwise be filtered by the AAF.

The analog channel features a gain range of 17 dB to 35 dB in 6 dB increments, and an ADC with a conversion rate of up to 60 MSPS. The combined input referred voltage noise of the entire channel is $3.5 \text{ nV}/\sqrt{\text{Hz}}$ at maximum gain. The channel is optimized for dynamic performance and low power in applications where a small package size is critical.

Fabricated in an advanced CMOS process, the AD8284 is available in a 10 mm \times 10 mm, RoHS compliant, 64-lead TQFP. It is speci-fied over the automotive temperature range of -40°C to +105°C.

APPLICATIONS Automotive radar

Adaptive cruise control Collision avoidance Blind spot detection Self-parking Electronic bumper

Features

4 channel mux to LNA, PGA, AAF

- 1 direct-to-ADC channel
- Programmable gain amplifier (PGA)

Includes low noise preamplifier (LNA)

- SPI-programmable>
- Antialiasing filter (AAF)

Programmable third-order low-pass elliptic filter (LPF) from 9 MHz to 15 MHz

Analog-to-digital converter (ADC)

12 bits of accuracy up to 60>

See data sheet for additional features

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

Application

Automotive radar