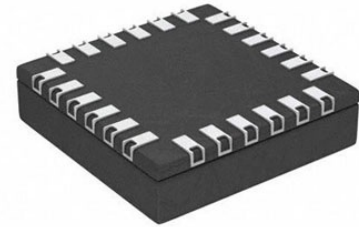


4-Channel Quad ADC Delta-Sigma 192ksps 24-bit Serial Automotive 40-Pin LFCSP EP Tray

Manufacturers	Analog Devices, Inc
Package/Case	40-WFQFN Exposed Pad, CSP
Product Type	Integrated/Special Purpose A/D Converters ; Audio A/D Converters
RoHS	RoHS
Lifecycle	



Images are for reference only

Please submit RFQ for ADAU1977WBCPZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADAU1977 incorporates four high performance analog-to-digital converters (ADCs) with direct-coupled inputs capable of 10 V rms. The ADC uses multibit sigma-delta (Σ - Δ) architecture with continuous time front end for low EMI. The ADCs can be connected to the electret microphone (ECM) directly and provide the bias for powering the microphone. Built-in diagnostic circuitry detects faults on input lines and includes comprehensive diagnostics for faults on microphone inputs. The faults reported are short to battery, short to microphone bias, short to ground, short between positive and negative input pins, and open input terminals. In addition, each diagnostic fault is available as an IRQ flag for ease in system design. An I2C/SPI control port is also included. The ADAU1977 uses only a single 3.3 V supply. The part internally generates the microphone bias voltage. The microphone bias is programmable in a few steps from 5 V to 9 V. The low power architecture reduces the power consumption. An on-chip PLL can derive the master clock from an external clock input or frame clock (sample rate clock). When fed with a frame clock, the PLL eliminates the need for a separate high frequency master clock in the system. The ADAU1977 is available in a 40-lead LFCSP package. APPLICATIONS

Automotive audio systems

Active Noise Cancellation System

Features

Programmable microphone bias (5 V to 9 V) with diagnostics

Four 10 V rms capable direct-coupled differential inputs

On-chip PLL for master clock

Low EMI design

106 dB ADC dynamic range

Selectable digital high-pass filter

24-bit ADC with 8 kHz to 192 kHz sample rates

See data sheet for additional features

Application

Automotive audio systems

Active Noise Cancellation System

Related Products



[ADAU1452WBCPZ](#)

Analog Devices, Inc
LFCSP72



[AD1851RZ](#)

Analog Devices, Inc
SOP-16



[AD1836AS](#)

Analog Devices, Inc
QFP44



[ADAU1445YSVZ-3A](#)

Analog Devices, Inc
LQFP-100



[ADG884BCPZ](#)

Analog Devices, Inc
QFN-10



[AD73322ARZ](#)

Analog Devices, Inc
SOP-28



[AD6521ACA](#)

Analog Devices, Inc
QFN



[AD1845JST](#)

Analog Devices, Inc
QFP100