

# AD1938YSTZ

Data Sheet

Audio Codec 4ADC / 8DAC 24Bit 48Pin LQFP

Manufacturers Analog Devices, Inc

Package/Case LQFP-48

Product Type Interface - CODECs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for AD1938YSTZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

### **General Description**

#### Linux Driver

Lifecycle

The AD1938 is a high performance, single-chip codec that provides four analog-to-digital converters (ADCs) with input and eight digital-to-analog converters (DACs) with single-ended output using the Analog Devices, Inc., patented multibit sigma-delta ( $\Sigma$ - $\Delta$ ) architecture. An SPI port is included, allowing a microcontroller to adjust volume and many other parameters.

The AD1938 operates from 3.3 V digital and analog supplies. The AD1938 is available in a 48-lead (single-ended output) LQFP package. Other members of this family include a differential DAC output and I2C® control port version.

The AD1938 is designed for low EMI. This consideration is apparent in both the system and circuit design architectures. By using the on-board PLL to derive the master clock from the LR clock or from an external crystal, the AD1938 eliminates the need for a separate high frequency master clock and can also be used with a suppressed bit clock. The DACs and ADCs are designed using the latest Analog Devices continuous time architectures to further minimize EMI. By using 3.3 V supplies, power consumption is minimized, further reducing emissions.

**Features** 

PLL generated or direct master clock

Low EMI design

108 dB DAC/107 dB ADC dynamic range and SNR

3.3 V single supply

Tolerance for 5 V logic inputs

Supports 24 bits and 8 kHz to 192 kHz sample rates

Please see data sheet for additional features

## **Application**

Automotive audio systems

Home Theater Systems

Set-top boxes

Digital audio effects processors

#### **Related Products**



ADV7181CBSTZ

Analog Devices, Inc LQFP-64



<u>AD724JR</u>

Analog Devices, Inc SOIC-16



ADV7391WBCPZ

Analog Devices, Inc LFSCP-3



ADV7341BSTZ

Analog Devices, Inc LQFP-64



**AD8170AR** 

Analog Devices, Inc SOP8



### ADV7393BCPZ

Analog Devices, Inc LFCSP-VQ-40



### ADV7390BCPZ

Analog Devices, Inc QFN32



ADUM4160BRIZ

Analog Devices, Inc SOIC-16