



24-bit 96KHz Stereo Audio dual-channel Analog-to-Digital Converter (ADC)

1 Main features:

- ◆ Conversion bits: 16/20/24Bit
- ◆ Sampling rate: 48/96KHz
- ◆ Power supply voltage: 5V
- ◆ Clock rate: 256/512/768 x Fs
- ◆ Signal to noise ratio: 106dB@-60dBFS
- ◆ Dynamic range: 105dB@-60dBFS Input
- ◆ THD+N: -103dB@-20dBFS Input
- ◆ Serial data port: I²S protocol
- ◆ Serial interface: SPI compatible
- ◆ Encapsulation: SSOP28

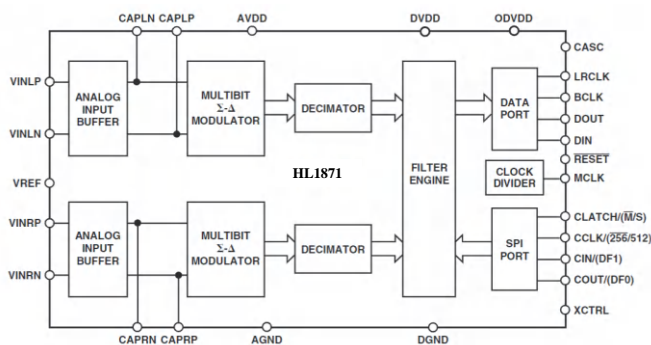
2. Typical applications

- ◆ Professional audio
- ◆ Mixing console and mixing console
- ◆ Digital audio recorder
- ◆ DVD-R, DAT, HDD
- ◆ Home theater systems, car audio systems

3 Product Description

This chip is a stereo audio ADC for digital audio applications requiring high performance analog-to-digital conversion.

The chip has two 24-bit conversion channels, each providing a dynamic range of 105dB. The audio data interface of the chip supports I²S, left align, right align and other common interface formats. The chip also has an SPI-compatible walk-through configuration port for easy configuration of chip parameters and functions. This chip is compatible with foreign products AD1871 pins, which can be replaced. The functional structure block diagram of the chip is shown as follows:



4 Product Highlights

- ◆ High precision, high SNR
- ◆ Flexible serial data port
- ◆ Supports multiple ADC Daisy chain connections
- ◆ Minimalist package design

5 Compared with similar foreign products

	precision	Sampling rate	Data port	Power dissipation	Dynamic range	THD+N	Encapsulation form
AD1871 (ADI)	24-bit	48/96KHz	serial	290~335mW	105dB@-60dBFS	-103dB@-20dBFS	SSOP28
HL1871	24-bit	48/96KHz	serial	290~335mW	105dB@-60dBFS	-103dB@-20dBFS	SSOP28