


## General Purpose Audio Codec 2ADC / 2DAC Ch 28-Pin TSSOP Tube



Images are for reference only

[Inquiry](#)

<b>Manufacturer:</b>	<u>Texas Instruments, Inc</u>
<b>Package/Case:</b>	TSSOP28
<b>Product Type:</b>	Communication & Networking ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active

### General Description

The PCM3060 is a low-cost, high-performance, single-chip, 24-bit stereo audio codec with single-ended analog inputs and differential analog outputs. The stereo 24-bit ADC employs a 64-times delta-sigma modulator. It supports 16-96 kHz sampling rates and a 16/24-bit digital audio output word on the audio interface.

The stereo 24-bit DAC employs a 64- or 128-times delta-sigma modulator. It supports 16-192 kHz sampling rates and a 16/24-bit digital audio input word on the audio interface.

The PCM3060 supports fully independent operation of the sampling rate and audio interface for the ADC and DAC.

Each audio interface supports I2S, left-justified, and right-justified formats with 16/24-bit words.

The PCM3060 can be software-controlled through a 3-wire SPI-compatible or 2-wire I2C-compatible serial interface, which provides access to all functions including digital attenuation, soft mute, de-emphasis etc.

The PCM3060 can be also used in hardware mode, which provides three basic functions.

The PCM3060 is fabricated using a highly advanced CMOS process and is available in a small 28-pin TSSOP package.

The PCM3060 is suitable for various sound processing applications for DVD-RW, digital TV, STB, and other AV equipment.

### Key Features

24-Bit Delta-Sigma ADC and DAC

ADC, DAC Asynchronous Operation

Stereo ADC:

High Performance: (Typical, 48 kHz)

THD+N:-93 dB

SNR:99 dB

Dynamic Range:99 dB

Sampling Rate: 16-96 kHz

System Clock: 256, 384, 512, 768 fS

Full Scale Input:3 Vp-p

Antialiasing Filter Included

1/64 Decimation Filter:

Pass-Band Ripple:±0.05 dB

Stop-Band Attenuation:-65 dB

On-Chip High-Pass Filter: 0.91 Hz atfS = 48 kHz

Stereo DAC:

High Performance: (Typical, Differential, 48 kHz)

THD+N:-94 dB

SNR:105 dB

Dynamic Range:104 dB

Sampling Rate: 16-192 kHz

System Clock: 128, 192, 256, 384, 512, 768 fS

Differential Voltage Output: 8 Vp-p

Single-Ended Voltage Output: 4 Vp-p

Analog Low-Pass Filter Included

4×/8× Oversampling Digital Filter:

Pass-Band Ripple: ±0.04 dB

Stop-Band Attenuation: -50 dB

Zero Flags

Flexible Mode Control

3-Wire SPI, 2-Wire I2C Compatible Serial Control Interface

Hardware Control Mode

Multiple Functions via SPI or I2C Interface:

Digital Attenuation and Soft Mute for ADC and DAC

Digital De-Emphasis: 32, 44.1, 48 kHz for DAC

Power Down:ADC/DAC Independently

Asynchronous/Synchronous Control for ADC/DAC Operation

External Reset and Power-Down Pin:

ADC/DAC Simultaneously

Audio Interface Mode:

ADC/DAC Independent Master/Slave

Audio Data Format:

ADC/DAC Independent

I2S, Left-Justified, Right-Justified

Dual Power Supplies:

5-V for Analog and 3.3-V for Digital

Package:TSSOP-28

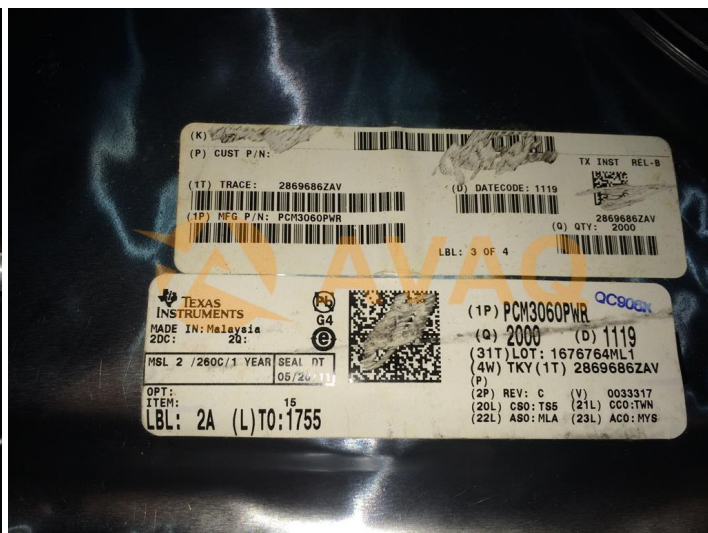
APPLICATIONS

DVD-RW

Digital TV

Digital Set-Top Box

Audio-Visual Applications



## Recommended For You

### PCA9534APWR

Texas Instruments, Inc

TSSOP16

### PCA9557PW

Texas Instruments, Inc

TSSOP16

### PCA9538PWR

Texas Instruments, Inc

TSSOP16

### PCA9515AD

Texas Instruments, Inc

SOP8

### PCM2904DB

Texas Instruments, Inc

SSOP

### PCMB000E

Texas Instruments, Inc

SSOP28

### PCF8574N

Texas Instruments, Inc

DIP16

### PCA9515BDGKR

Texas Instruments, Inc

MSOP8

### PCMB500E

Texas Instruments, Inc

SSOP24

**PCF8574RGTR**

Texas Instruments, Inc

QFN16

**PCI2050PDV**

Texas Instruments, Inc

QFP208

**PCA9539DW**

Texas Instruments, Inc

SOIC(DW)

**PCI1510GGU**

Texas Instruments, Inc

BGA144

**PCM2900CDBR**

Texas Instruments, Inc

SSOP28

**PCF8575PWR**

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TSSOP24