

24 Bit Differential Stereo DAC with Volume Control

DESCRIPTION

The WM8719 is a high performance differential stereo DAC designed for audio applications such as SACD, DVD, home theatre systems, and digital TV. The WM8719 supports PCM data input word lengths from 16 to 32-bits and sampling rates up to 192kHz. Additionally 64x DSD bitstream support is offered on both channels. The WM8719 consists of a serial interface port, digital interpolation filters, multi-bit sigma delta modulators and differential stereo DAC in a small 28-pin SSOP package. The WM8719 also includes a digitally controllable mute and attenuate function for each channel, accessible during PCM mode. A MUX is provided to select between PCM and DSD audio data input formats.

The 3 wire MPU serial port provides access to a wide range of features including on-chip mute, attenuation and phase reversal.

The WM8719 is an ideal device to interface to AC-3™, DTS™, and MPEG audio decoders for surround sound applications, or for use in DVD players including those supporting DVD-A and SACD formats.

FEATURES

- 24 bit Stereo DAC
- Fully Differential Voltage Outputs
- Audio Performance
 - 111dB SNR ('A' weighted @ 48kHz) DAC
 - -100dB THD
- DAC Sampling Frequency: 8kHz - 192kHz
- 3 Wire Serial Control Interface
- Programmable PCM Audio Data Interface Modes
 - I²S, Left, Right Justified, DSP
 - 16/20/24/32 bit Word Lengths
- Independent Digital Volume Control on Each Channel with 127.5dB Range in 0.5dB Steps (in PCM mode)
- Independent Zero Flag Outputs
- On board MUX to select between PCM and DSD inputs
- Master or slave operation with Normal or Phase modulated method of DSD data transfer
- 3.0V - 5.5V Supply Operation
- 28-pin SSOP Package

APPLICATIONS

- CD, SACD, DVD, DVD-Audio and DVD 'Universal' Players
- Home theatre systems
- Professional mixing desks

BLOCK DIAGRAM

