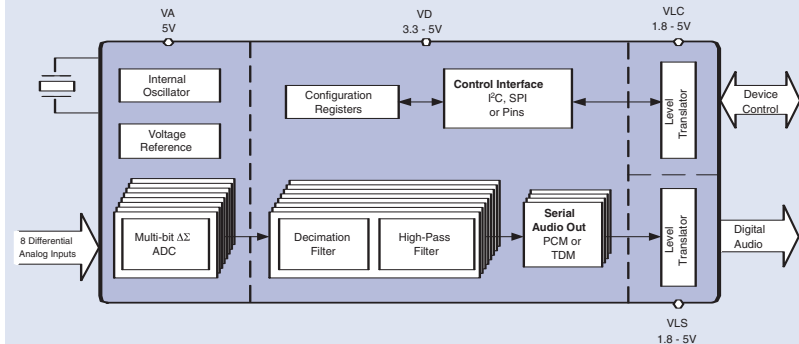


48-pin LQFP



9.0 mm

9.0 mm
nominal dimensions



CS5368 FEATURES

- Multi-bit Delta-Sigma architecture
- 24-bit conversion
- System sampling rates up to 192 kHz
- 114 dB dynamic range
- -105 dB THD+N
- Selectable audio interface formats
 - Left-justified, I²S, TDM
 - 8-channel TDM interface formats
- Low latency digital filters
- On-chip oscillator driver
- 5 V analog power supply
- 3.3-5 V digital power supply
- Supports logic levels between 1.8 V and 5 V for control and serial ports
- Less than 600 mW power consumption
- High pass filter for DC offset calibration
- Differential analog architecture
- Supports Master or Slave mode
- Overflow detection
- Lead-free 48-pin LQFP; 8-, 6-, and 4-channel pin-compatible family
- CS5368 (8-channel) price: \$11.61 (10K)
- CS5366 (6-channel) price: \$10.35 (10K)
- CS5364 (4-channel) price: \$ 9.09 (10K)

New Multichannel A/D Converter Delivers High-End Audio While Reducing System Costs

PREMIUM AUDIO PERFORMANCE

The CS5368 premium-performance audio A/D converter is designed for today's demanding surround-sound consumer and multichannel pro audio applications. The highly integrated IC provides developers with a space-saving solution that streamlines product development, reduces design complexity and lowers overall system costs compared to boards that use multiple stereo A/D converters for surround-sound or multichannel designs. The end result? Smaller audio equipment that can be produced at a lower cost compared to today's products.

The CS5368 is the industry's first audio A/D converter to support a high-speed TDM interface which provides a serial output of 8 channels of audio data with sample rates up to 192 kHz within a single data stream. This capability reduces layout complexity and relieves input/output constraints in digital signal processors. The on-chip level-shifter and oscillator driver further reduce complexity and simplify system design. The IC also features a differential architecture that provides excellent noise rejection and performs sampling, analog-to-digital conversion and anti-alias filtering.

APPLICATIONS

- A/V Receivers
- Home theater systems
- Digital mixing consoles
- Multi-track recording systems
- Broadcast studio equipment
- Digital effects processors
- Outboard audio converters
- PC sound cards
- Automotive audio systems

The CS5368 uses a 5th-order, multi-bit Delta-Sigma architecture that provides superior 114 dB dynamic range and negligible distortion. Low-latency digital filtering, with the industry's shortest group delay, further preserves the original audio quality and experience, making the ICs ideal for real-time and live-sound applications.

The flagship CS5368 is an 8-channel converter and the CS5364 and CS5366 are its pin-compatible 4- and 6-channel family members. Competitively priced at \$11.61 in quantities of 10K units, the CS5368 is an ideal solution for audio engineers who desire high-end fidelity at a competitive price.

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