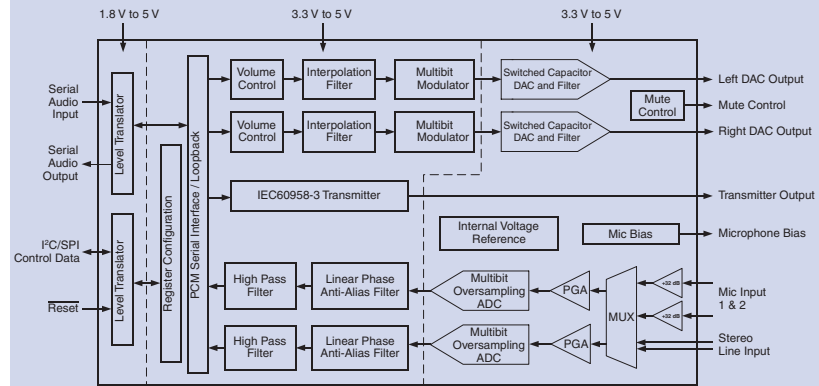


5.0 mm  
5.0 mm  
IC dimensions  
(nominal)



## HIGH-END PERFORMANCE AT AN AFFORDABLE PRICE

- Complete stereo CODEC
- Integrated 192 kHz S/PDIF transmitter
- 24-bit conversion, up to 192 kHz sample rates
- Advanced multi-bit Delta-Sigma architecture
- 105 dB dynamic range
- -95 dB THD+N
- 2:1 analog input multiplexer
- PGA:  $\pm 12$  dB gain, 0.5 dB step sizes with zero crossing
- Microphone pre-amp with +32 dB gain and low-noise bias supply
- Digital volume control
- Popguard® technology reduces output clicks and pops
- Single-ended architecture
- +3.3 V or +5.0 V power supply operation
- Integrated level shifters for direct interface to DSP or  $\mu$ C
- Overflow detection
- HPF with defeat
- 32-pin QFN (5 x 5), lead-free assembly
- CS4265 CODEC price: \$3.20 (10K)

## New Highly Integrated Stereo CODEC with S/PDIF Output Provides Premium Audio Performance

### INNOVATIVE DESIGN INTEGRATES 5 CHIPS INTO 1 TO DELIVER LOWER BOM COST

The new CS4265 stereo CODEC advances the Cirrus Logic® mixed-signal audio IC portfolio and provides an integrated, small, and cost-effective solution — enabling designers to deliver precisely what manufacturers need to get premium audio products to market fast.

The CS4265 features an integrated front-end with 2:1 input multiplexer and programmable gain amplifier capable of  $\pm 12$  dB analog gain in 0.5 dB step sizes with zero crossing, click-free transitions to maintain sonic quality. One pair of inputs has a dedicated microphone pre-amplifier in its path that provides +32 dB of gain, and there is also a low-noise microphone bias supply available.

The stereo A/D and D/A conversion is based on a multi-bit Delta-Sigma architecture and supports 24-bit conversion and sample rates up to 192 kHz. Single-ended inputs and outputs are offered, and the outputs feature Cirrus Logic's Popguard® technology to eliminate power cycling clicks and pops, further reducing the number of external components required. The

CS4265 operates from either a +3.3 V or +5 V power supply and has +1.8 V to +5 V logic power supplies for the control and serial port to allow for direct interface to external processors or micro-controllers without level shifting.

A synchronous S/PDIF (IEC60958-3) digital audio transmitter is integrated to provide additional design flexibility and lower system cost.

Engineered for performance, this new CODEC delivers professional audio quality at a breakthrough price point.

### Applications

- DVD recorders
- DVD receivers
- Digital video recorders/personal video recorders
- Digital televisions
- Set-top boxes and home media centers
- Automotive entertainment systems
- Notebook computers
- PC sound cards

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