

New Stereo DAC Simplifies Designs & Lowers System Cost

Integrated Line Drivers Provide 2 Vrms Output, Eliminates Costly Circuitry

CS4351 Features

- Advanced multi-bit Delta-Sigma modulator
- 24-bit conversion
- Up to 192 kHz sample rates
- 112 dB dynamic range
- -100 dB THD+N
- Integrated line driver – 2Vrms line level output
- Digital volume control with soft ramp
 - 119 dB attenuation
 - 1/2 dB step size
 - Zero crossing click-free transitions
- Automatic sample rate detection
- Low clock-jitter sensitivity
- Popguard® technology for control of clicks and pops
- +9 V or +12 V analog power supply
- +3.3 V digital power supply
- Direct interface with 3.3 V to 1.8 V logic
- Package: 20-pin TSSOP
- CS4351 price: \$1.60 (10K)

CS4351 Applications

- DVD players & recorders
- Digital set-top boxes and televisions
- Effects processors
- Digital mixing consoles
- Musical instruments
- Automotive audio systems



Simplifying designs and reducing system costs, the latest D/A converter from Cirrus Logic® takes integration to the next level, yet still delivers the sound quality that Cirrus® customers have come to expect over the past 20 years. The CS4351 is a single-chip, complete digital audio output system that makes analog design effortless, saves money, and accelerates time to market for manufacturers of audio electronics.

The CS4351 is the industry's highest performance DAC to integrate the amplifier and filter stages, a process required to achieve the 2 Vrms line level output signal found in most consumer electronics. This integration enables the CS4351 to directly drive the outputs of audio products such as DVD players, which allows system designers to save valuable printed circuit-board space and significantly reduces their efforts to design the analog output section of their products. As a result, the CS4351 delivers audio performance equal to that found in solutions that require many additional components, including operational amplifiers, resistors and capacitors.

The CS4351 utilizes a multi-bit Delta-Sigma architecture, operates from a 9-volt or 12-volt power supply, and offers digital volume control with half dB step sizes and patented Popguard® technology for control of clicks and pops during power cycling. Achieving dynamic range performance of 112 dB and support for sample rates up to 192 kHz, the CS4351 is ideal for a wide range of audio systems including DVD players and recorders, digital set-top boxes and televisions, mini-component systems, effects processors, digital mixing consoles, and automotive audio systems.

Actual Size 