New 192 kHz Stereo DACs Are Ideal for Value-Line Entertainment Products

Premium Audio Performance With 50% Smaller Footprint Than Previous Generation

CS4344/5/6/8 Features

- Advanced multi-bit Delta-Sigma architecture
- 105 dB dynamic range
- -95 dB THD+N
- 24-bit conversion
- Automatically detects sample rates up to 192 kHz
- Single +3.3 V or +5 V power supply
- Single-ended outputs
- Popguard® technology
- Low clock jitter sensitivity
- On-chip digital de-emphasis
- Family supports all standard audio interface formats
- Available in 10-pin TSSOP
- CS4344/5/6/8 price: $1.02 (10 K)

Applications

- DVD players & recorders
- DVD receivers
- Digital televisions
- Set-top boxes
- Automotive entertainment systems
- Professional audio products
- Musical instruments

The new Cirrus Logic® family of digital-to-analog converters, the CS4344, CS4345, CS4346 and CS4348, delivers superior audio quality while providing OEMs with the industry’s smallest, most cost-effective 192 kHz stereo DAC.

Helping reduce printed circuit board space requirements, the chips are offered in a low profile 10-pin package that is 50 percent smaller than Cirrus’ current eight-pin DAC family. Based on an advanced multi-bit Delta-Sigma architecture, the CS4344 family provides a single-ended output architecture and delivers -95 dB THD+N and a dynamic range of 105 dB. The DACs operate from a single +3.3 V or +5 V power supply and include value-added features such as patented automatic sample-rate detection, on-chip digital de-emphasis and Cirrus Logic’s Popguard technology to eliminate power cycling clicks and pops, which further reduces the number of external components required.

The CS4344, CS4345, CS4346, and CS4348 differ only in the serial audio interface format they support, which includes I²S, left-justified, and 24-bit and 16-bit right-justified, respectively. Existing Cirrus Logic customers have a simple upgrade path because the CS4344 family is functionally compatible with other popular value-line DACs from Cirrus Logic, including the CS4334, CS4340, and CS4340A.

The CS4344 family strengthens Cirrus’ industry leading D/A converter product line and provides manufacturers a simple, small, and cost-effective solution, which is precisely what you need to get premium audio products to market fast. You will have to look closely to see this tiny 10-pin DAC, but your ears will easily discern the remarkable sound quality that this DAC delivers.