



TrueDigital™ Class D Amplifier Solutions—CS44210

Cirrus Logic, the leading provider of digital audio solutions for entertainment electronics, together with its strategic partner International Rectifier, expands its Total Entertainment solutions portfolio by offering the Crystal® CS44210 based audio amplifier solution, a member of Cirrus's TrueDigital™ Class D amplifier product family.

The CS44210, in combination with the IRCS8001 gate driver IC and the IRCS8102 power MOSFETs, provides a highly optimized, complete time-to-market digital audio amplifier solution. The stereo digital-to-PWM Class D audio system controller includes digital volume and tone control, peak limiting, half-bridge PWM driver outputs, and an integrated headphone amplifier.

The CS44210 high-efficiency enables system designs in more convenient and smaller system form factors by eliminating the need for bulky heat sinks and power supplies.

The CS44210 is an ideal solution for the high-performance, high-fidelity, high-efficiency needs of both professional and consumer audio applications including:

- AVR's
- DVD Receivers
- Powered Speakers
- Mini-Component Systems
- Stand-alone Amplifiers
- Shelf-Top Systems
- Set-Top Systems
- Automotive Systems
- Powered Mixers
- Powered PA Systems
- Boombox Systems



CS44210 Solution Features and Specifications

Integrated Audio Processing

- Digital Tone Control
- Digital Peak Limiting
- Programmable Digital Volume Control w/PWM PopGuard®
- De-emphasis for 32kHz, 44.1kHz and 48kHz
- Flexible Input Selection

High Performance

- 3 Serial Audio Inputs (e.g. - I²S) w/Mux
- Host Interface
- 24-bit/96kHz Conversion
- 50W Un-Bridged Multi-Channel or 200W Bridged Mono Power Amplifier Solutions

High Fidelity

- 100dB Dynamic Range
- Short Circuit Protection

Low Power

- >90% Power Efficiency

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