

## TrueDigital™ Class D Headphone Amplifier—CS44L10

Cirrus Logic, the leading provider of digital audio solutions for entertainment electronics, expands its Total Entertainment Solutions portfolio by offering the Crystal<sup>®</sup> CS44L10 headphone amplifier, a member of Cirrus's TrueDigital<sup>™</sup> Class D amplifier product family.

The CS44L10 is a complete stereo digital-to-PWM Class D headphone amplifier including digital volume and tone control, and peak limiting. It's high-efficiency enables system designs to deliver higher volumes and longer battery life in portable audio applications.

The CS44L10 is an ideal solution for the high-performance, high-fidelity, low-power needs of portable consumer electronics, mobile phone, and other headphone amplifier products.



# CS44L10 Features and Specifications

### **Integrated Audio Processing**

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

#### **High Performance**

- Serial Audio Input (e.g. I<sup>2</sup>S)
- 24-bit/96kHz Conversion
- 100mw/channel into 16 ohms @ 3.6V

#### **High Fidelity**

- 100dB Dynamic Range
- Short Circuit Protection

#### **Low Power**

• >90% Power Efficiency

#### **Package**

• 16-pin TSSOP



