

## EUTECH 3-VRMS Audio Line Driver With Adjustable Gain

## DESCRIPTION

The EUA6632 is a 3-Vrms audio line driver with adjustable gain. The EUA6632 is capable of driving 2 Vrms into a  $10k\Omega$  load with 3.3-V supply voltage. The device has differential inputs and uses external gain-setting resistors to support a gain range of  $\pm 1 \text{V/V}$  to ±10V/V, and gain can be configured individually for each channel. The EUA6632 has built-in active-mute control for pop-free audio on/off control. The EUA6632 has an external under voltage detector that mutes the output when the power supply is removed, ensuring a pop free shutdown. Using the EUA6632 in audio products can reduce component count considerably compared to traditional methods of generating a 3-vrms output. The EUA6632 does not require a power supply greater than 3.3V to generate its 5.6-Vpp output, nor does it require a split-rail power supply. The EUA6632 integrates its own charge pump to generate a negative supply rail that provides a clean, pop-free ground-biased 3-Vrms output.

The EUA6632 is available in a 14-pin TSSOP.

## **FEATURES**

- Supply Voltage 3V to 5V
- 2Vrms Into  $10k\Omega$  With 3.3V Supply
- Low THD+N<0.01% at 2Vrms Into  $10k\Omega$
- High SNR>90dB
- 16Ω Output Load Compliant
- Differential Input and Single-Ended Output
- Adjustable Gain by External Gain-Setting Resistors
- Ground-Referenced Outputs Eliminate DC Blocking Capacitors
  - Reduce Board Area
  - Reduce Component Cost
  - Improve THD+N performance
  - No Degradation of Low Frequency Response Due to Output Capacitors
- Short-Circuit Protection
- Click and Pop-Reduction Circuitry
- External Under voltage Mute
- Active Mute Control for Pop-free Audio On/Off Control
- RoHS compliant and 100% lead(Pb)-free Halogen-Free

## **APPLICATIONS**

- Set-Top Boxes
- Blue-ray Disc DVD Players
- LCD and PDP TV
- Mini/Micro Combo Systems
- Sound Cards
- Laptops

