# DIO2114B

# 2-Vrms Audio Driver with Adjustable Gain

## Features

- Voltage Output at 10kΩ Load
  2 Vrms With 3.3V Supply Voltage
- Ultra Low Distortion:
  SNR>100dB
  Typical Vn<10μVrms
  THD+N<0.001% at 2 Vrms
- No Pop/Clicks Noise when Power ON/OFF
- No Need for Output DC-Blocking Capacitors
- Optimized Frequency Response between 20Hz–20kHz
- Accepting Differential Input
- Featuring external under voltage mute
- All Pins HBM ESD protection 5kV
- Available in TSSOP-14 package

## Applications

- Set-Top Boxes
- High Definition DVD Players
- Car Entertainment System
- Medical

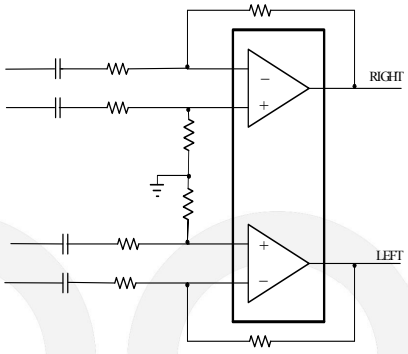
## Descriptions

The DIO2114B is an integrated solution for Set-top box and high definition player, and designed to optimize the audio driver circuit performance while reducing the BOM cost by eliminating the peripheral discrete components for noise reduction. DIO2114B features a 2Vrms stereo audio driver that designed to allow for the removal of output AC- coupling capacitors.

Featuring differential input mode, gain range of ±1 V/V to ±10 V/V can be achieved via external gain resistor setting. The DIO2114B is able to offer 2Vrms output with 10k ohm load and 3.3V supply.

Meanwhile, the DIO2114B offers built-in shut-down control circuitry for optimal pop-free performance. Under under-voltage condition, DIO2114B is able to detect it and mutes the output.

## Block Diagram

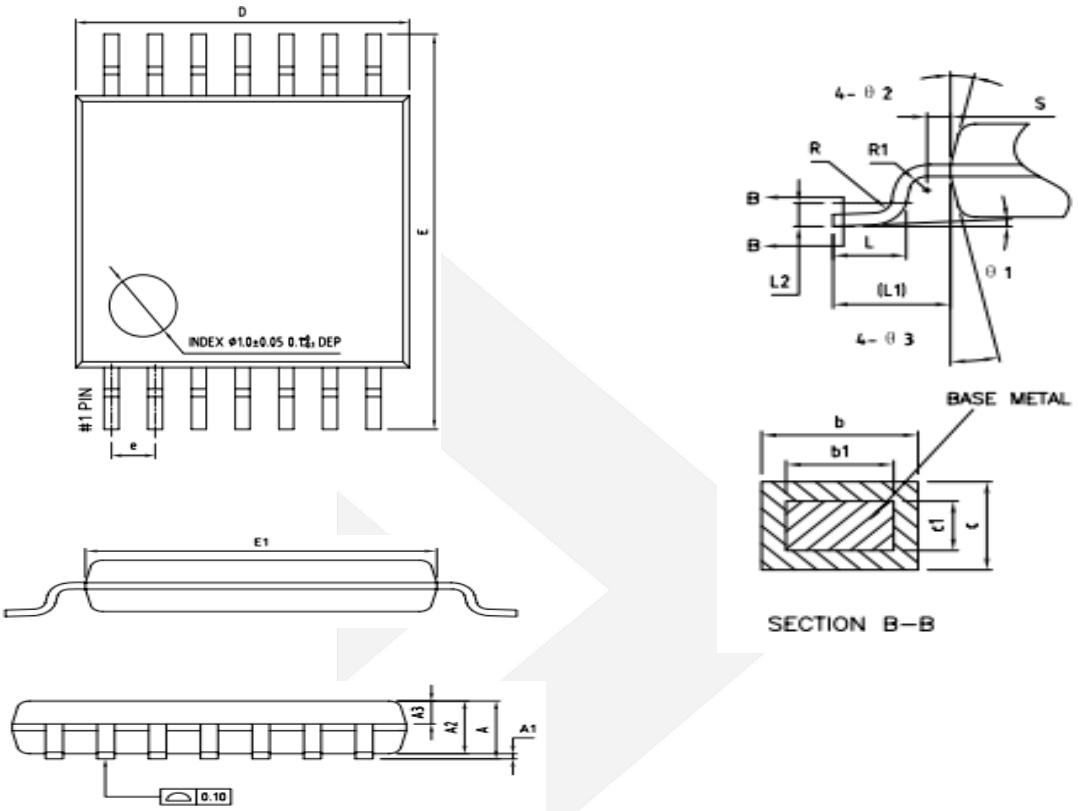



## Ordering Information

| Order Part Number | Top Marking | | $T_A$ | Package | |
|---|---|---|---|---|---|
| DIO2114BTP14 | DIO2114B | Green/RoHS | -40 to +85°C | TSSOP-14 | Tape & Reel, 2500 |


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## Physical Dimensions: TSSOP-14




| Symbol | Dimensions In Millimeters | | |
|---|---|---|---|
| | Min | Nom | Max |
| A | - | - | 1.20 |
| A1 | 0.05 | - | 0.15 |
| A2 | 0.90 | 1.00 | 1.05 |
| A3 | 0.34 | 0.44 | 0.54 |
| b | 0.20 | - | 0.28 |
| b1 | 0.20 | 0.22 | 0.24 |
| c | 0.10 | - | 0.19 |
| c1 | 0.10 | 0.13 | 0.15 |
| D | 4.86 | 4.96 | 5.06 |
| E | 6.20 | 6.40 | 6.60 |
| E1 | 4.30 | 4.40 | 4.50 |
| e | | 0.65BSC | |
| L | 0.45 | 0.60 | 0.75 |
| L1 | | 1.00REF | |
| L2 | | 0.25BSC | |
| R | 0.09 | - | - |
| R1 | 0.09 | - | - |
| S | 0.20 | - | - |
| θ 1 | 0° | - | 8° |
| θ 2 | 10° | 12° | 14° |
| θ 3 | 10° | 12° | 14° |



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## CONTACT US

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