

3-Vrms Cap-Less Line Driver with Adjustable Gain

Features

- Operation Voltage: 3V to 5.5V
- Cap-less Output
 - Eliminates Output Capacitors
 - Improves Low Frequency Response
 - Reduces POP/Clicks
- Low Noise and THD at 2.5k Load
 - SNR > 102dB
 - Typical $V_n < 12\mu\text{Vrms}$
 - THD+N < 0.02%
- Maximum Output Voltage Swing into 2.5k Load
 - 2Vrms at 3.3V Supply Voltage
 - 3Vrms at 5V Supply Voltage
- Differential Input
- External Gain Setting from 1V/V to 10V/V
- Fast Start-up Time : 2ms
- Integrated De-Pop Control
- External Under Voltage Protection
- Thermal Protection
- Less External Components Required
- +/-8kV IEC ESD Protection at line outputs

Applications

- LCD / PDP TVs
- CD / DVD players
- Set-Top Boxes
- Home Theater in Box

Description

The AD22650B is a 3-Vrms cap-less stereo line driver. The device is ideal for single supply electronics. Cap-less design can eliminate output dc-blocking capacitors for better low frequency response and save cost.

The AD22650B is capable of delivering 3-Vrms output into a 2.5k Ω load with 5V supply. The gain settings can be set by users from 1V/V to 10V/V externally. The AD22650B has internal and external under voltage protection to prevent POP noise. Build-in shutdown control and de-pop control sequence also help AD22650B to be a pop-less device.

The AD22650B is available in a 14-pin TSSOP package.

Ordering Information

Product ID	Package	Packing	Comments
AD22650B-QH14NAT	TSSOP-14L	96 Units / Tube	Green(HF)
AD22650B-QH14NAR		100 Tubes / Small Box	
		2.5k Units Tape & Reel	

Simplified Application Circuit

