



Quad Audio Line Driver with 3VRMS Output

General Description

The MAX9727 quad audio line driver with 3VRMS output is ideal for portable audio devices where board space and cost is at a premium. The device uses Maxim's DirectDrive™ architecture that produces a ground-referenced output from a single supply, eliminating the need for large DC-blocking capacitors, saving cost, board space, and component height. A high 100dB PSRR and low 0.0005% THD+N ensures clean, low-distortion amplification of the audio signal. Each MAX9727 amplifier can provide 3VRMS to a 1kΩ load with less than 0.003% THD+N while operating from a single +5V supply. Each MAX9727 amplifier can provide 2VRMS to a 1kΩ load with less than 0.003% THD+N while operating from a single +3.3V supply.

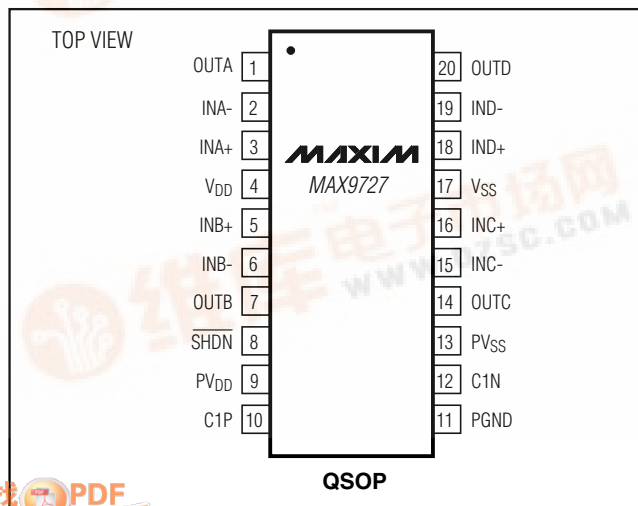
A shutdown input disables the amplifiers and reduces quiescent current consumption to less than 100nA. The MAX9727 features Maxim's comprehensive click-and-pop suppression circuitry that reduces audible clicks and pops during startup and shutdown.

The MAX9727 operates from a single 2.7V to 5.5V supply, consumes only 3mA of supply current per channel and is specified over the -40°C to +85°C extended temperature range.

Applications

Set-Top Boxes	CD and DVD Players
Consumer and Professional Audio Equipment	Soundcards
A/V Receivers	Portable Audio Devices

Pin Configuration



Features

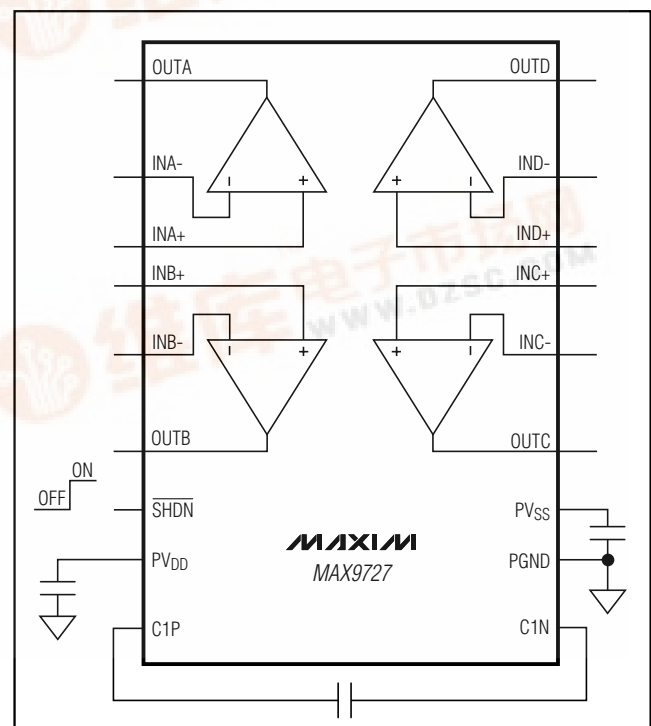
- ◆ 2.7V to 5.5V Single-Supply Operation
- ◆ High 100dB PSRR
- ◆ 109dB Signal-to-Noise Ratio (SNR)
- ◆ Ground-Referenced Outputs
- ◆ No Audible Clicks or Pops at Power-Up/Down
- ◆ Differential Inputs
- ◆ 3VRMS into 1kΩ Load at 5V
- ◆ 2VRMS into 1kΩ Load at 3.3V
- ◆ 3mA Supply Current Per Channel
- ◆ Unity-Gain Stable
- ◆ 100nA Low-Power Shutdown Mode
- ◆ CLOAD Drive > 220pF
- ◆ ±8kV HBM ESD-Protected Outputs

Ordering Information

PART	TEMP RANGE	PIN-PACKAGE	GAIN
MAX9727EEP+	-40°C to +85°C	20 QSOPT	Adjustable

+ Denotes lead-free package.

Simplified Block Diagram



MAX9727