

## Ground-Reference Popless Stereo Headphone Driver

### Features

- 7mA Quiescent Current.
- Ground-Referenced Outputs Eliminate DC-Bias Voltages on Headphone Ground Pin
- Popless Function Embedded
- 70mW Per Channel into 16Ω loads
- Low Distortion
- Large Output Voltage Swing.
- ±1.8V to ±3.6V Dual Power Operating Range
- Low Power Consumption.
- Over-Temperature Protection
- UVLO Embedded
- TDFN2X2-8 & TQFN3X3-16 Packages

### Applications

- Cellular Phone
- Notebooks
- PDAs
- MP3 Players
- Portable Audio Equipment

### General Description

The G1412 stereo headphone driver is designed for portable equipment where board space is limited. The G1412 uses the dual external power supplies PVDD/NVDD to produce a ground-reference output, eliminating the need for large DC-blocking capacitors, saving cost, board space, and component height.

The G1412 is a dual channel, low voltage, low power, and high performance amplifiers, which can deliver up to 70mW per channel into a 16Ω load with small THD+N performance.

The G1412 operates from a dual ±1.8V to ±3.6V supplies, consumes only 7mA of supply current. With excellent AC performance (small THD), it can be designed into a wide range of headphone driving application.

### Ordering Information

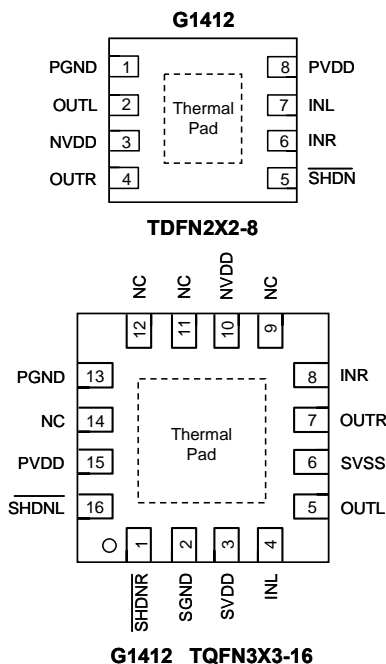
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)	REMARK
G1412RC1U	1412	-40°C ~ +85°C	TDFN2X2-8	
G1412R41U	1412	-40°C ~ +85°C	TQFN3X3-16	<b>OBSOLETE</b>

Note: RC :TDFN2X2-8 R4:TQFN3X3-16

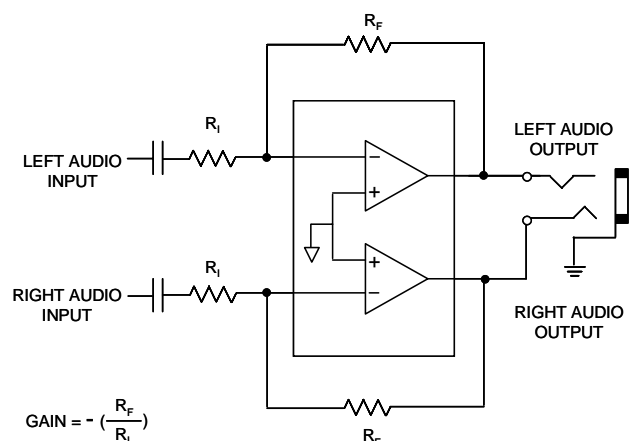
1: Bonding Code

U: Tape & Reel

### Pin Configuration



### Typical Application Circuit



Note: Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.