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.

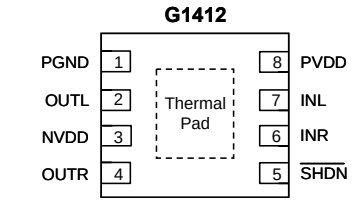
The G1412 operates from a dual ±1.8V to ±3.6V supplies, consumes only 7mA of supply current. With excellent AC performance (small THD), it can be designed into a wide range of headphone driving application.

Ordering Information

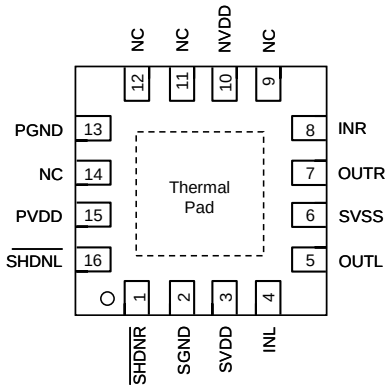
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)	REMARK
G1412RC1U	1412	-40°C ~ +85°C	TDFN2X2-8	
G1412R41U	1412	-40°C ~ +85°C	TQFN3X3-16	**OBSOLETE**

Note: RC :TDFN2X2-8 R4:TQFN3X3-16
1: Bonding Code
U: Tape & Reel

Pin Configuration



TDFN2X2-8



G1412 TQFN3X3-16

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

Typical Application Circuit

