

2W Stereo Audio Amplifier

Features

- Internal Gain Control, Which Eliminates External Gain-Setting Resistors
 - Depop Circuitry Integrated
 - Output Power at 1% THD+N, VDD=5V
--2.0W/CH (typical) into a 4Ω Load
--1.2W/CH (typical) into a 8Ω Load
 - Bridge-Tied Load (BTL) Supported
 - Fully differential Input
 - Shutdown Control Available
 - Surface-Mount Power Package
 - Over-Temperature Protection Embedded
- 20-Pin TSSOP-P & 20-Pin TQFN 4X4

Applications

- Stereo Power Amplifiers for Notebooks or Desktop Computers
- Multimedia Monitors
- Stereo Power Amplifiers for Portable Audio Systems

General Description

G1431 is a stereo audio power amplifier in 20pin TSSOP thermal pad package or 20-pin TQFN 4X4. It can drive 2W continuous RMS power into 4Ω load per channel in Bridge-Tied Load (BTL) mode at 5V supply voltage. Its THD is smaller than 1% under the above operation condition. To simplify the audio system design in the notebook application and to enlarge the driving power, G1431 supports the Bridge-Tied Load (BTL) mode for driving the speakers. For the low current consumption applications, the SHDN mode is supported to disable G1431 when it is idle. The current consumption can be reduced to 150μA (typically).

Amplifier gain is internally configured and controlled by two terminals (GAIN0, GAIN1). BTL gain settings of 6dB, 10dB, 15.6dB, 21.6dB are provided.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G1431F2U	G1431	-40°C to +85°C	TSSOP-20 (FD)
G1431R9U	1431	-40°C to +85°C	TQFN4X4-20

Note: F2: TSSOP-20 (FD) R9:TQFN4X4-20
U: Tape & Reel

Pin Configuration

