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# 2.8W/Ch Stereo Class-D Audio Amplifier

# NAU8223-DEMO-RevA User Manual

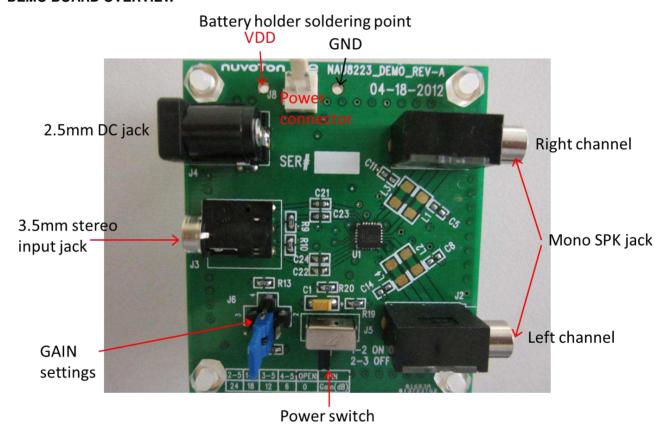


#### **DESCRIPTION:**

The NAU8223 is a stereo high efficiency class-D audio amplifier, which is capable of driving a  $4\Omega$  load with up to 2.8W output power.

This demo board consists of the following parts: The input is configured by a 3.5mm stereo phone jack. Outputs are composed of dual mono speaker jack, and the power supply can be selected in one of the three ways: AAA batteries, power connector and 2.5mm DC jack. Besides, there is a gain pin which can be tie to one of four gain settings and a switch.to control on/off.

#### **DEMO BOARD OVERVIEW**



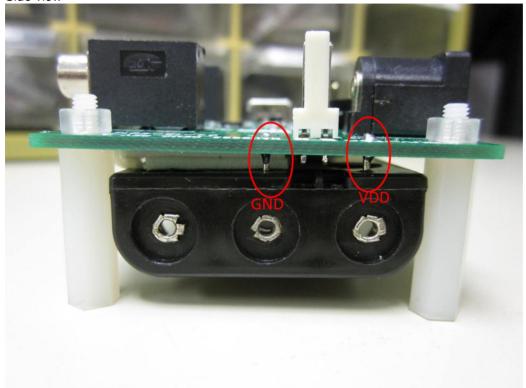
# **POWER CONNECTIONS:**

There are three ways to choose:

- 1) Apply 2.5 to 5.5V voltage to Power connector J8.
- 2) Plug 2.5mm adapter (Vout<5.5V) to J4 jack.
- 3) Weld a battery holder under the bottom of NAU8223 demo board. The soldering points are on both sides of J8. (Please refer to below figures)



Side view



# Bottom view:





# **INPUT CONNECTIONS:**

A 3.5mm stereo plug is recommended to put in J3. You can play general audio source like the music from PC.

# **OUTPUT CONNECTIONS:**

 $4\Omega$  or  $8\Omega$  mono speakers are recommended to plug in J1 (right channel) and J2 (left channel).

# **GAIN SETTINGS**

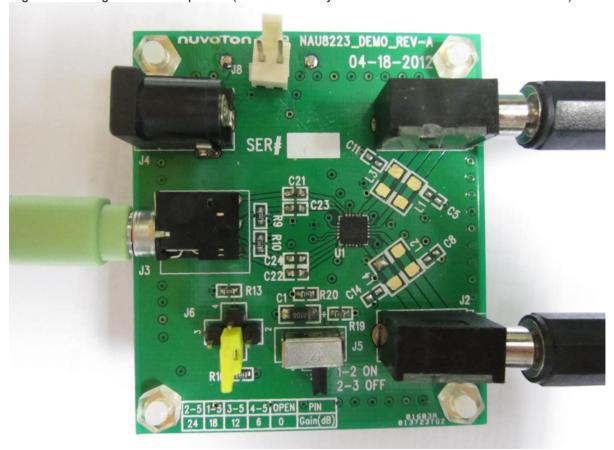
You are allowed to install a jumper on J6 to set the gain of NAU8223:

Without jumpers: 0 dB 5-4: (Center-Top pin) 6 dB 5-3: (Center-Left pin) 12 dB 5-1: (Center-Bottom pin) 18 dB 5-2: (Center-Right pin) 24 dB

# **POWER SWITCH**

Switch J5 to control normal/shutdown mode.

A general setting is like below picture (use AAA battery holder under the bottom of demo board):





# SCHEMATIC:

