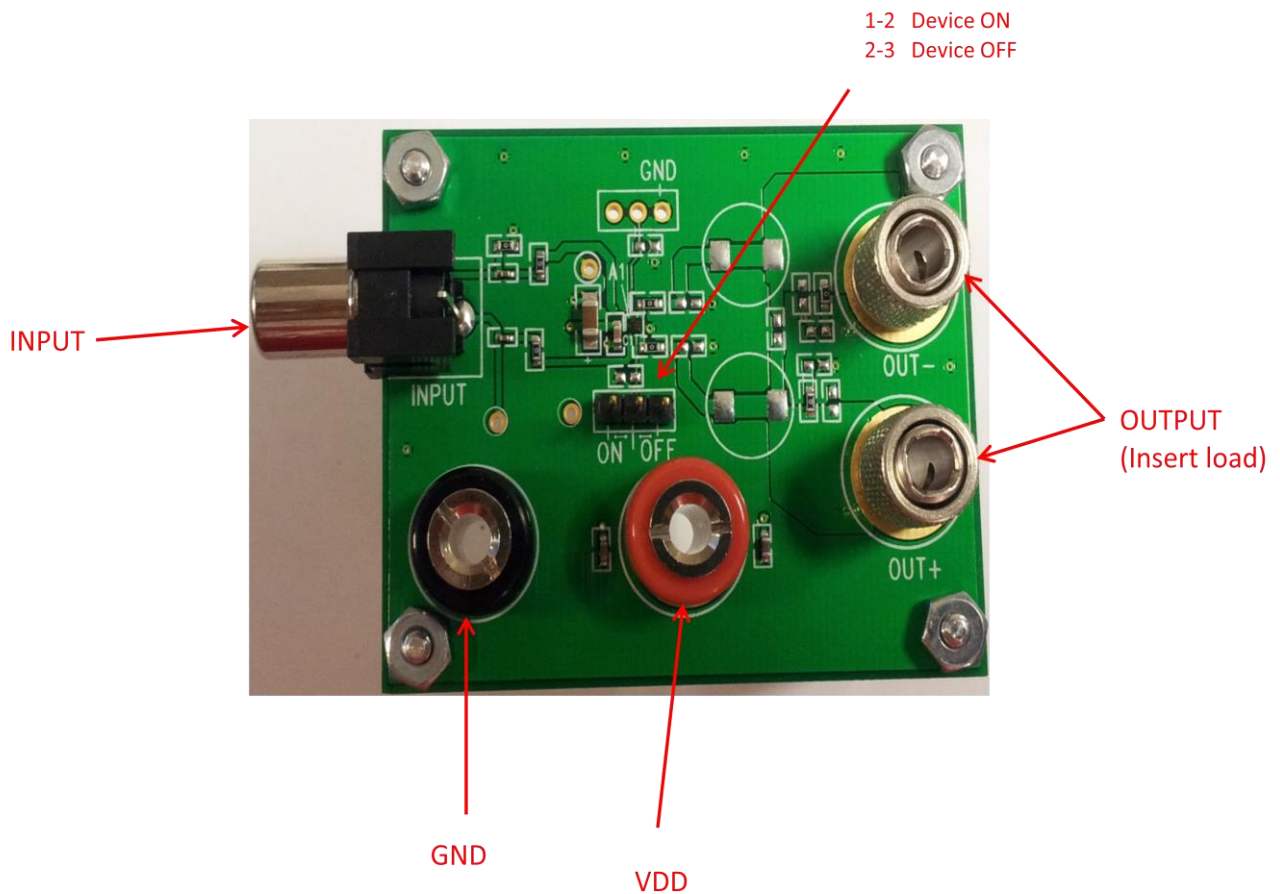


NAU82039 Evaluation Board User Manual

1. General Description

The NAU82039 is a mono high efficiency filter-free Class-D audio amplifier, which is capable of driving a 4Ω load with up to 3W output power. This device provides chip enable pin with extremely low standby current and fast start-up time. The ability to configure with either single-ended or differential inputs is included. The NAU82039 has fixed gain 12dB. With advanced features like 100dB SNR, 90dB PSRR, 93% efficiency, ultra low quiescent current and superior EMI performance, the NAU82039 is ideal for the portable applications of battery drive.

2. EVB Set Up



Power Connection

An external DC Voltage supply with a compliance of at least 2 Amperes should be connected to VDD & GND.

Jumper Settings

Install J6 on Pins 1-2 to turn ON the device, installing it on 2-3 turns the device OFF.

Input Connection

The default input configuration is single ended mode. If differential configuration is desired then, the 0 ohm resistor R7 needs to be removed. If Audio Precision Analyzer is used as input source, Unbalanced inputs are to be selected for single ended operation or Balanced inputs for differential mode.

Output Connection

An 8 ohm 68uH load should be connected on the output channel (J3- J2). Connect the outputs to the inputs of the Audio Precision Analyzer (Balanced) via the AP0025 Aux Filter.

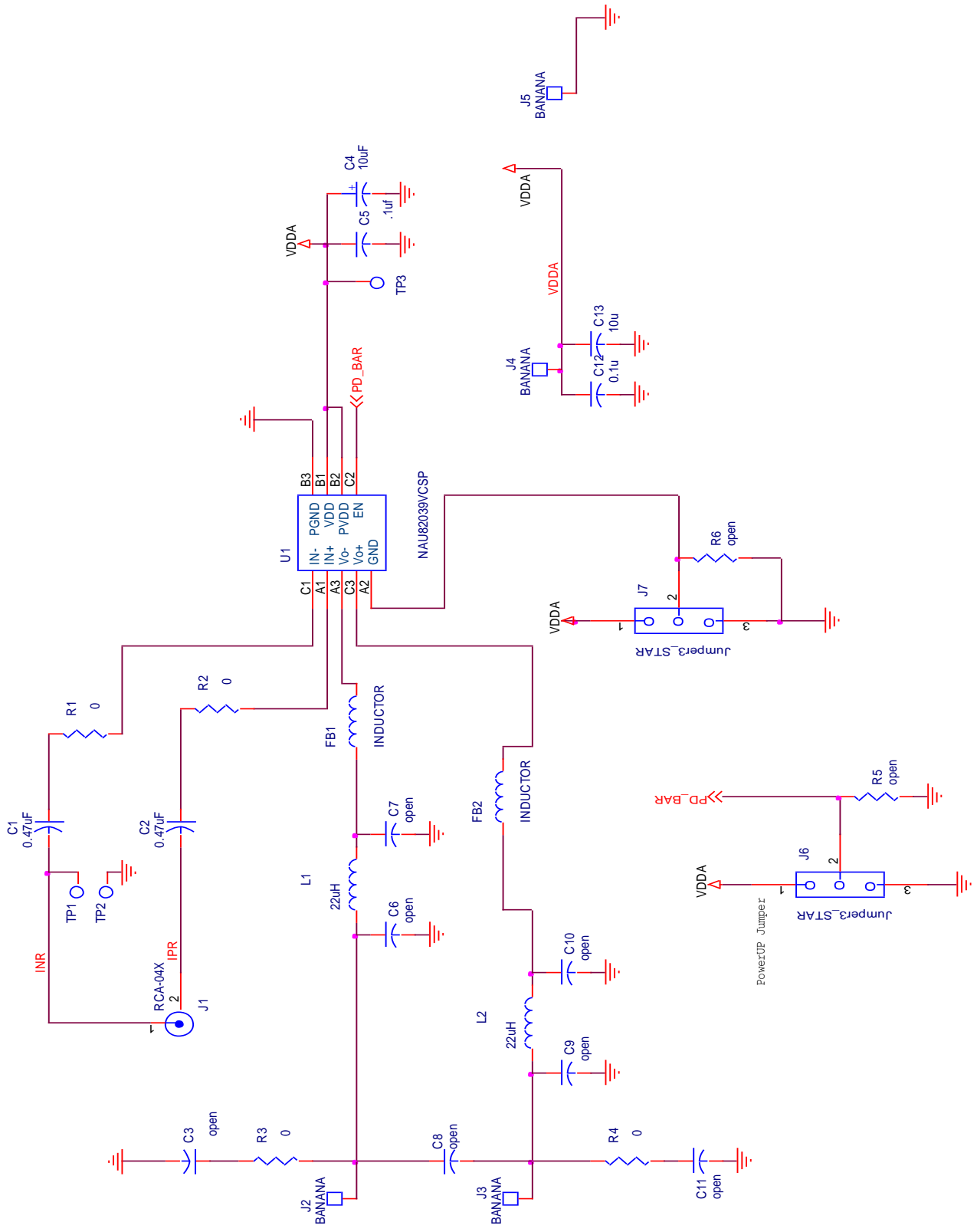
Power Up

For optimum performance the board should be power up with J5 in the power down state. Once the power is applied J5 can be set to power up the board. Then, the input signal can be applied.

Important note:

When using a power supply, it is recommended to use a 330 μ F capacitor across the power pins to suppress any supply glitches, as a safety measure. When a battery is used, the capacitor is not required. In normal applications too, the capacitor is not required.

3. Schematic:



1 Revision History

VERSION	DATE	PAGE/ CHAP.	DESCRIPTION
V.05	Oct. 8, 2013	-	First Release.
V1.0	March, 2016	-	Updated content

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