

LSP2916 16-Channel, High-Voltage Amplifier Evaluation Board

Features

- Full-featured evaluation board for the LSP2916.
- Socketed LSP2916 for easy replacement.

Note: Please read the LSP2916 (DS01-023ANET) data sheet before using the evaluation board.

WARNING: High voltage up to –298 V could be involved.

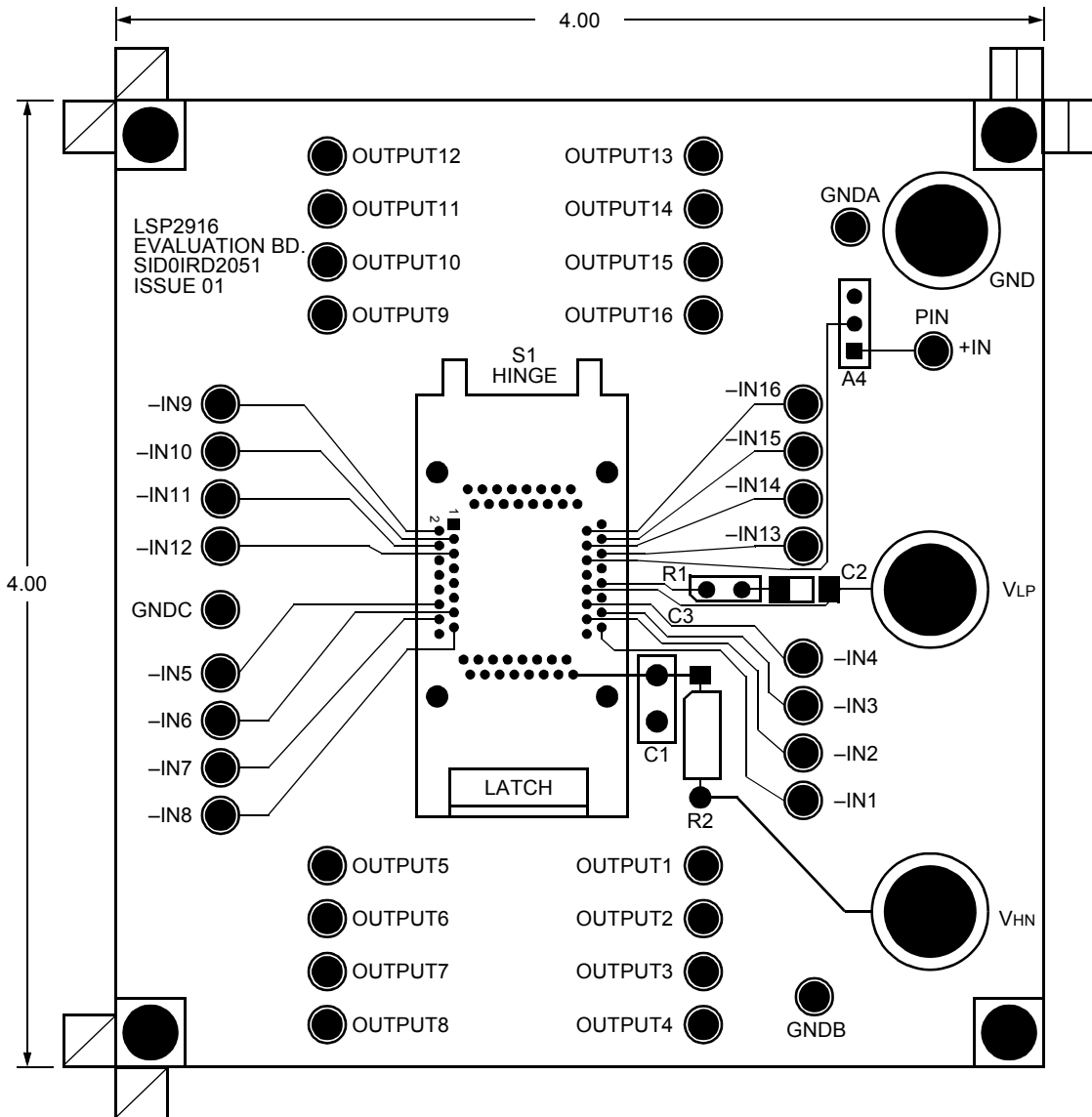
Description

The LSP2916 is inserted in the socket of the evaluation board (see Figure 1); note that all the amplifiers work in inverting configuration. The inverting input for each channel is labeled as –IN_x ($x = 1, 2, \dots, 16$, corresponding to each channel) on the board, where the signal can be applied. Corresponding to each channel, the outputs are labeled OUTPUT_x. The noninverting input for the amplifiers (+IN) is connected to GND, which is set by the jumper.

The external resistor (R_{ib}) should be connected to pin IBIAS. The recommended value for R_{ib} is 143 k Ω since any other value will impact the power consumption for the LSP2916. Banana plugs are used for the two power supplies: V_{HN} and V_{LP} (see Table 1 for typical values). There are several extra GND terminals for convenience on the board. See Table 2 for a list of the descriptions for the inboard pins. This evaluation board can be used for both the LSP2916A and the LSP2916B.

Description (continued)

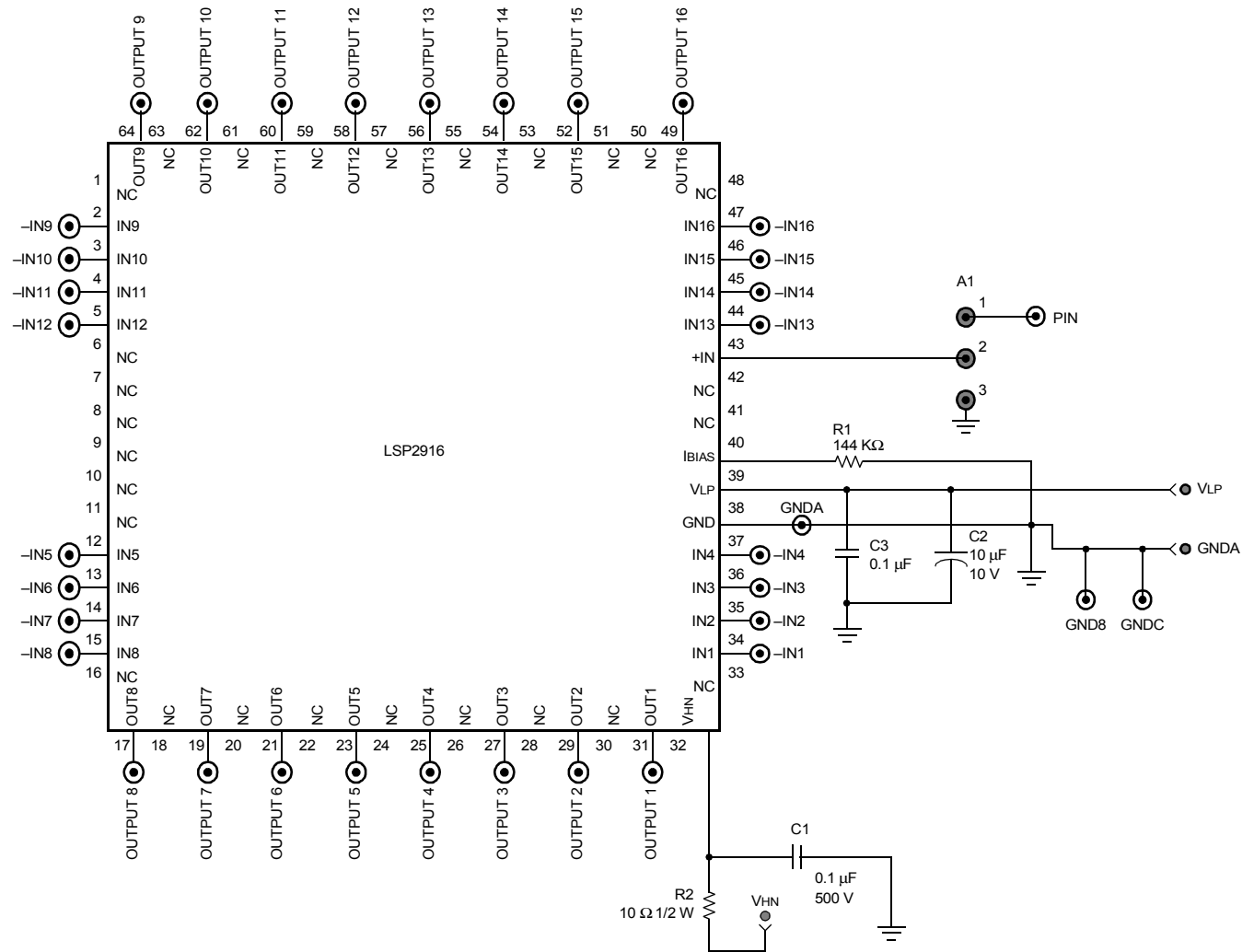
The board dimensions are 4 in. x 4 in.



1988(F)

Figure 1. LSP2916 Evaluation Board (Top Layout)

Evaluation Board Schematics



1987(F)

Figure 2. Evaluation Board Schematics

Jumps Setup

Jumper A1 will set the noninverting input for all channels.

- 1—2: Connects +IN pin to GNDA.
- 2—3: Connects +IN pin to inboard pin labeled as +IN, which can be set by the user.

Typical Configuration for Jumpers

Jumper A1 1—2 connects +IN to GND.

Electrical Characteristics

Table 1. Typical Power Supplies

Power Supply	Typ	Unit
VHN	-160.0	V
VLP	5.0	V

Table 2. Description for the Inboard Pin

Pin	Description
-IN1	Channel 1 input.
-IN2	Channel 2 input.
-IN3	Channel 3 input.
-IN4	Channel 4 input.
-IN5	Channel 5 input.
-IN6	Channel 6 input.
-IN7	Channel 7 input.
-IN8	Channel 8 input.
-IN9	Channel 9 input.
-IN10	Channel 10 input.
-IN11	Channel 11 input.
-IN12	Channel 12 input.
-IN13	Channel 13 input.
-IN14	Channel 14 input.
-IN15	Channel 15 input.
-IN16	Channel 16 input.
+IN	Noninverting input to all the channels.
OUTPUT1	Channel 1 output.
OUTPUT2	Channel 2 output.
OUTPUT3	Channel 3 output.
OUTPUT4	Channel 4 output.
OUTPUT5	Channel 5 output.
OUTPUT6	Channel 6 output.
OUTPUT7	Channel 7 output.
OUTPUT8	Channel 8 output.
OUTPUT9	Channel 9 output.
OUTPUT10	Channel 10 output.
OUTPUT11	Channel 11 output.
OUTPUT12	Channel 12 output.
OUTPUT13	Channel 13 output.
OUTPUT14	Channel 14 output.
OUTPUT15	Channel 15 output.
OUTPUT16	Channel 16 output.
VHN	Negative high-voltage power supply.
VLP	Analog 5 V power supply.
GND	Analog ground.

Notes

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