

551600234 - LMP8100 Evaluation Board User Guide

National Semiconductor
Application Note 1890
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August 8, 2008



This demo board contains a footprint for the LMP8100, along with input, output, power and control circuitry. The evaluation board is unstuffed allowing the user to install the circuit that is needed.

Connectors, Jumpers, Test Points

POWER SUPPLY

There are three holes for banana plugs labeled GND, V+, and V- to power the evaluation board. Power can also be applied on pins 7, 8, and 9 on header J5. A single supply of +5V or a dual supply of $\pm 2.5V$ can be used. If a single supply is used, the V- pin can be grounded by shorting JP2.

SIGNAL CONNECTORS

- J1 is a BNC labeled IN for the input signal.
- J2 is a BNC labeled OUT for the output signal.
- J5 pins 1 and 3 can also be used for the output and input signals.
- J4 is a 5-pin header that can be connected to an SPI bus to write the register of the LMP8100.
- J3 is a hole for a banana plug to provide a low impedance voltage to the GRT pin. This voltage can also be input on J5 pin 5. If GRT is to be grounded, short JP1.

TEST POINTS

The evaluation board has the following test points.

- TP1 – IN pin
- TP2 – GRT pin
- TP3 – SDI pin
- TP4 – SDO pin
- TP5 – SCK pin
- TP6 – \overline{CS} pin
- TP7 – OUT pin
- TP8 – GND
- TP9 – GND
- TP10 – GND

Schematics

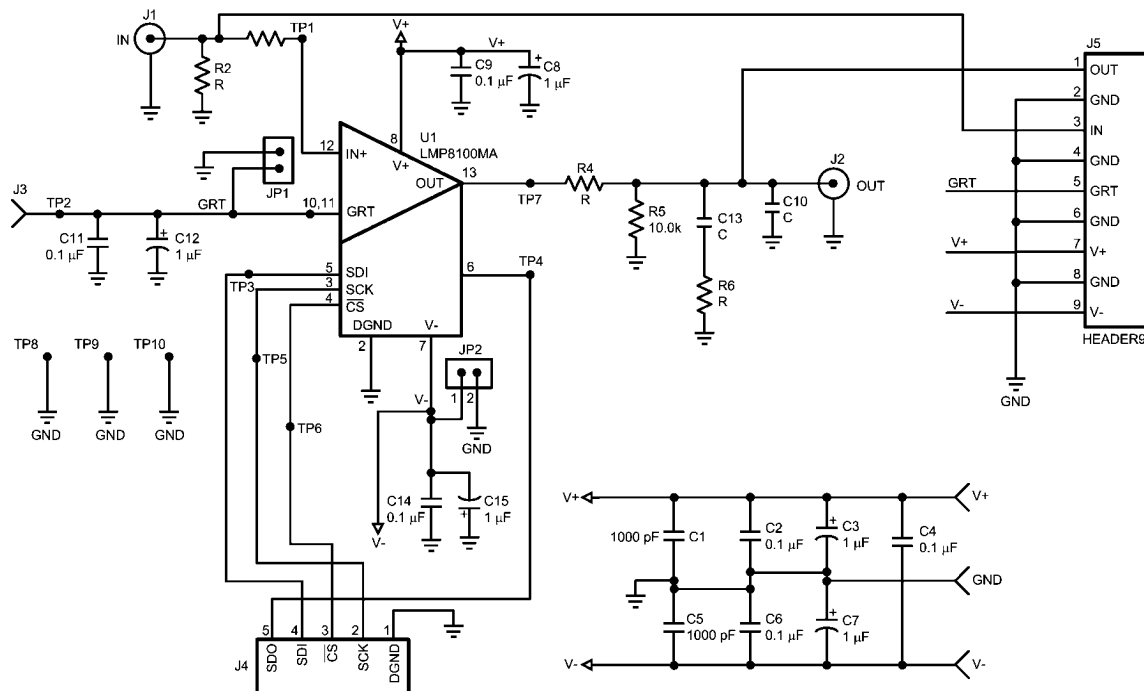
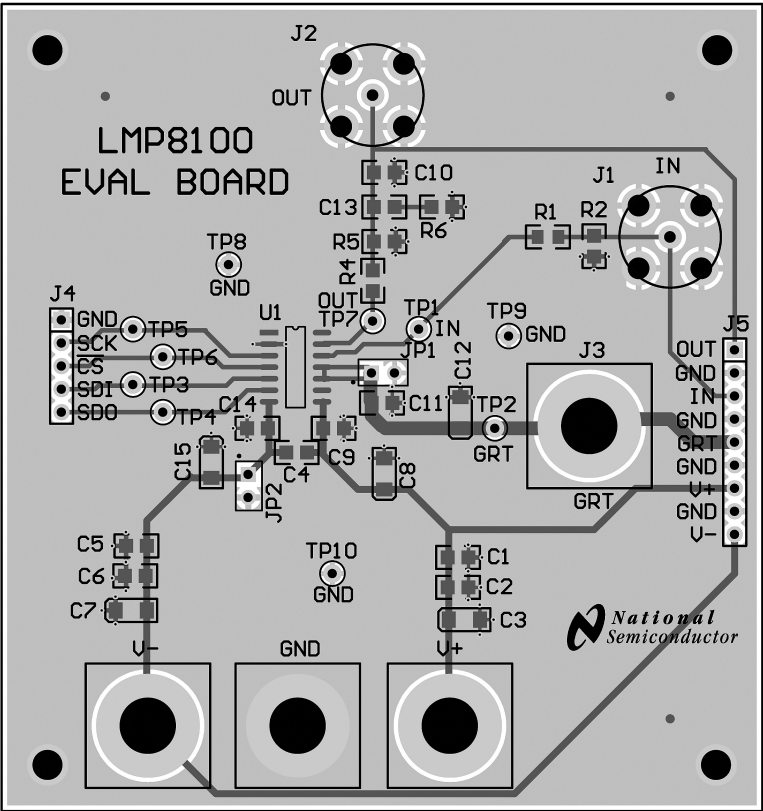


FIGURE 1. Schematic

30075701

Board Layout



30075702

FIGURE 2. View of Top and Bottom of Evaluation Board

Notes

Notes

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