NCV7691LBGEVB

NCV7691 Load Board Evaluation Board User's Manual

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EVAL BOARD USER'S MANUAL

Description

The NCV7691GEVB Current Controller with Automotive LED Lamps in Sequencing Application Evaluation Board has an edge connector feature which allows for an external connection of LEDs. This board connects to the edge connector to display LEDs in addition to the LED array on the board.

Four boards with different LED footprints will fit many standard LED components. Each board has a connector for the controller board VBB and 3 strings of 4 LEDs in series. If you are only using 3 LEDs in your string, a short across the unpopulated footprint will complete the circuit.

Instructions for setting current levels and guiding the circuit to the edge connector are include in the NCV7691GEVB user manual.

Features

- Provides a Platform to Display Design Target LEDs
- Options for 4 Different LED Footprints

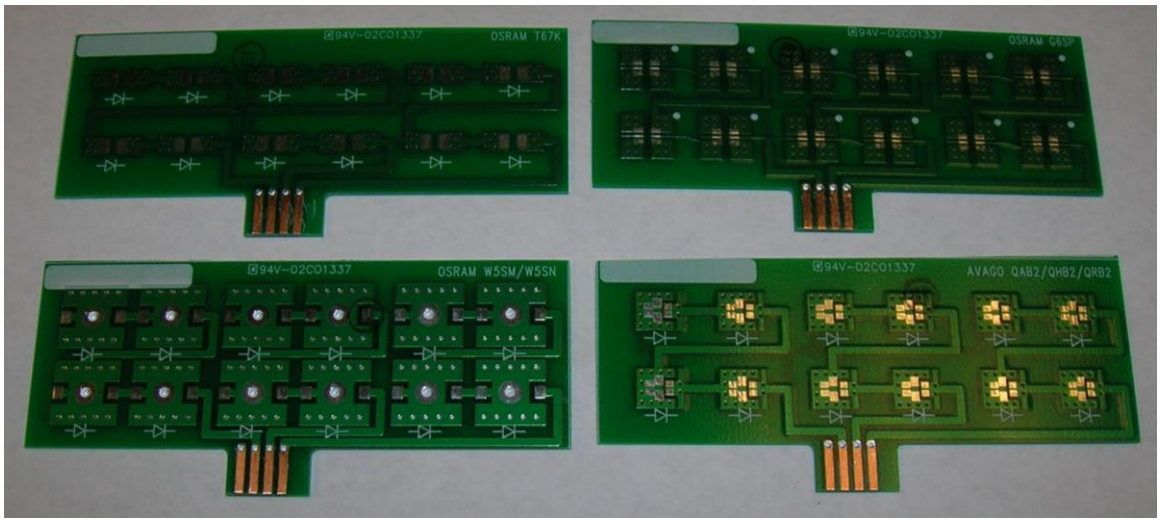

Figure 1. NCV7691 Optional External LED Load Boards

The Load boards are designed for standard LED components, but alternative components may be populated to any of these boards.

The standard LED targeted components are:

1. OSRAM T67K
2. OSRAM G6SP
3. OSRAM W5SM / W5SN
4. AVAGO QAB2 / QHB2 / QRB2

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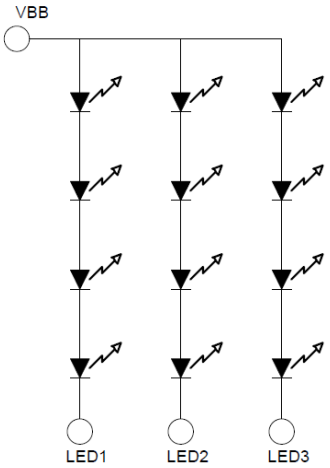

Figure 2. Load Board Schematic

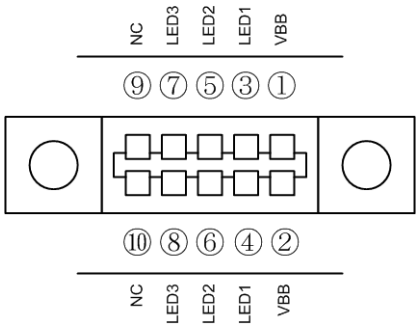

Figure 3. Edge Connector

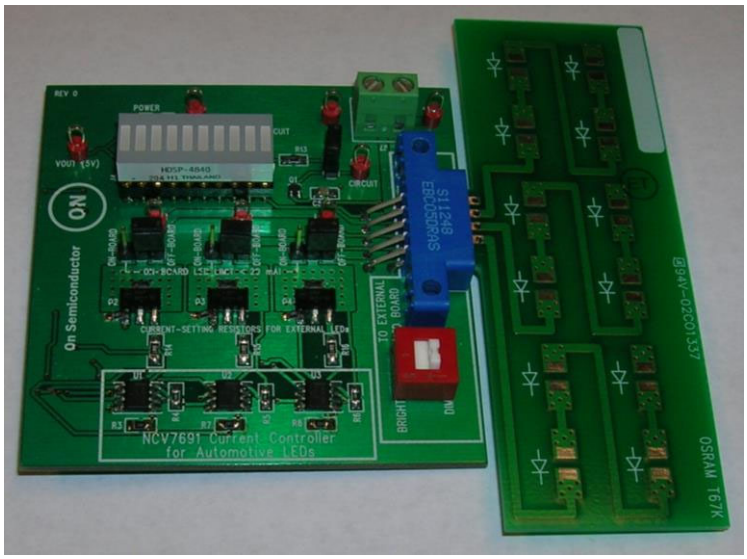

Figure 4. Load Board Interface with Controller Board

The connections in the load board provide a path between VBB and each individual string as shown in Figure 2. Figure 3 shows the load board interfaced to the controller board. The jumpers labled for “OFF−BOARD” should be moved to their proper position (right) for use. Figure 4 shows the Edge Connector points if an additional load board is desired. It is also simple to connect to the edge connector with clip leads for easy access to the driver points.

It is best to remove the LED array from the board when using the external LED boards to avoid high current damage to the LED array.

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