



Test Procedure for the NCV8873LEDBSTGEVB Evaluation Board

Operational Guidelines

1. Connect a DC input voltage, within the 6 V to 40 V range, between VIN and GND.
2. Connect a DC enable voltage, within the 2.0 V to 5.0 V range, between EN/SYNC and GND.
3. Connect a function generator between PWM and GND. It is recommended the waveform be set to
 - a. 125-200 Hz square typical frequency range,
 - b. low state voltage of 0 – 0.8V
 - c. high state of 1.8-5V range
 - d. duty cycle from 0.1% to 100%
4. Overvoltage may be tested by enabling the board (EN/SYNC) with jumper J1 removed.
5. Optionally,
 - a. for external clock synchronization, connect a pulse source between EN/SYNC and GND. The high state level should be within the 1.8 to 5 V range*, and the low state level within the -0.3 V to 0.8 V range, with a minimum pulse width of 40 ns and a frequency within the 1 MHz and 1.1 MHz range.
 - b. Jumper J1 should be removed if an external load is to be used instead of on-board LEDs. Input voltage operating range is valid for loads requiring $V_{out} < 40$ V.

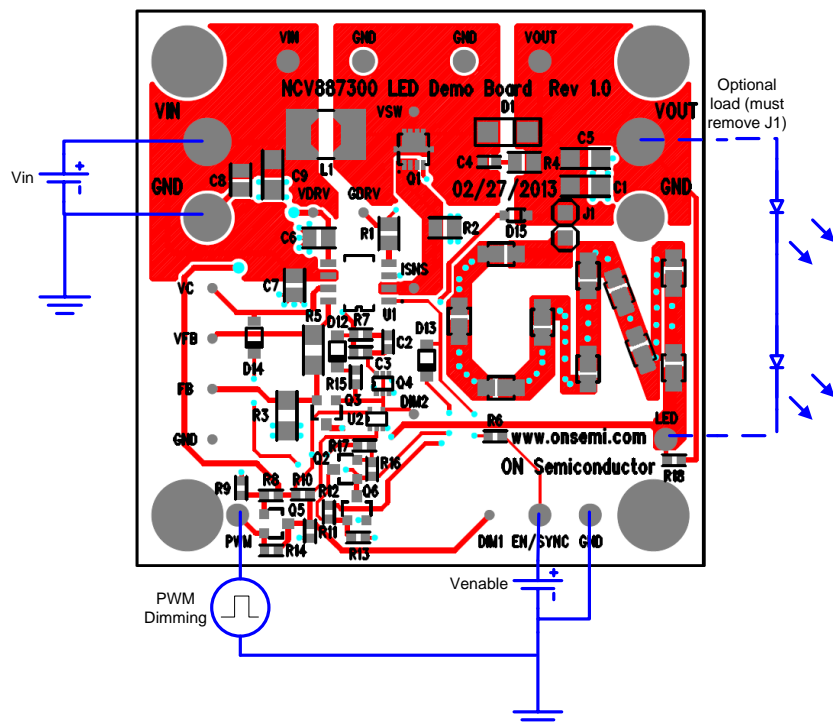


Figure 1. Demo Board Connections



Typical Performance

Start-up

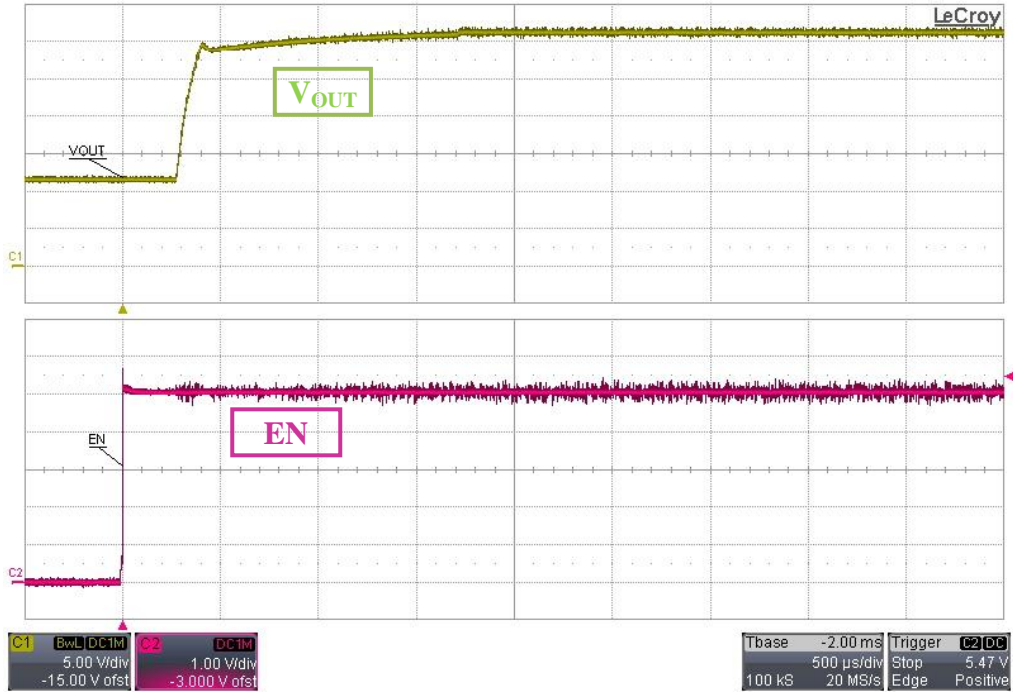


Figure 2 Typical start-up with V_{IN} = 12 V, 10 LEDs/60mA