

# Test Procedure for the NLSF595 LED Driver Demonstration Board

**ON Semiconductor**



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Thank you for your interest in the ON Semiconductor NLSF595 LED Driver Demo board. This board demonstrates the use of the NLSF595 device with 8 individual red, white, blue, and green LEDs and a 7 segment LED.

Table 1: Required Test Equipment

NLSF595 Demo Board	DC Power Source Capable of 9 Volts providing a current of .8 Amps
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Note: The NLSF595 is controlled by the 12F629 PIC which is programmed prior to arrival.

Note: If you are using your own power source, be sure that the center pin supplies positive voltage as many of the wall type power supplies have a negative center pin.

1. Apply power by plugging the dc power source capable of 9 volts into J2 .
2. Observed Functionality:
  - a. Upon applying power, all individual LEDs including the 7 segment LED centered on the board will light up. The 7 segment unit will display an 8
  - b. The individual LEDs will advance through three levels of brightness.
  - c. The 7 segment LED will than read the number 1 simultaneously the individual LEDs will illuminate in a clockwise and counter clockwise manner around the seven segment LED respectively.
  - d. The LEDs will all flash simultaneously
  - e. All Leds will power off.
  - f. The 7 segment LED will display the number "8"
  - g. The sequence repeat incrementing the 7 segment LED from 2 through 0. Once the number "0" is reached the sequence starts again from 1.