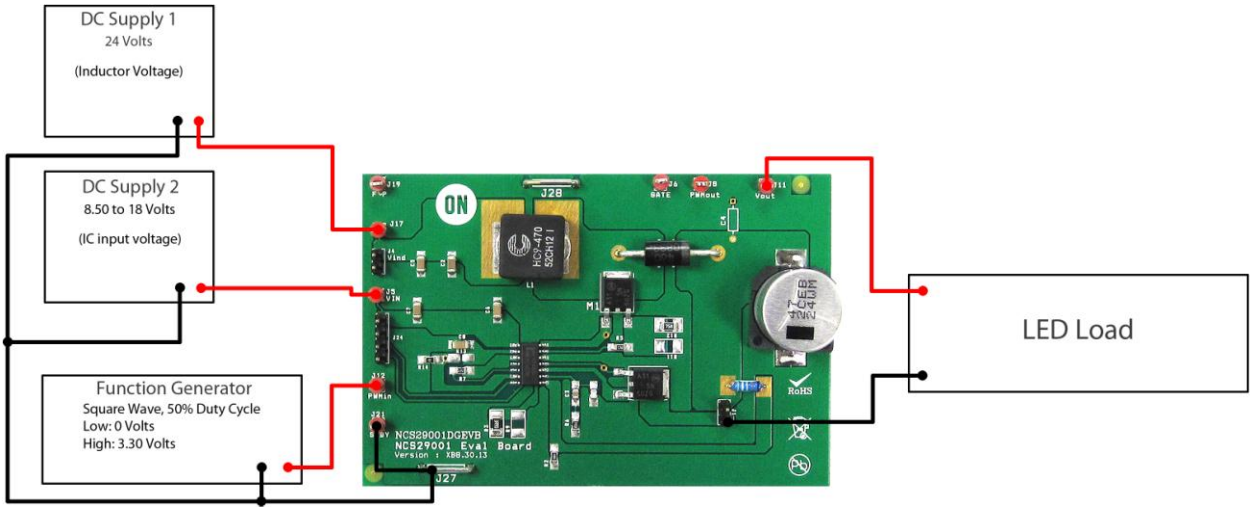
ON Semiconductor®

Test Procedure for the NCS29001DGEVB Evaluation Board



1. **Board Setup:**

- IC input voltage 8.5V to 18V
- Inductor input voltage 24V
- LED current 200 mA **(BE SURE LED CURRENT DOES NOT EXCEED 200 mA!)**
- Switching frequency 200kHz
- LED string 76V total forward voltage

2. **Power Supply:**

- Refer to diagram above for proper connections to board.
- Plug in the GND first.
- Connect output load
- Connect IC input voltage
- Connect Inductor input voltage
- Connect function generator
- Power on

3. **Enable Device Through STBY and PWMin:**

- Bring device out of standby by connecting STBY pin to ground
- Apply PWM signal centered at 1.65 V with 3.30 $V_{pk\text{-}pk}$ to PWMin (100Hz to 300Hz) to engage soft-start power up
- Adjust PWM duty cycle to change LED brightness