

# Test Procedure for the NCV7694GEVB Evaluation Board

## **Initial setup:**

Connect jumper J1 for DC/DC operation

Connect jumper JOPEN

Make sure that straps S\_DG, S\_W, S\_D2w (S\_D2ir) are connected

The trimmers PETL should be set to 2k5 and PFRL to 1k as default, but the values may be tuned by the customer.

## **Required Equipment:**

Bench power supply with current limitation of 3A minimum or with huge output capacitor

Multimeter

NCV7694GEVB board

## **Test procedure (DC/DC converter)**

- 1. Connect setup as shown above
- The current limitation should be set to the maximum.

3.

Apply flash pattern to the FLASH\_in or FLASH testpoint. (Respect maximum 3.3V on this pin)

The LEDs should respond based on the FLASH input signal. If the Flash signal will exceed 1 ms (the default setting) the LED current is turned off and FAULT is reported to the LED. Also if the flash pulses are send frequently than what is set on the PFRL, then the safety function is taken into account.

Check the current by any of LED Strings using A-meter connected instead of OLx jumper.

## **Test procedure (Open Load detection)**

Apply 14V on the supply connector.

Apply flash pattern to the FLASH\_in or FLASH testpoint. (Respect maximum 3.3V on this pin)

Open the J\_OPEN jumper during the normal operation

The LEDs should be turned off, and the FAULT indication diode should follow the flash input signal.

If the J\_OPEN jumper is recovered, the board will return to the normal behavior.

## **Test procedure (Short to the GND)**

Apply 14V on the supply connector.

Connect the J\_SH-GND jumper for short period of time and release.

The FAULT should be latched and reported

The fault can be recovered by first flash pulse which can be applied on th