



Test Procedure for the NCP383LMUAJAGEVB Evaluation Board

This test procedure is given as an example for 800mA OCP version and EN active high.

Equipments needed:

- Power supply 5V, 3A.
- 1 potentiometer 100Ω, 10W.
- 1 oscilloscope with 3 voltage probe and 1 current probe.

Set-up

- VCC = 5V
- VIN=3.3V
- Device disable, EN=5V with **ENABLE H/ENABLE L** switch.
- Connect R3, R4 to VCC (Flag pull-up) with **FLAG1&FLAG2 PULL UP** jumper.
- Connect potentiometer between **OUT1 or OUT2** and **GND** pin.

Turn-on sequence

- Enable device, EN=0V with **ENABLE H/ENABLE L** switch.

Over current protection

- Sense IN (Yellow), OUT (Blue), FLAG (Green) voltage and IOUT (Purple).
- Enable device, EN=5V with **ENABLE H/ENABLE L** switch.
- Decrease resistance value of the potentiometer until FLAG goes to 0V.

Regulation mode

- Sense IN (Yellow), OUT (Blue), FLAG (Green) voltage and IOUT (Purple).
- Enable device, EN=5V with **ENABLE H/ENABLE L** switch.
- Decrease resistance value of the potentiometer until regulation mode occurs.

Turn off

- Disable device, EN1&2=5V with **ENABLE H/ENABLE L** switch.
- Remove Vin voltage
- Remove Vcc voltage



| Symbol | Switch Description |
|--------|--------------------|
|--------|--------------------|







POWER TEST POINT

| | |
|-------------|---|
| IN | Input voltage |
| OUT1 | Output voltage 1 |
| OUT2 | Output voltage 2 |
| VCC | External supply voltage, connected to FLAG1&2 pin through R3&R4 |
| GND | Ground plane |

SIGNAL TEST POINT

| | |
|--------------|----------------------------|
| FLAG1 | Flag pin of the output 1 |
| FLAG2 | Flag pin of the output 2 |
| EN1 | Enable pin of the output 1 |
| EN2 | Enable pin of the output 2 |

SET-UP

| | |
|---|--|
| ENABLE L - ENABLE H | <p>Enable active low:</p> <p>Device enable → </p> <p>Device disable → </p> |
| FLAG1 PULL UP | <p>-To connect R3 to VCC, connect a shorting jumper on left: </p> <p>-To connect R3 to Vin, connect a shorting jumper on right: </p> |
| FLAG1 PULL UP | <p>-To connect R4 to Vin, connect a shorting jumper on left: </p> <p>-To connect R4 to VCC, connect a shorting jumper on right: </p> |
| CURRENT LIMIT | <p>-Connect a shorting jumper to short circuit R6 (or R5, R7 for additional options).</p> <p>-Do not connect a shorting jumper to take R6 into account</p> |

BOARD MARKING

| | |
|----------------------|--|
| PART NUMBER | Device Marking, please refer to NCP383 specification |
| CURRENT LIMIT | Adjustable |
| ENABLE | Active low |