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

BOARD MARKING

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