

# Test Procedure for the NCV7535EVB



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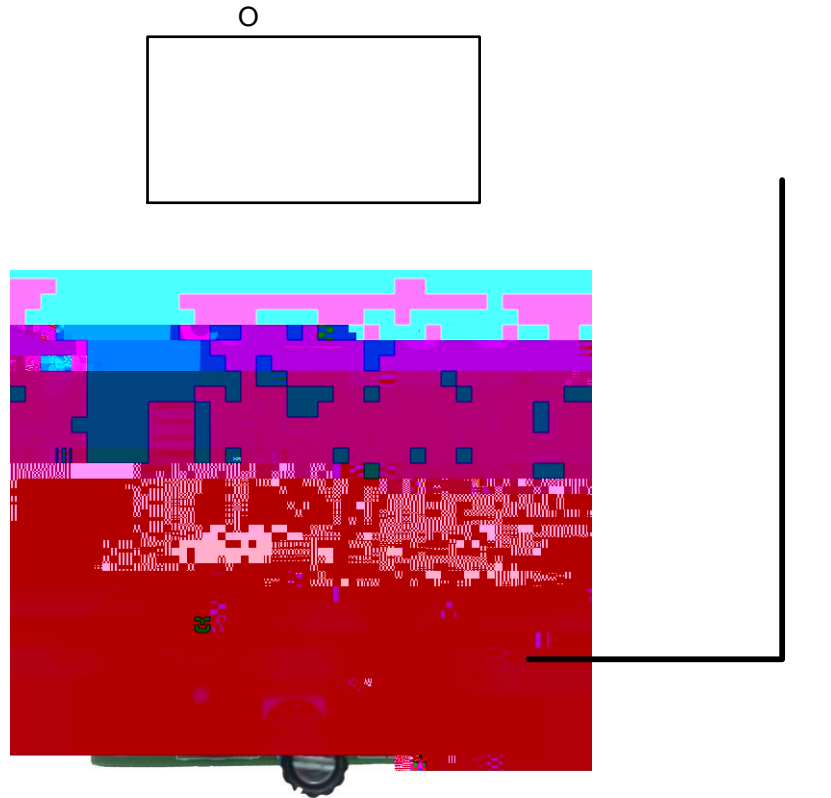


Figure 1: Test Setup Configuration

## Required Equipment

Oscilloscope  
Bench Power Supply, current capability min. 3 A, Ampermeter  
Voltmeter (alternatively free oscilloscope channel)  
PC Software for NCV7535 EVB Control  
Micro USB Cable  
NCV7535 Evaluation Board (NCV7535\_EVB\_V3)

## Test procedure Step 1 (Standalone mode):

1. Turn Pot1 left
2. Move SW1-4 to the right positions (OFF)
3. Connect supply
4. Check  $I_{BAT}$
5. Check OUT1/2 state
6. Check  $V_{CHP}$
7. Check  $V_{sen}$  voltage
8. Turn Pot1 right
1. Check OUT1/2 state
2. Move SW1 to the left position (ON)
3. Check OUT1/2 state

**Table 1: Desired Results**

$I_{BAT} = I_{BAT\_SA}$
OUT1/2 = PWM duty-cycle per Pot1 position
$V_{CHP} = V_{CHP}$
$V_{sen} = V_{sen\_off}$ (when duty-cycle 0%)
$V_{sen} = V_{sen\_on}$ (when duty-cycle 100%)
LED1 off, LED2 on, LED3 off, LED4 off

### Test procedure Step 2 (PC Mode, HS1 + LS2 on):

1. Connect USB
2. Start NCV7535 Control Software
3. After connected virtual COM port appears, click “Connect” button
4. Click “Run Forward” button in “Basic” window
5. Move “Speed Control” slider
6. Check OUT1/2 state

**Table 2: Desired Results**

OUT1/2 = PWM duty-cycle per Duty slider position
LED1 on, LED2 off, LED3 off, LED4 off

### Test procedure Step 4 (PC Mode, HS2 + LS1 on):

1. Click “Stop” button in “Basic” window
2. Click “Run Backward” button in “Basic” window
3. Move “Speed Control” slider
4. Check OUT1/2 state

**Table 3: Desired Results**

OUT1/2 = PWM duty-cycle per Duty slider position
LED1 on, LED2 off, LED3 off, LED4 off

### DC Characteristics

	MIN	TYP	MAX
VCC ON	4.9 V	5 V	5.1 V