



Test Procedure for the NCN1154MUTGEVB Evaluation Board

Equipment needed

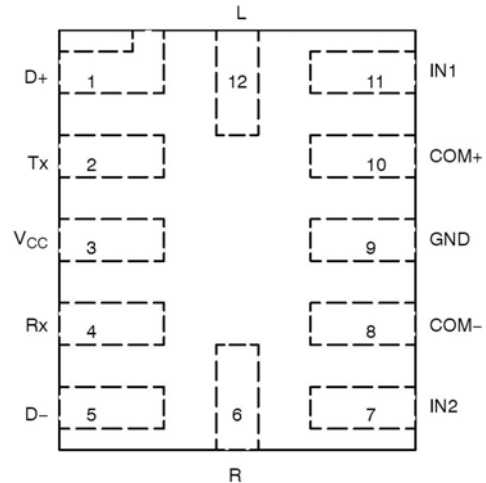
- Power Supply
- Digital Ohm Meter
- Desktop or Laptop with Windows XP or higher
- USB Key
- USB Headset

BACKGROUND: IN1 & IN2 TRUTH TABLE

IN1	IN2	D+, D-	Rx, Tx	L, R	L, R SHUNT
0	0	Hi Z	Hi Z	Hi Z	ON
0	1	ON	Hi Z	Hi Z	ON
1	0	Hi Z	Hi Z	ON	OFF
1	1	Hi Z	ON	Hi Z	ON

Note: Please refer to the device pin out below for the following impedance measurements. These measurements must only be taken for the first few boards to insure assembly quality. Only steps 1, 4, 6, 7, and 9 must be done for the remaining boards.

1. Connect the power supply at 3.6 V from VCC to GND. The supply current should be less than 35 uA.
2. Turn SW1 and SW2 to G (ground) position.
3. The impedance measured from COM+ to D+, Tx and L is over 10 M Ω .
The impedance measured from COM- to D-, Rx and R is over 10 M Ω .
The impedance measured from L & R to GND is closed to 118 Ω .
4. Turn SW1 to + (VCC) and keep SW2 to G (ground).
5. The impedance measured from COM+ to D+ is closed to 5.5 Ω .
The impedance measured from COM- to D- is closed to 5.5 Ω .
The impedance measured from COM+ to Tx and L is over 10 M Ω .
The impedance measured from COM- to Rx and R is over 10 M Ω .
The impedance measured from L & R to GND is closed to 118 Ω .
6. Place a USB key connected to COMMON terminal (J6) and connect the USB terminal (J4) to the laptop or desktop.
The device is being recognized.
Remove both USB cable and USB key for next measurement.





7. Keep SW1 to + (Vcc) and turn SW2 to + (Vcc)
8. The impedance measured from COM+ to Tx is closed to 5.5 Ω .
The impedance measured from COM- to Rx is closed to 5.5 Ω .
The impedance measured from COM+ to D+ and L is over 10 M Ω .
The impedance measured from COM- to D- and R is over 10 M Ω .
The impedance measured from L & R to GND is closed to 118 Ω .
9. Place a USB key connected to COMMON terminal (J6) and connect the UART terminal (J5) to the laptop or desktop.
The device is being recognized.
Remove both USB cable and USB key for next measurement
10. Turn SW1 to G (ground) and keep SW2 to + (Vcc)
The impedance measured from COM+ to L is closed to 3 Ω .
The impedance measured from COM- to R is closed to 3 Ω .
The impedance measured from COM+ to D+ and Tx is over 5 M Ω .
The impedance measured from COM- to D- and Rx is over 5 M Ω .
The impedance measured from L & R to GND is over 5 M Ω .

End of test.