



## Test Procedure for the NS5S1153EVB Evaluation Board

### Equipment Needed

- Power Supply
- Digital Ohm Meter
- Desktop or Laptop with Windows XP or higher
- USB Memory Stick
- USB Type A to USB Type B

**BACKGROUND: ASEL AND VBUS TRUTH TABLE**

A <sub>SEL</sub>	V <sub>BUS</sub>	L, R	D <sub>+</sub> , D <sub>-</sub>	L, R Shunt
Low	Low	ON	OFF	OFF
Low	High	OFF	ON	ON
High	X	ON	OFF	OFF

### Test Procedure:

1. Connect ASEL to '0' (J4) and VBUS\_CTRL to '1' (J5).
2. Connect the power supply at 3.6 V from VCC to GND. The supply current should be around 20  $\mu$ A.
  - The impedance measured from COM+ (TP3) to D+ (TP5) is over 10 M $\Omega$
  - The impedance measured from COM- (TP4) to D- (TP6) is over 10 M $\Omega$
  - The impedance measured from COM+ (TP3) to R (TP7) is close to 3  $\Omega$ .
  - The impedance measured from COM- (TP4) to L (TP8) is close to 3  $\Omega$
3. Insert a USB cable from USB terminal (J3) to the laptop or desktop.
  - The impedance measured from L (TP8) and R (TP7) to GND is closed to 118  $\Omega$ .
4. Place a USB Memory Stick connected to USB terminal (J1). The device is being recognized.