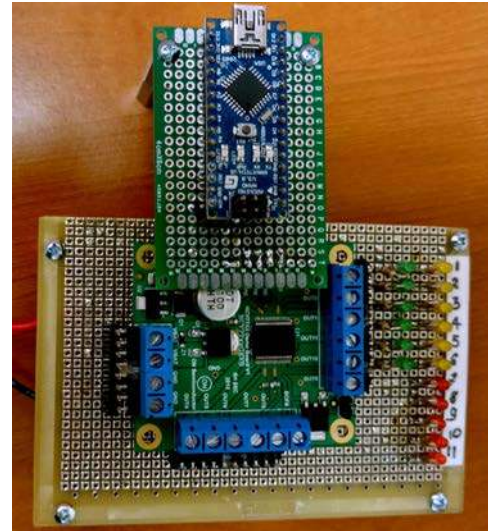
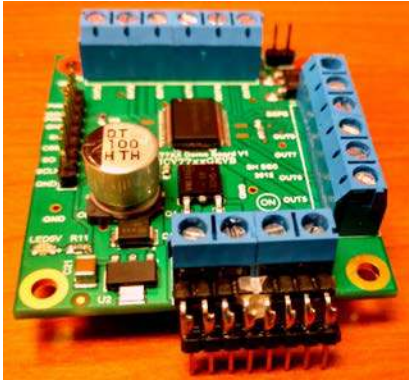


## Test Procedure for the NCV7707GEVB Evaluation Board

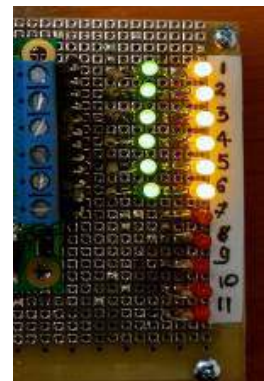


1. Attach the connectors on the NCV7707 board output terminals.
2. Plug the module in on the board.
3. Mount the Arduino board on the NCV7707 EVB.
4. Attach the USB Cable to Arduino board and make sure the USB drivers are installed.
5. Apply power 12V.
6. Open a Serial Terminal like PUTTY.exe with baudrate of 38400 and select the device's COM port.

**NOTE: Using Serial Terminal is not a mandatory part for testing the board. Testing can be done by just looking at the output LED patterns.**

7. As the terminal opens the microcontroller will reset itself and loop through the program as follows:
  - a. Read the device information from NCV7707 and display it on the Serial terminal. All the outputs are in high impedance mode, thus both LEDs Green and Yellow for each output with half bridge(Outputs 1,2,3,4,5 and 6) will be lit.

```
COM9 - PuTTY
.....
ID Header: 4300h
Version: 400h
Product Code: 7707h
SPI Frame ID: 0h
.....
```



- b. Enable outputs 1, 3, and 5 only. In this case high side MOSFET in the half bridge is driving. Remaining all the outputs are in high impedance mode.

```
.....  
High Side Drive  
Outputs: 1, 3, 5  
.....
```

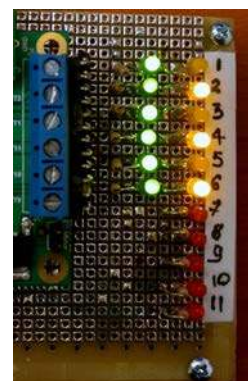


- c. Enable outputs 2, 4, and 6 only. In this case high side MOSFET in the half bridge is driving. Remaining all the outputs are in high impedance mode.



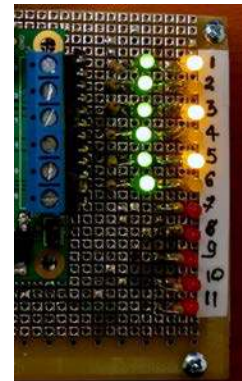
- d. Enable outputs 1, 3, and 5 only. In this case low side MOSFET in the half bridge is driving. Remaining all the outputs are in high impedance mode.

```
.....  
Low Side Drive  
Outputs: 1, 3, 5  
.....  
High Side Drive  
Outputs: 2, 4, 6  
.....
```



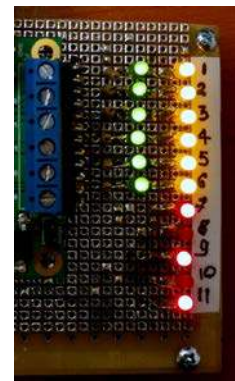
- e. Enable outputs 2, 4, and 6 only. In this case low side MOSFET in the half bridge is driving. Remaining all the outputs are in high impedance mode.

```
.....  
Low Side Drive  
Outputs: 2, 4, 6  
.....
```



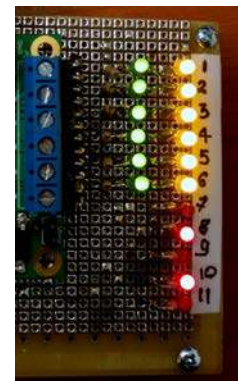
- f. Enable outputs 7, 9, and 11 only. In this case pulled up MOSFET is driving. Remaining all the outputs are in high impedance mode. Red LED with respect to the output will lit.

```
.....  
Pull Ups Drive  
Outputs: 7, 9, 11  
.....
```



- g. Enable outputs 8 and 10 only. In this case pulled up MOSFET is driving. Remaining all the outputs are in high impedance mode.

```
.....  
Pull Ups Drive  
Outputs: 8, 10  
.....
```



And the program loops through all the steps ove