

Malcolm McKellips

ECEN 3600

Professor Graham

Spring 2020

Description for Testing Malcolm's Lab 7

Project: I did the LEUART RX option for lab 7 and did not implement any of the extra credit assignments. As such, the only test that is necessary for my assignment is to verify proper functionality of the LEUART RX.

TDD Test: My leuart_rx_test() TDD function can be found in my leuart.c module and it is called by app.c on system start, so requires no input from the tester. You will notice on system start and reset that all of the strings from the leuart_rx_test are transmitted over the BLE module if you are connected on your phone, so you can disregard these.

Connecting: To connect to the BLE module, simply use your phone's BLE terminal app. Your BLE module will be named whatever you named it last because my project has the BLE test disabled.

Running/Testing: Run the simplicity project in the profiler and flip the switch from AEM to BAT and then back to AEM to reset the device for proper profiling. Then, deliver the following commands with the BLE terminal app to change between displaying the temperature in F and C.

Commands:

Change to Fahrenheit command: "#TEMPF!"

Change to Celcius command: "#TEMPC!"

Notice that Start Frame = "#" and Signal Frame = "!"