

More UI

- GUI Advanced Comm Tab basically Putty/Serial I/F
 - Lessons learned from home networking
 - If you can setup the WiFi in your house, you can prototype with a few steps

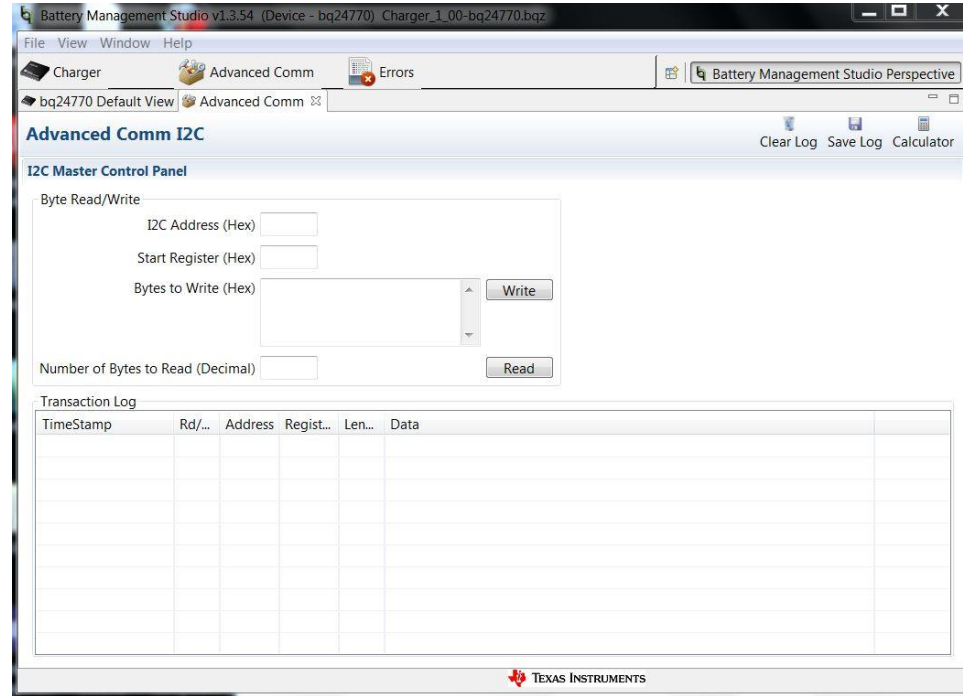
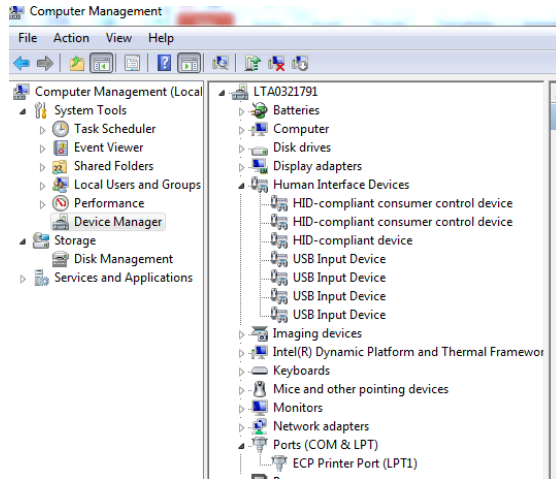
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Agenda

- Fundamentals (mostly for Analog)
 - Implementing necessary prototyping functions such clocks/GPIO, Read A/D, I2C/SMBus, etc.
 - Seamless interface of various Analog EVM's for system “proof of concept”
 - Standalone UI - Button (GP Input - GPIO), LCD Display (“Hello”), Music, Serial Interface (Putty)
- More UI (i.e. GUI Advanced Comm Tab basically Putty/Serial I/F) - Lessons learned from home networking (if you can setup the WiFi in your house, you can prototype with a few steps)
- EP - Embedded prototyping (mostly for Digital)
 - Wired and Wireless Control
 - Use of TI Cloud Computing Tools for prototype
- Advanced Topics
- Conclusion Demos (Simple and Complex)

More UI (Revisit serial interface)

- Lessons learned from Analog GUIs
 - Spoiled from using GUI (WiFi Router)
 - Can use Advanced Comm Tab or similar
 - OK to type a few steps in Putty if needed for development?
 - HID/COM x on PC



Available commands: (Need LOG)

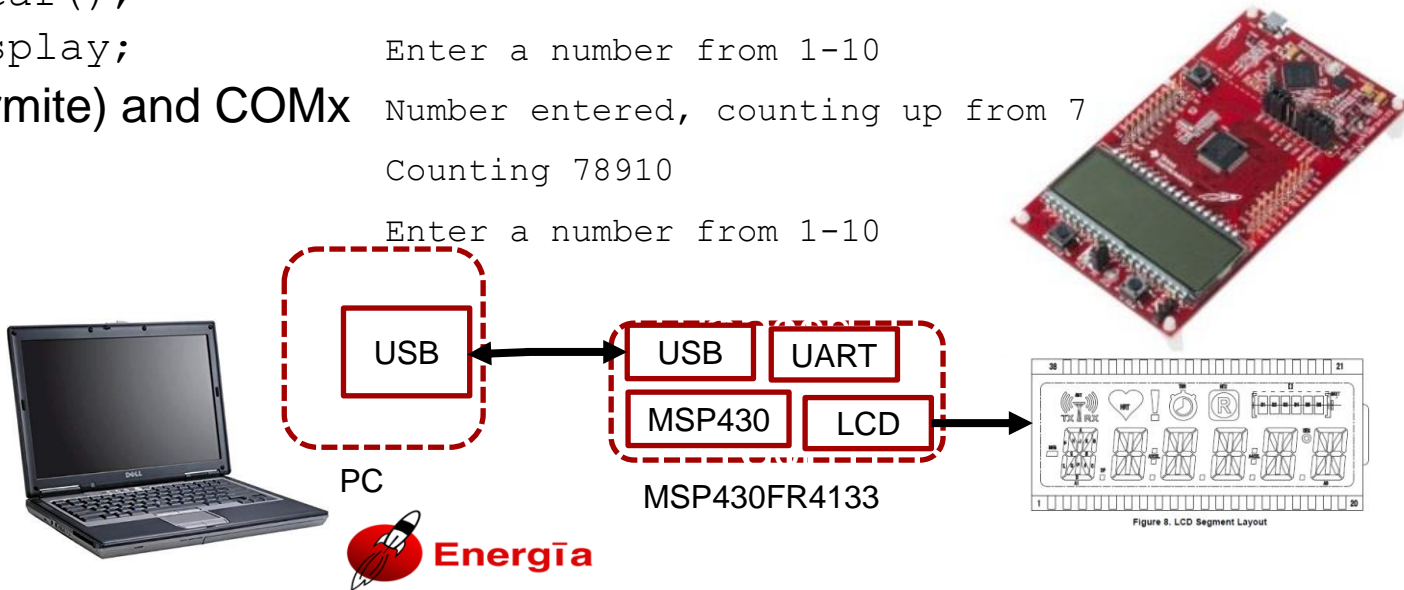
```
>>I2C_Write 0x12 0x1 0xAB
```

Demo – Revisit Serial I/F (Count on LCD Display)

– Step-by-step Functionality (Demo)

• User Interface (Display) – Energia Serial Event (“Hello LCD”)

- //initialize LCD Hello World
- myLCD.init(); ABCDE - Alpha
- myLCD.clear(); 12345 - Numeric
- myLCD.display; Enter a number from 1-10
- Putty (Termite) and COMx Number entered, counting up from 7
- Counting 78910
- Enter a number from 1-10



Revisit serial interface – Setting up WiFi example

- Smartphone/PC/Router – click on SSID -> Spoiled from using GUI
- Serial Interface - OK to type a few steps in Putty if needed for development?

help

=====

Available commands:

```
help          scan          setpolicy    wlanconnect
wlan_ap_start wlandisconnect ping          send
recv         createfilter  enablefilter  disablefilter
deletefilter enablewlan    mDNSadvertise mDNSquery
radiotool    p2pstart     p2pstop      clear
```

=====

user@CC3220: scan -n 10

```
-----scan -n 1
|          SSID          |          BSSID          | RSSI | Ch | Hidden | Security |
-----|-----|-----|-----|-----|-----|-----|-----|
1 | TP-LINK_33C4BE        | 20:25:64:f5:a9:b8 | -70  | 1  | NO     | WPA/WPA2 |
2 | 5TH AVE Secure        | ac:86:74:ad:1e:03 | -86  | 1  | NO     | WPA2      |
3 | halekoa75            | ac:a3:1e:f9:11:c0 | -59  | 11 | NO     | WPA2      |
4 | externalhotspot84    | ac:a3:1e:f9:11:c1 | -59  | 11 | NO     | WPA2      |
5 | net4guest            | ac:a3:1e:f9:11:c2 | -59  | 11 | NO     | WPA2      |
-----scan -n 1
```

user@CC3220: wlanconnect -s TP-LINK_33C4BE

[WLAN EVENT] STA Connected to the AP: TP-LINK_33C4BE , BSSID: f8:d1:11:33:c4:be

[NETAPP EVENT] IP set to: IPv4=192.168.1.100 , Gateway=192.168.1.1



CC3220 SimpleLink SDK Wi-Fi
(WiFi STA)

Simplink SDK Example:
Network Terminal

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 - Standalone UI - Button (GP Input - GPIO), LCD Display (“Hello”), Music, Serial Interface (Putty)
- More UI (i.e. GUI Advanced Comm Tab basically Putty/Serial I/F) - Lessons learned from home networking (if you can setup the WiFi in your house, you can prototype with a few steps)
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- Conclusion Demos (Simple and Complex)