Advanced Topics

- USB (Native) UART (MSP430F5529 Launchpad) Energia USBSerialExample
- Multiblink(Use of TI-RTOS) Energia Multitasking (Red+Green+Blue = White LED)

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Advanced Topics

- Energia Libraries
  - Educational BoosterPack MKII (Built-In Energia18)
  - Neopixel/WS2811 Driver (Copy library into Energia18)
  - Seeed Grove Starter Kit (Add from GitHub)
  - TI BLE for CC2650 Boosterpack (Add from GitHub)
- Layered Energia Code
- Porting AdaFruit Neopixel to MSP432
- Single-step Debug of Energia using CCS (even assembly language)
- Allows Energia<->CCS fluid transitions
- USB (Native) UART (MSP430F5529 Launchpad) Energia USBSerialExample
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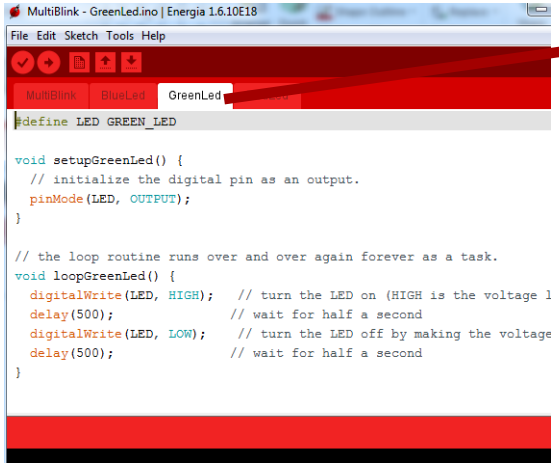
NativeUSB UART, Energia Multitasking

- With MSP430F5529 LaunchPad (MSP-EXP430F5529LP) and USB Devpack
  - serialevent (UART Echo) – default 9600 baud
  - USBSerialExample (USB UART Echo) – Need USB_config files
  - USBSerialExample2 (UART Echo <-> USB UART i.e. CDC Client Echo)

Need Putty or other Terminal program

MSP430F5529 LP

- Energia Multitasking (just TI RTOS) – MultiBlink with EnergiaMT (TI-RTOS): https://www.youtube.com/watch?v=0f8brpzvdD0



One tab for each LED (Red+Green+Blue = White LED)

MSP432P401r LP

Agenda

- Fundamentals (mostly for AFA)
  - Implementing necessary prototyping functions such clocks/GPIO, Read A/D, I2C, etc.
  - Seamless interface of various Analog EVM's for customer "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 DFA)
  - Wired and Wireless Control
  - Use of TI Cloud Computing Tools for prototype

- Advanced Topics
- Conclusion Demos (Simple and Complex)