Conclusion

Conclusion / Call to Action

Conclusion Demos

- (Simple) Drive <u>UCC28070</u> PFC Controller MSP430 (Revisit Square Wave)
- (Complex) Neopixel controlled wirelessly from iPad (Fun)

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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)



Conclusion

- Conclusion / Call to Action
 - Keep prototyping with the ideas mentioned here using various tools (i.e TI Cloud Computing)
 - Especially analog EVMs connected to Launchpads (i.e. I2C/SMBus)
 - Influence TI to make rapid prototyping easier (command line interface over GUI?)
 - Have Fun!
- Conclusion Demos
 - (Simple) Drive UCC28070 PFC Controller MSP430 (Revisit Square Wave)
 - (Complex) Neopixel controlled wirelessly from iPad (Fun)



Rapid Prototype Examples

- PFC (Power Factor Correction) Controller
 - Generate clocks for UCC28070 PLC ~100 kHz, 180 degrees out of phase
- SMBus (I2C) setup for Battery Charger
 BQ24725a read Mfg ID and Device ID

Drive Neopixel LED's for Appliance

• Amazon Alexa: Amazon Tap Button when no wake word









