

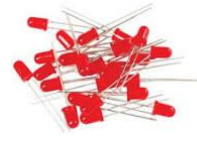
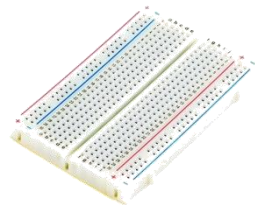
# SPI I/O Expander

Housekeeping

MSP430

# Hardware Needed for this Example Code

- MSP430FR2433 LaunchPad Development Kit
- Breadboard (optional)
- LEDs / Resistors (optional)
- Jumper wires (optional)



MSP430FR2433 LaunchPad™ Development Kit

MSP-EXP430FR2433

 Description & Features

 Technical documentation

 Support & Training

 Order Now

## Key Document

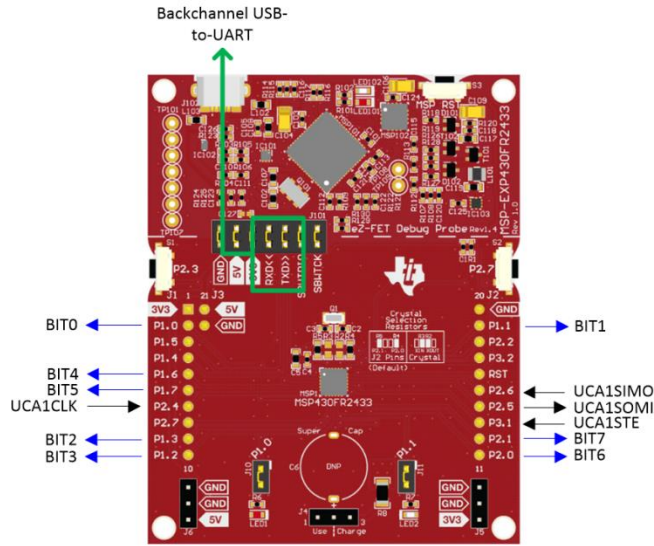
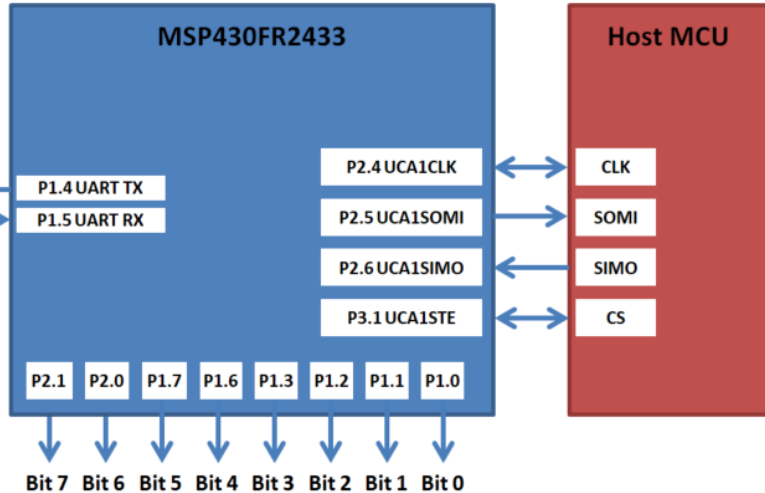
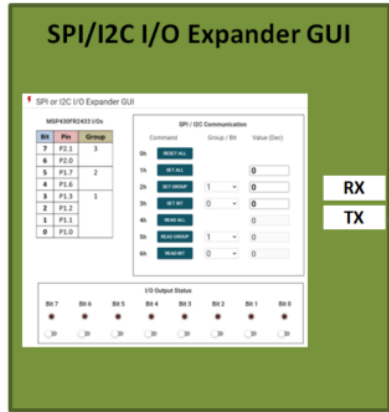
 [MSP430FR2433 LaunchPad Development Kit \(MSP-EXP430FR2433\) User's Guide](#)  
(PDF 2945 KB)  
25 Oct 2017

 [MSP-EXP430FR2433 Software Examples and Design Files](#)

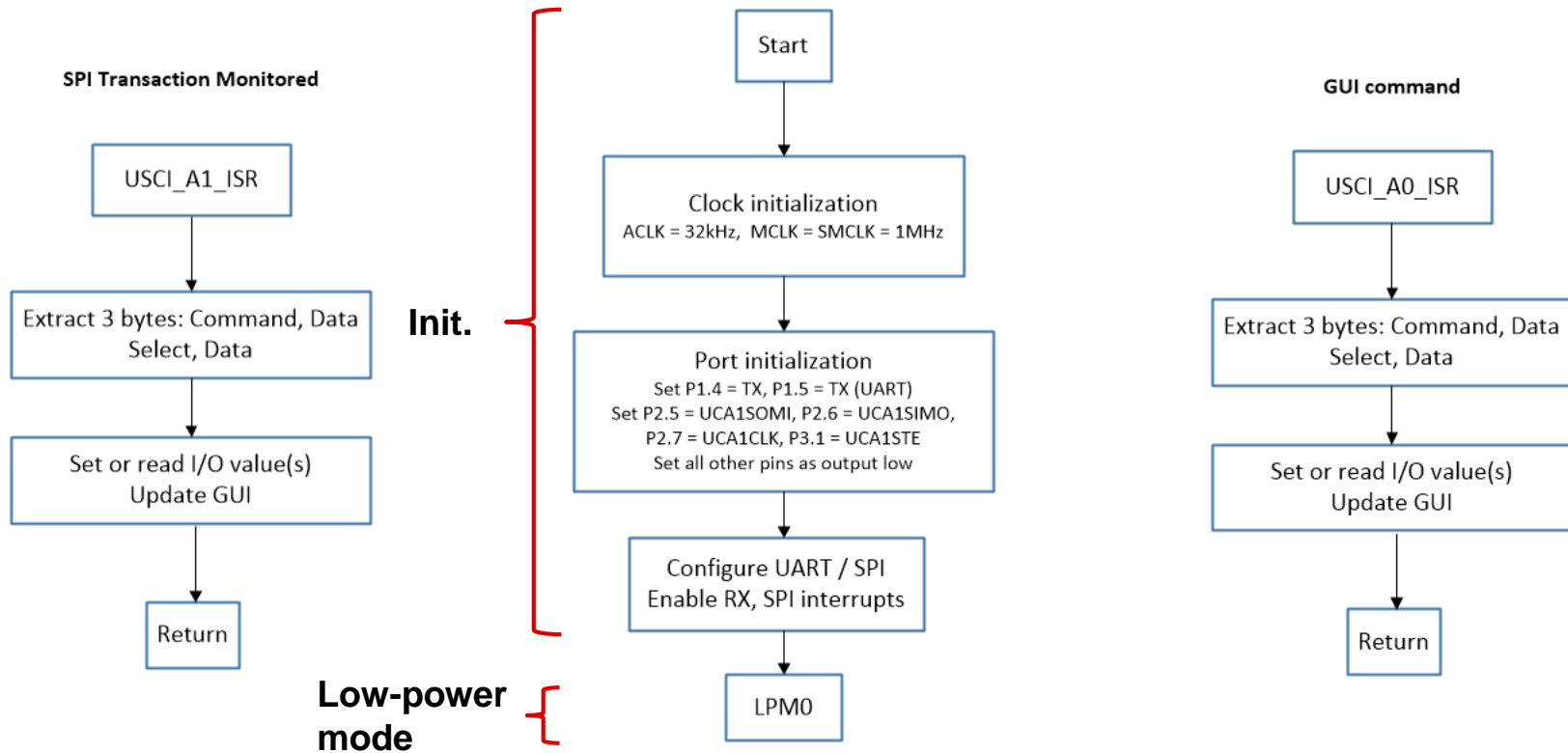
[» View All Technical Documents \(4\)](#)



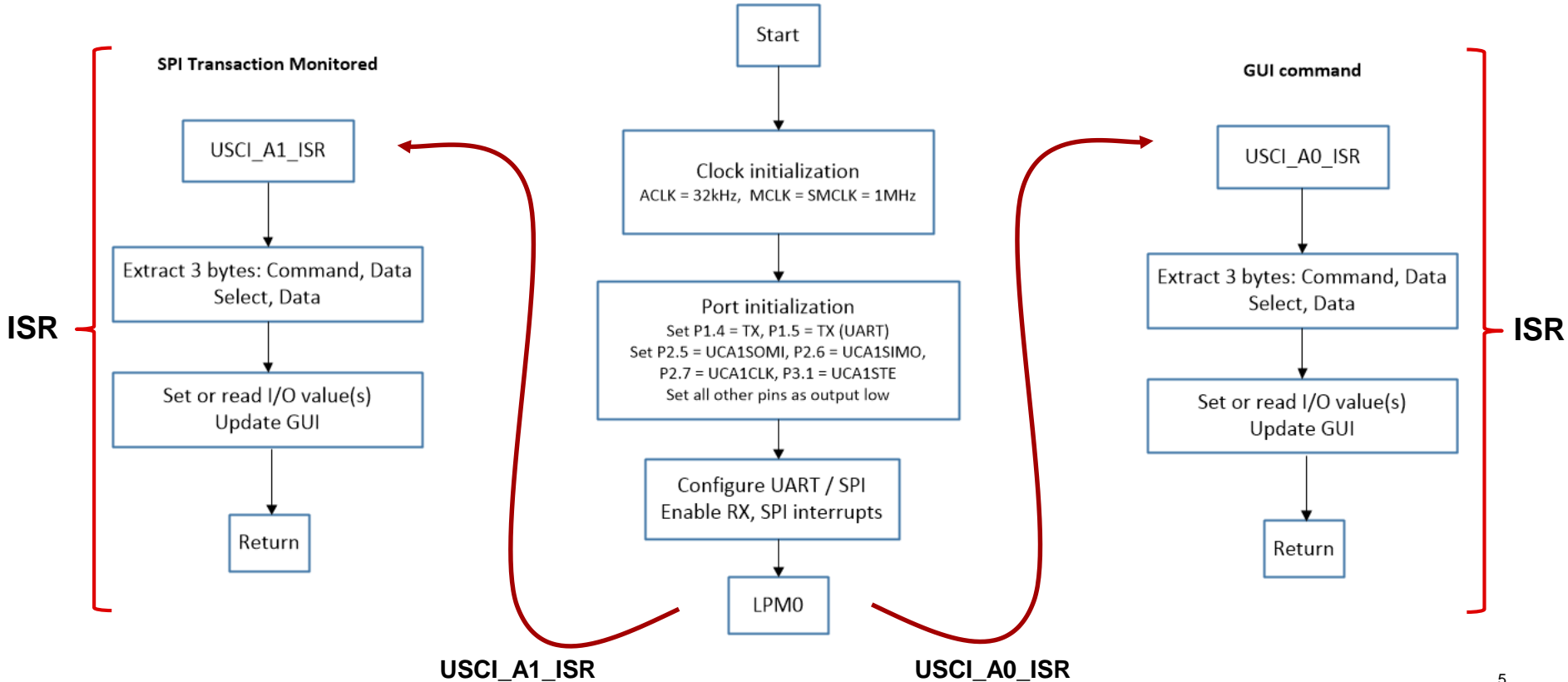
# System Overview and Hardware Connections



# Example Code Flow



# Example Code Flow



# Thanks for watching!

**MSP430FR2433:** <https://www.ti.com/product/MSP430FR2433>

**MSP430FR2433 LaunchPad:** <https://www.ti.com/tool/MSP-EXP430FR2433>

**SPI I/O Expander Tech Note:** <https://www.ti.com/lit/pdf/slaa985>

**SPI I/O Expander Source Code:** <https://dev.ti.com/tirex>

**GUI Composer:** <https://dev.ti.com/gc/>