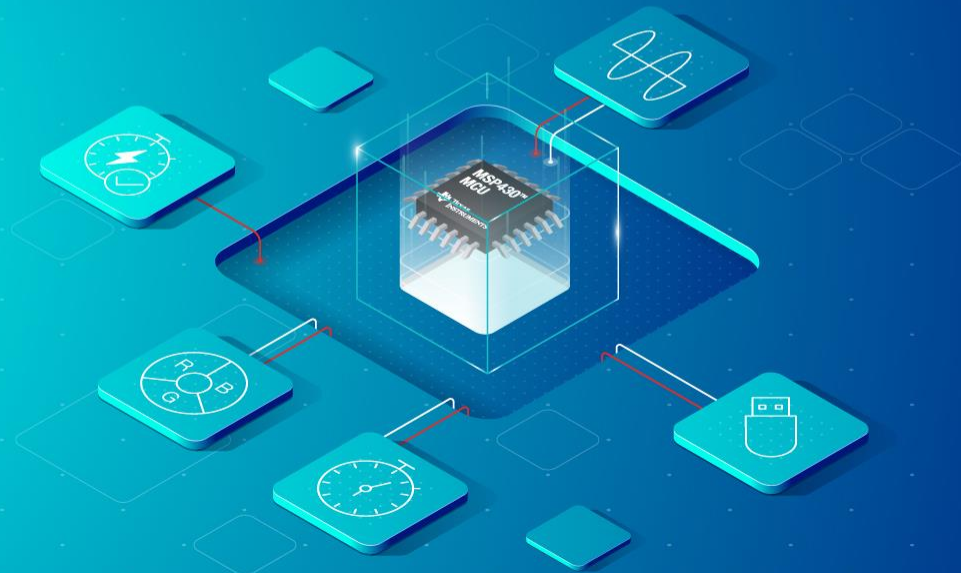


# MSP HOUSEKEEPING MCUs



**BUILDING  
AUTOMATION  
DIGITAL I2C  
SENSORS**

# Hardware Needed for this Example Code

- MSP430FR2433 LaunchPad Development Kit
- BP-BASSENSORSMKII BoosterPack module
- Jumper wires
- 5pin ribbon cable



## BP-BASSENSORSMKII

Building automation sensors BoosterPack module

Order now

Overview | Order & start development | Technical documentation | Support & training

### Overview

[Description & features](#) | [Supported products](#)

The BP-BASSENSORSMKII BoosterPack plug-in module is an easy way to add digital sensors to your LaunchPad development kit. MCU Launchpad developers can use this BoosterPack module to start developing sensor applications using the on-board temperature, humidity, ambient light & accelerometer, magnetometer and Hall-effect sensors.

#### Features

- TI HDC2080 temperature and humidity sensor.
- TI TMP117 ultra-high accuracy temperature sensor with breakout board.
- TI DRV5055 Hall effect sensor.
- TI OPT3001 ambient light sensor.
- Bosch BMI160 inertial measurement unit.
- BMM 150 magnetometer.
- Works with TI LaunchPad.



## 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 \(4\)](#)



# Hardware Connections

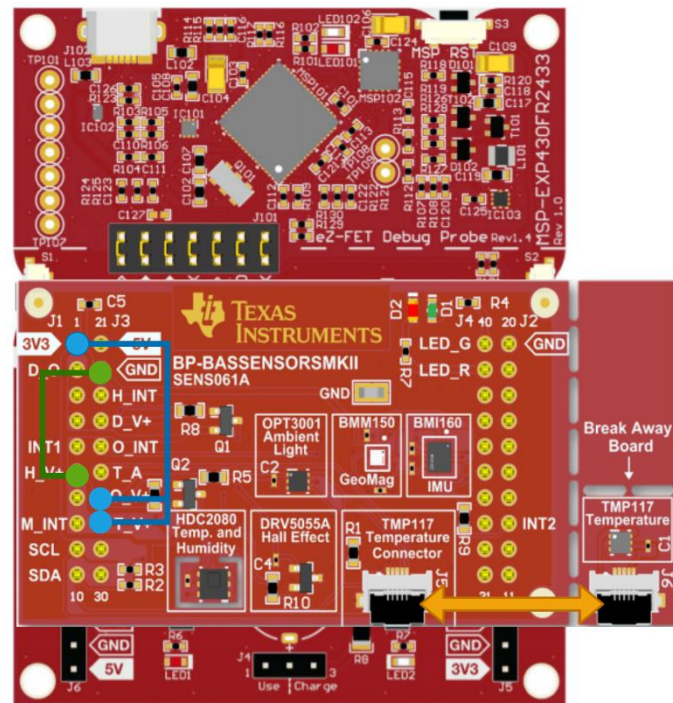
**Step1:** Plug BP-BASSENSORSMKII BoosterPack in MSP-EXP430FR2433 launchpad

**Step2:** Connect headers on BP-BASSENSORSMKII

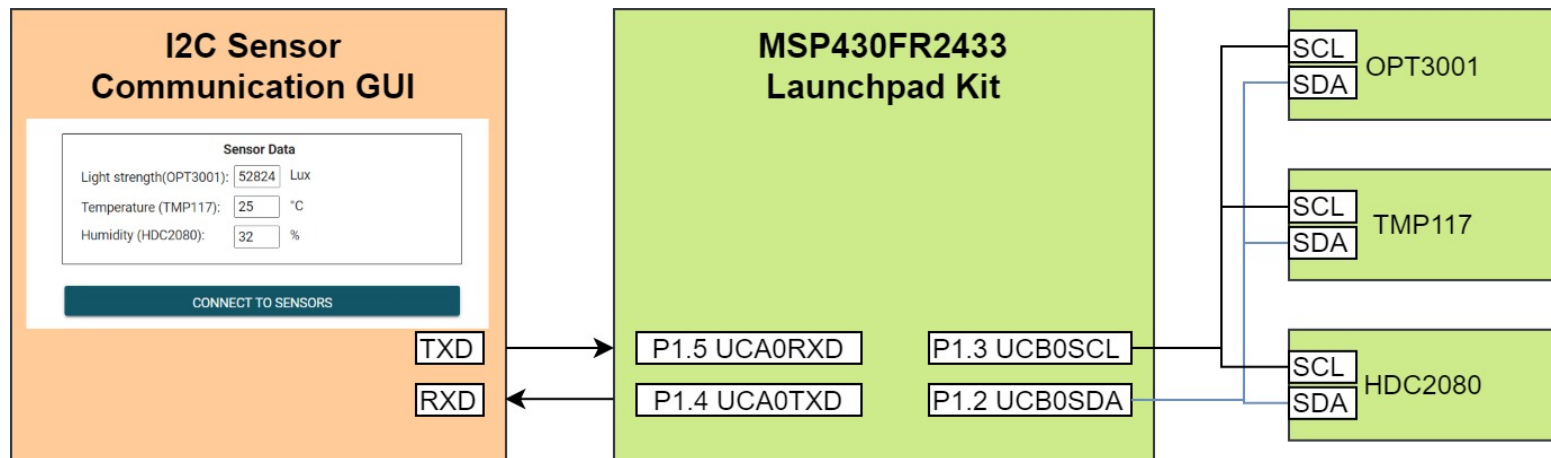
- Connect J1 to J27 and J28
- Connect J23 to J6

**Step3:** Connect connectors on BP-BASSENSORSMKII

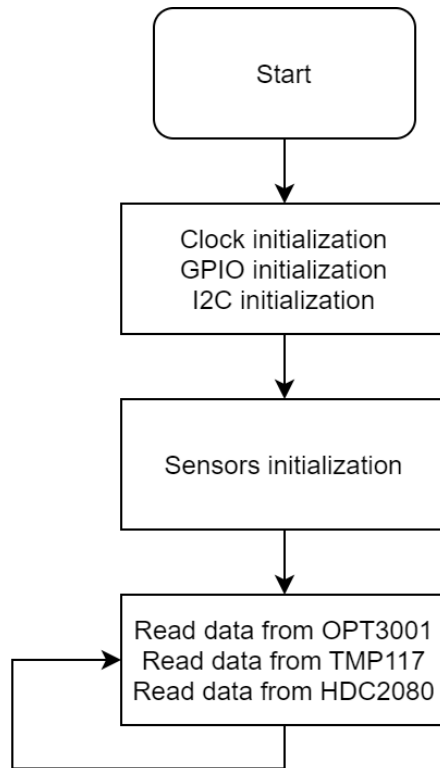
- Connect J5 to J6



# System Overview



# Example Code Flow (Without GUI)



# Thanks for watching!

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

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

**BP-BASSENSORSMKII BoosterPack:** <https://www.ti.com/tool/BP-BASSENSORSMKII>

**[I2C Sensor Communication Using MSP430FR2433 Tech Note](#)**

**[I2C Sensor Communication Using MSP430FR2433 Source Code](#)**

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