Basic Motion Sensor

Welcome back to Cypress Academy, PSoC 6 101. Now that we have the fundamentals down for interfacing with the thermistor, lets focus now on the motion sensor.

The motion sensor that’s on the E-ink display shield board is a 6-axes motion sensor from Bosch, the IMU160. To communicate with this sensor, a digital interface is required, so for this lesson, I’ll be using the I2C master component to communicate and receive data from this sensor.

So lets get started! Lets create a new project, I’ll call it Basic Motion Sensor. Let’s drag and drop the I2C component in our schematic, set our I2C pins, set the data rate, write some code, program and test

[Create a new project for showing basic I2C master component]

[Add in components (I2C) for motion sensor, describe, API/PDL]

[Add the firmware]

[Build, run, demo]

Let’s use the Bridge Control Panel to read back the data from the motion sensor using the following command line r xx xx xx xx xx xx xx. Now we got the I2C master working for the motion sensor. Next step, implement what we did for the thermistor and motion sensor to our BLE remote controller.

You can post your comments and questions in our PSoC 6 community or as always you are welcome to email me at alan\_hawse@cypress.com or tweet me at @askioexpert with your comments, suggestions, criticisms and questions.