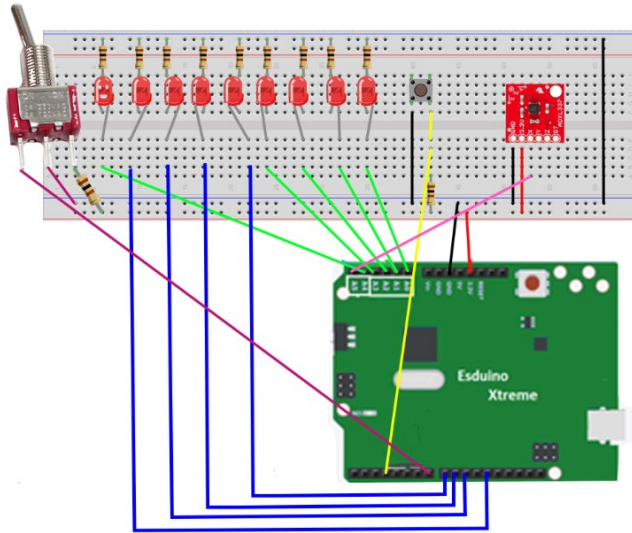


User Manual-Analog-to-Digital Conversion

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1. Open the Code Warrior, select right device and port. Select the one that support float and double.
2. Copy the code from appendix and SCI file and paste to the code warrior.
3. Connect the ESDX like this:



4. You might need a breadboard, several jumper wire, one tilter, one switch, one button, several resistors and 9 LEDs.
5. After setting them up, you can open realterm to check the communicate port. Usually, the port is 2,3 or 5, and baud rate is 9600. (If you open the realterm and see unreadable code, just type the right rate and port and click **change**.) You should see the output now, which should be around 530 when the tilter is horizontal, 630 when the tilter is vertical. You can also see angle which shows on LED, turn on the switch which you can see MODE1 output.
6. Now close the realterm, open the MATLAB, run the code warrior again. (Don't forget to close the old window, or you will fail to run the code.)
7. Open the MATLAB file, double check the port number, change to the one that you used on realterm.
8. Delete the `SCI_OutUDec(angle); OutCRLF();` Or you might get some wrong result.
9. You should see the plot and how it will change due to the time and tilt level.