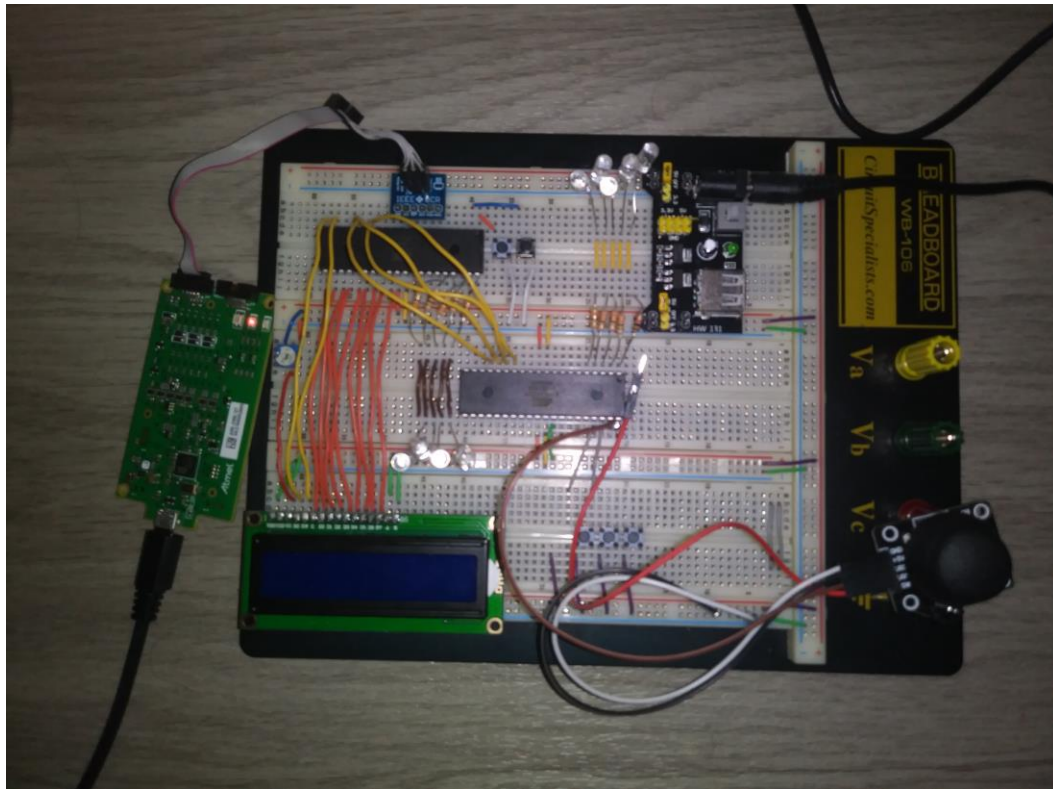
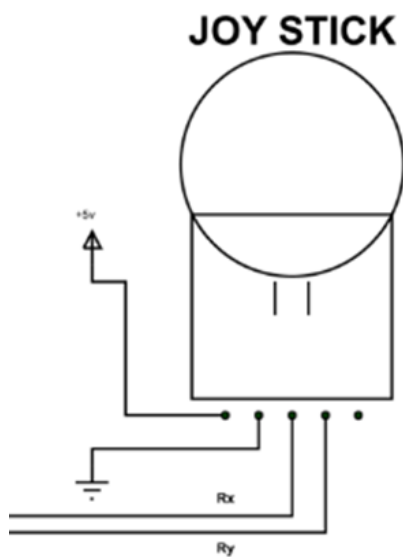


Breadboard Configuration (picture)



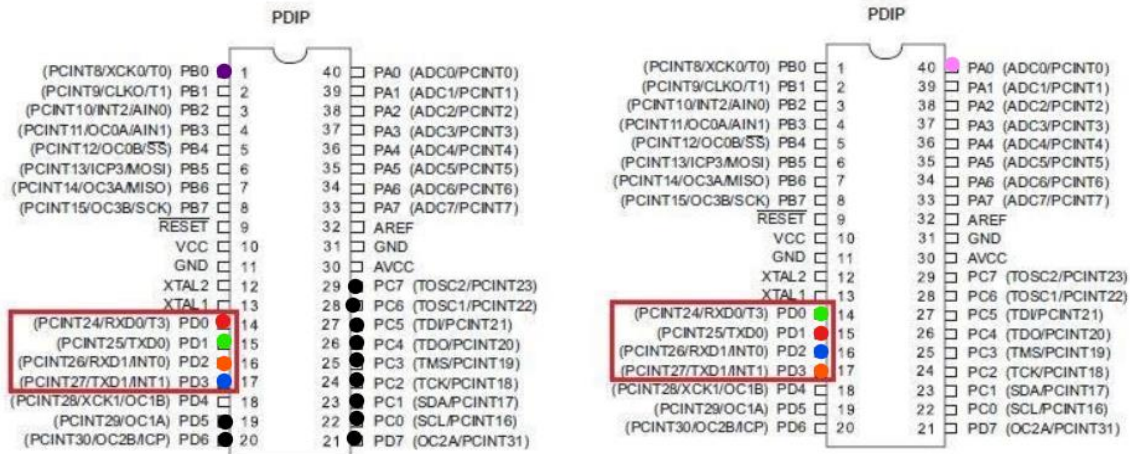
The joystick above is connected to GND, 5V, and PA0 on the bottom microcontroller. The Start button is connected to PB0 on the top microcontroller.



(Rx->PA0)

LCD Microcontroller

Joystick Microcontroller



The red box shows how the USART pins are connected between the microcontrollers  
 The pink dot shows the pin where the Microcontroller connects to the joystick  
 The purple dot shows the pin where the Button is connected to the other Microcontroller  
 The Black dots are the pins that are connected to the LCD.



LCD PIN #	Symbol	Function	Connection
1	VSS	Power supply (For LCD contrast)	GND
2	VDD		5V
3	V0		Potentiometer
4	R/S	H: Data, L: Instr	PD6
5	R/W	H: Read, L: Write	<del>GND</del>
6	E	Enable	PD7
7-14	DBn	Data bus	PCn
15	A	Backlight	5V
16	K		GND

Summarized from datasheet

Figure 1: Functional LCD

These are the connections for the LCD

**Note that R/W is connected to PD5 instead of GND**