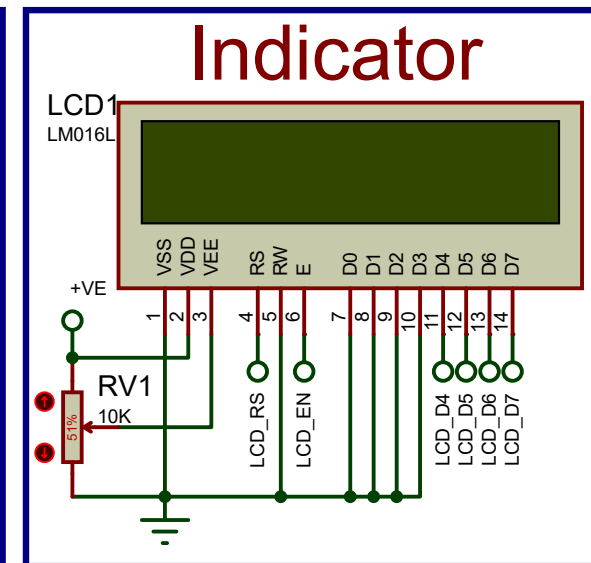
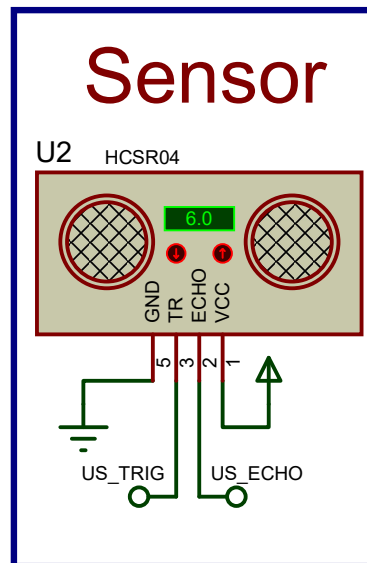
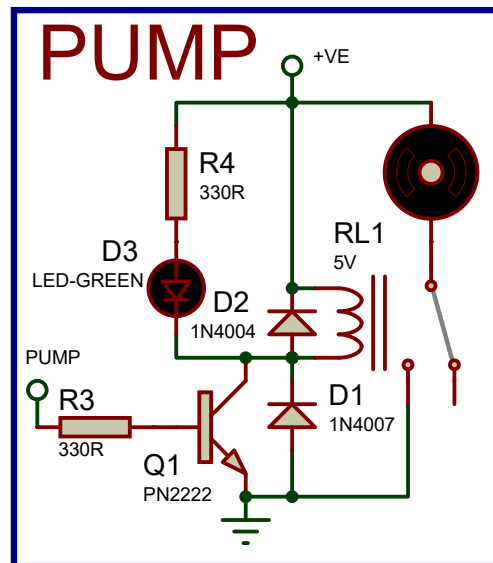
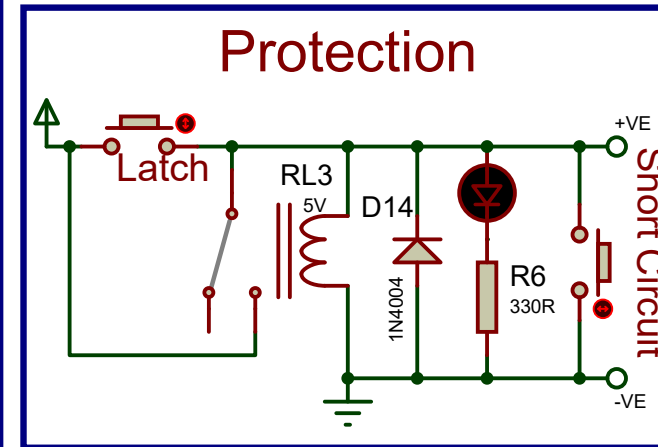
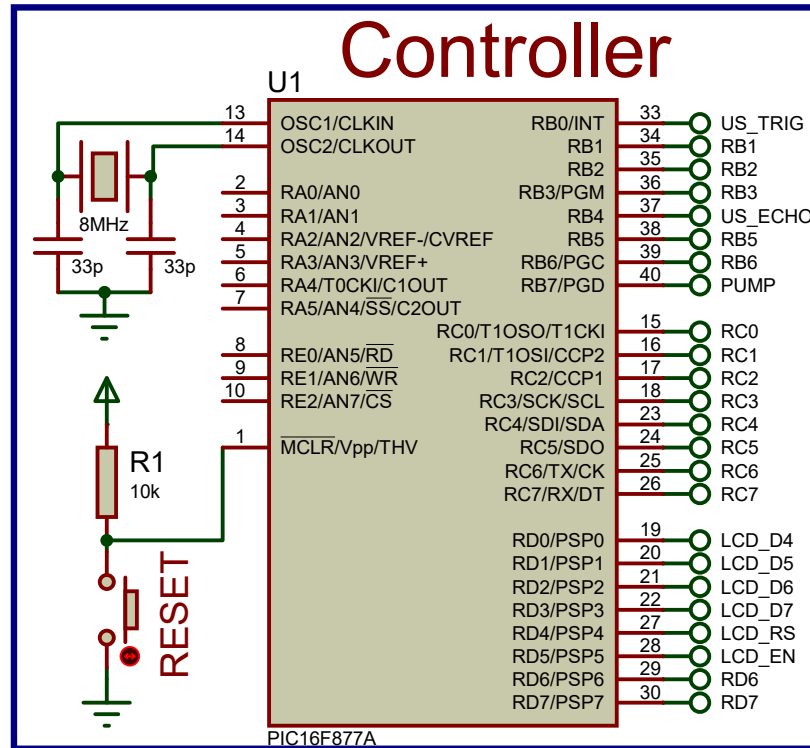


# Tank Level

Press Latch to start



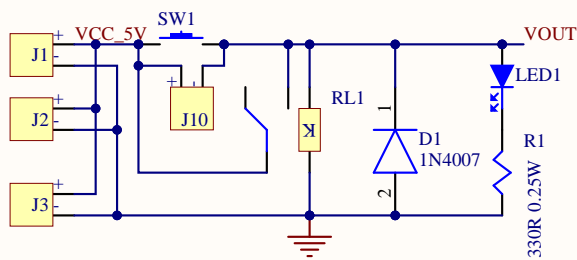
# Control Circuit

PIC16F877A

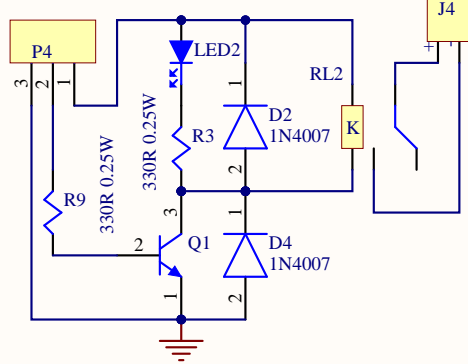
Author: Mahmoud Karam

Version: 2

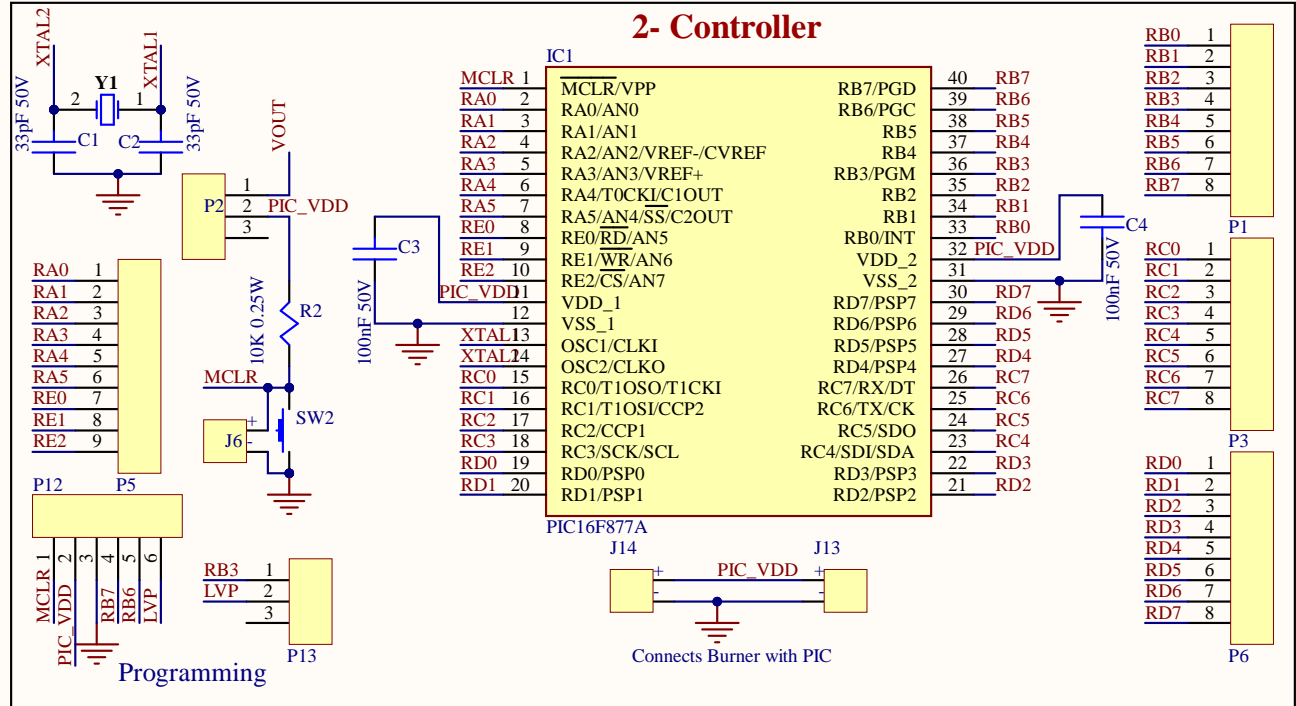
## 1- PIC Short Circuit Protection



## 3- Power Devices Interface

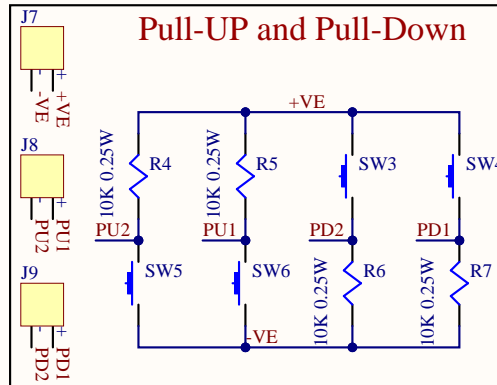


## 2- Controller

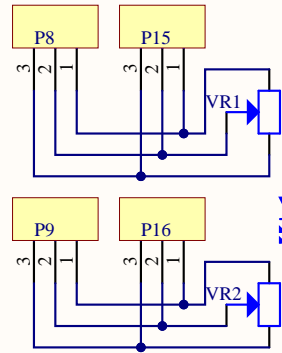


## 4- Additional Devices

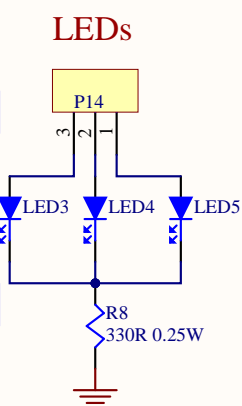
### Pull-UP and Pull-Down



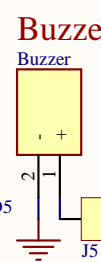
### Potentiometers



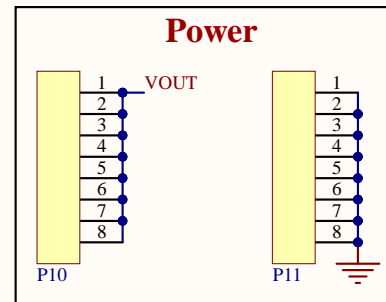
### LEDs



### Buzzer

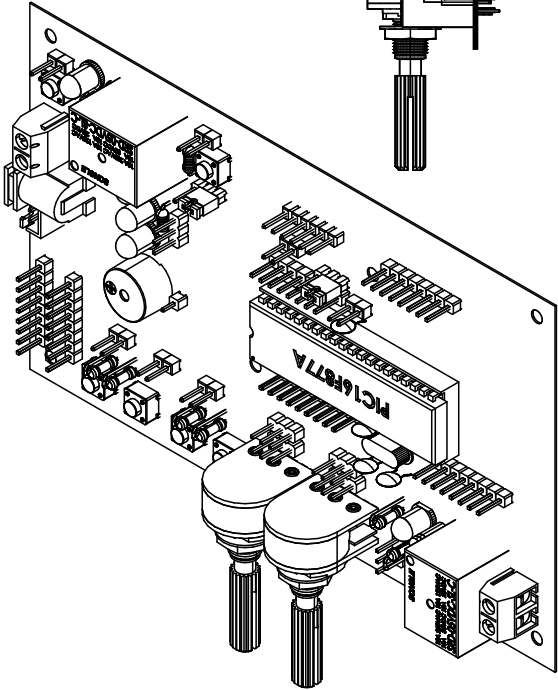
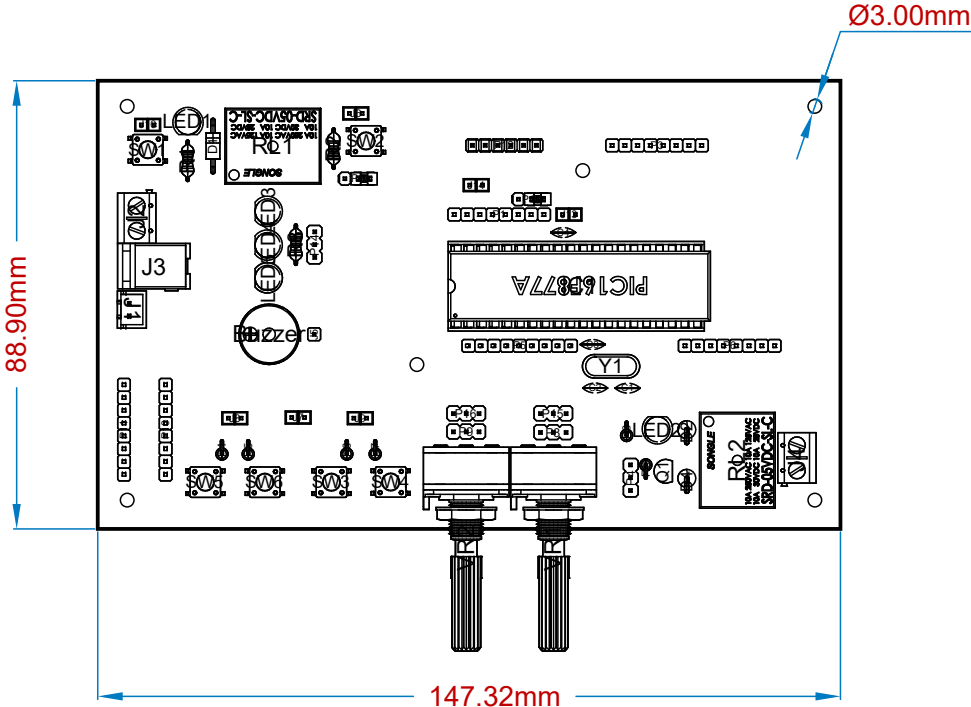
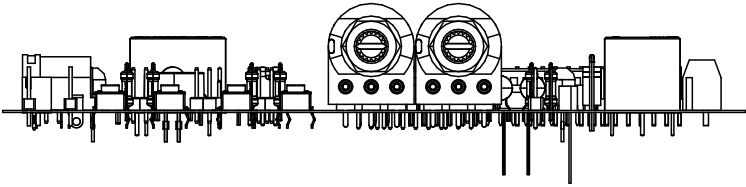


## Power

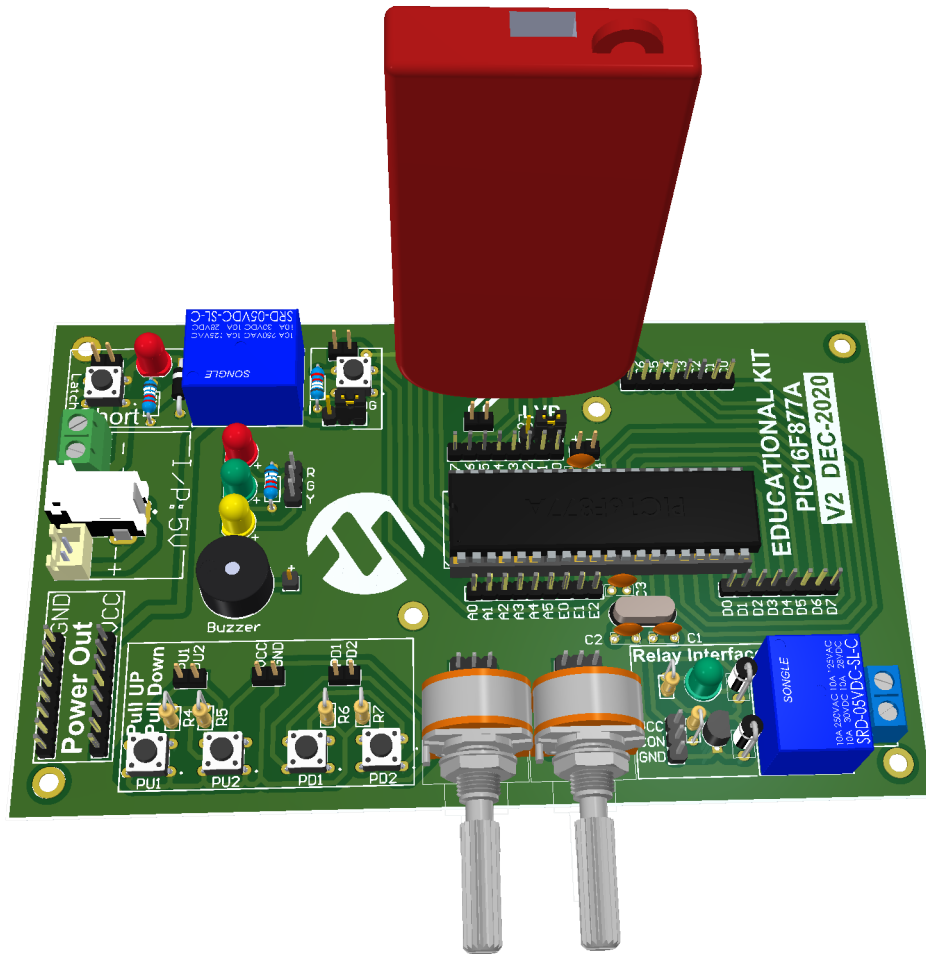


# Board Assembly View

Scale = 2:3



# 3D View & BOM



## Bill Of Materials

Line #	Designator	Comment	Quantity
1	Buzzer	Buzzer 5V	1
2	C1, C2	33pF 50V	2
3	C3, C4	100nF 50V	2
4	D1, D2, D4	1N4007	3
5	IC1	PIC16F877A	1
6	J1	JST on PCB Connector 2 pins	1
7	J2	Terminal Block Green 5.08mm	1
8	J3	DC Power Jack PJ002	1
9	J4	Terminal Block Blue 5.08mm	1
10	J5	Pin	1
11	J6, J7, J8, J9, J10, J13, J14	Header male 2 ways	7
12	LED1, LED3	RED 5mm	2
13	LED2, LED4	Green 5mm	2
14	LED5	Yellow 5mm	1
15	P1, P3, P6, P10, P11	Header male 8 ways	5
16	P2, P13	Header male 3 ways with jumper	2
17	P4, P8, P9, P14, P15, P16	Header male 3 ways	6
18	P5	Header male 9 ways	1
19	P12	Header male 6 ways	1
20	Q1	Transistor PN2222	1
21	R1, R3, R8, R9	330R 0.25W	4
22	R2, R4, R5, R6, R7	10K 0.25W	5
23	RL1, RL2	Relay 5V SRD-05VDC-SL-C	2
24	SW1, SW2, SW3, SW4, SW5, SW6	Tactile Switch 4 poles	6
25	VR1, VR2	Potentiometer 10K	2
26	Y1	Crystal 8MHz	1

# Board Fabrication View

Scale = 1:1

