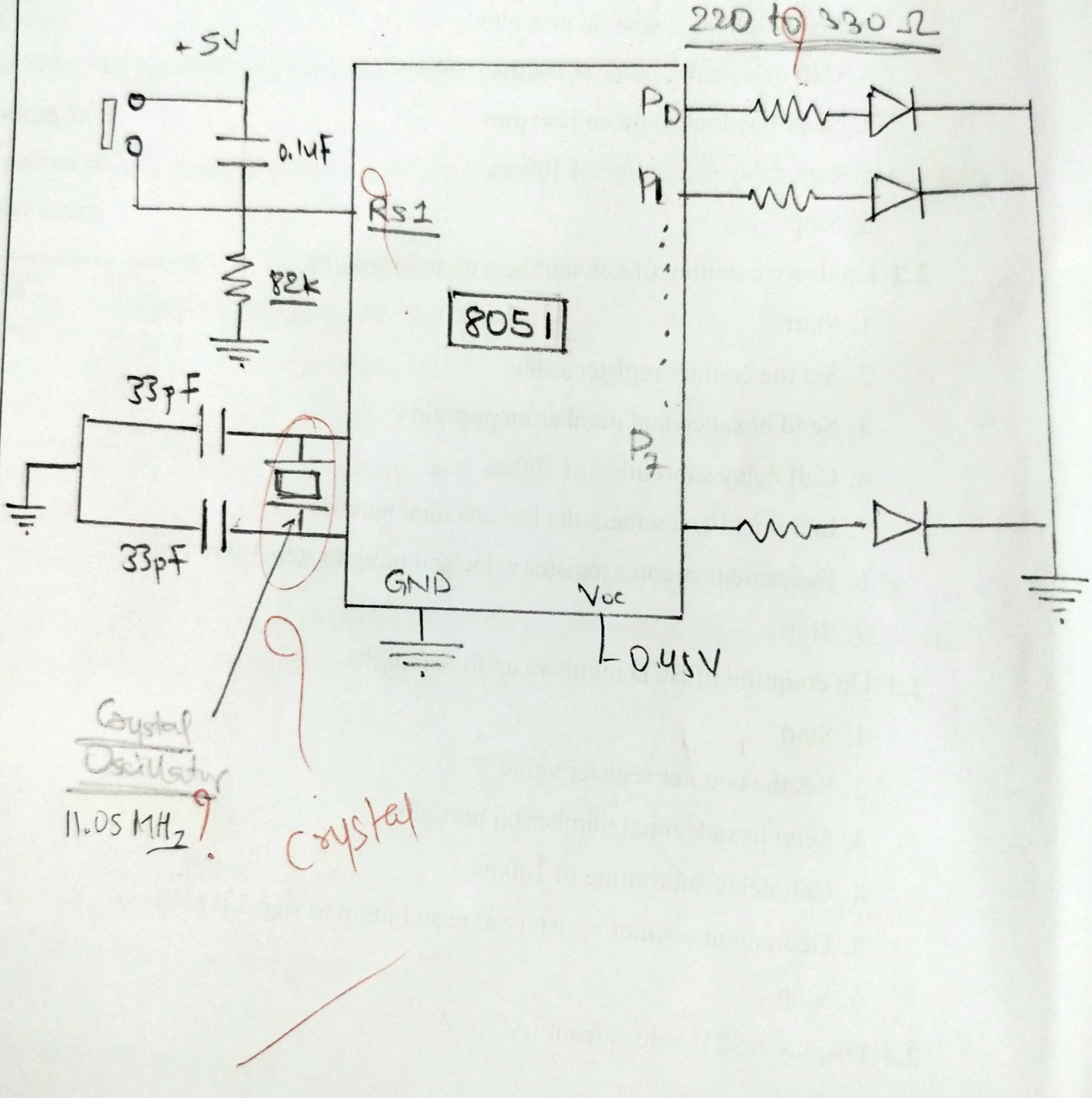
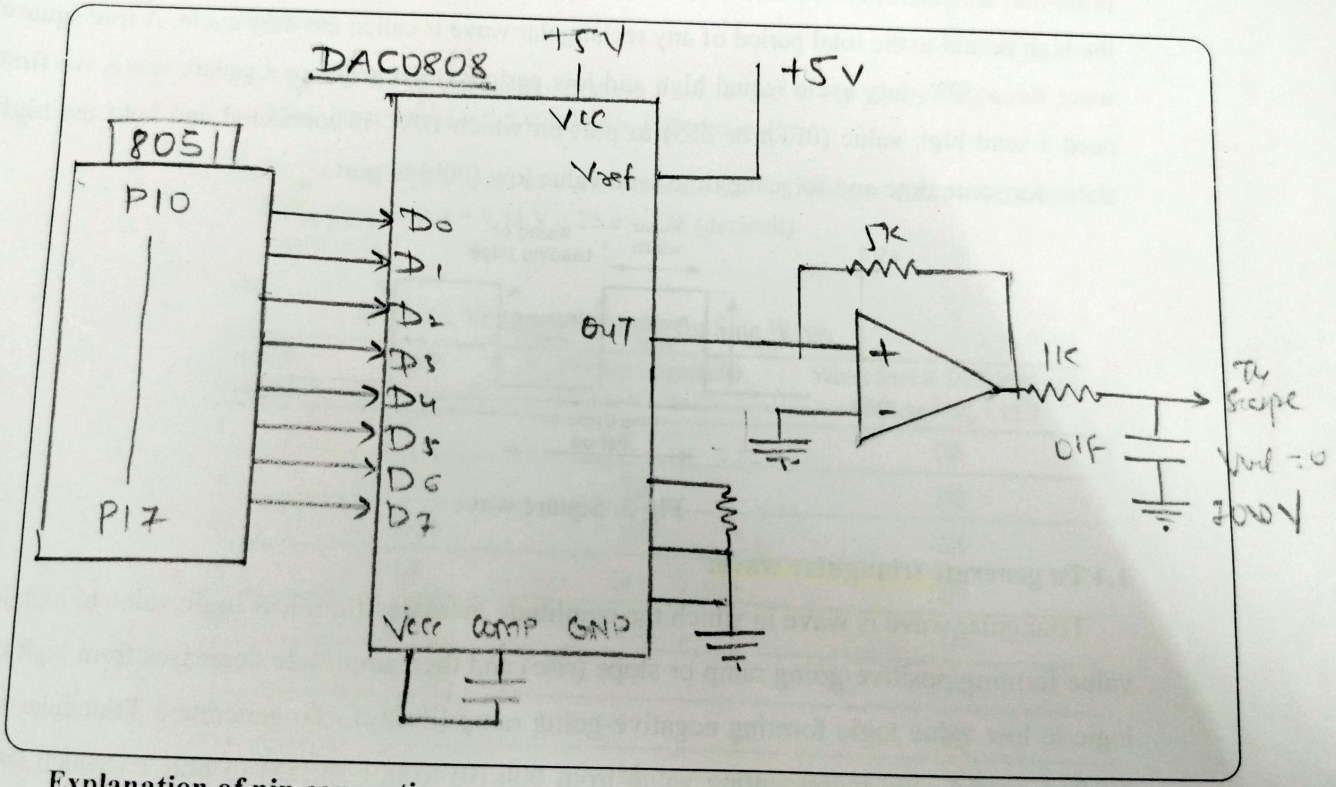
3. Interfacing Diagram Exp02, LED hex



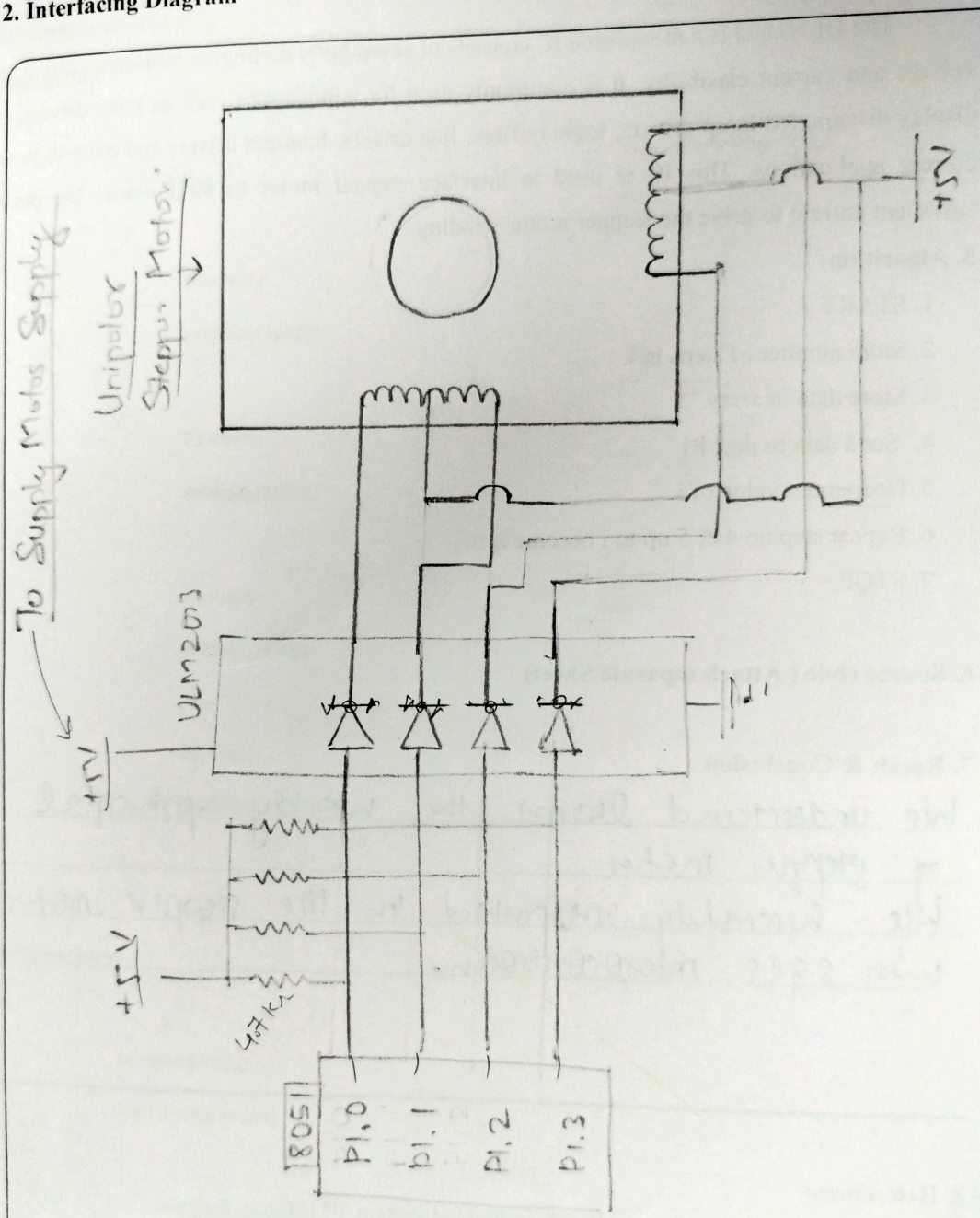
$$I_{out} = I_{ref}\left(\frac{D7}{2} + \frac{D6}{4} + \frac{D5}{8} + \frac{D4}{16} + \frac{D3}{32} + \frac{D2}{64} + \frac{D1}{128} + \frac{D0}{256}\right)$$

1.2 Interfacing of DAC0808 with 8051:

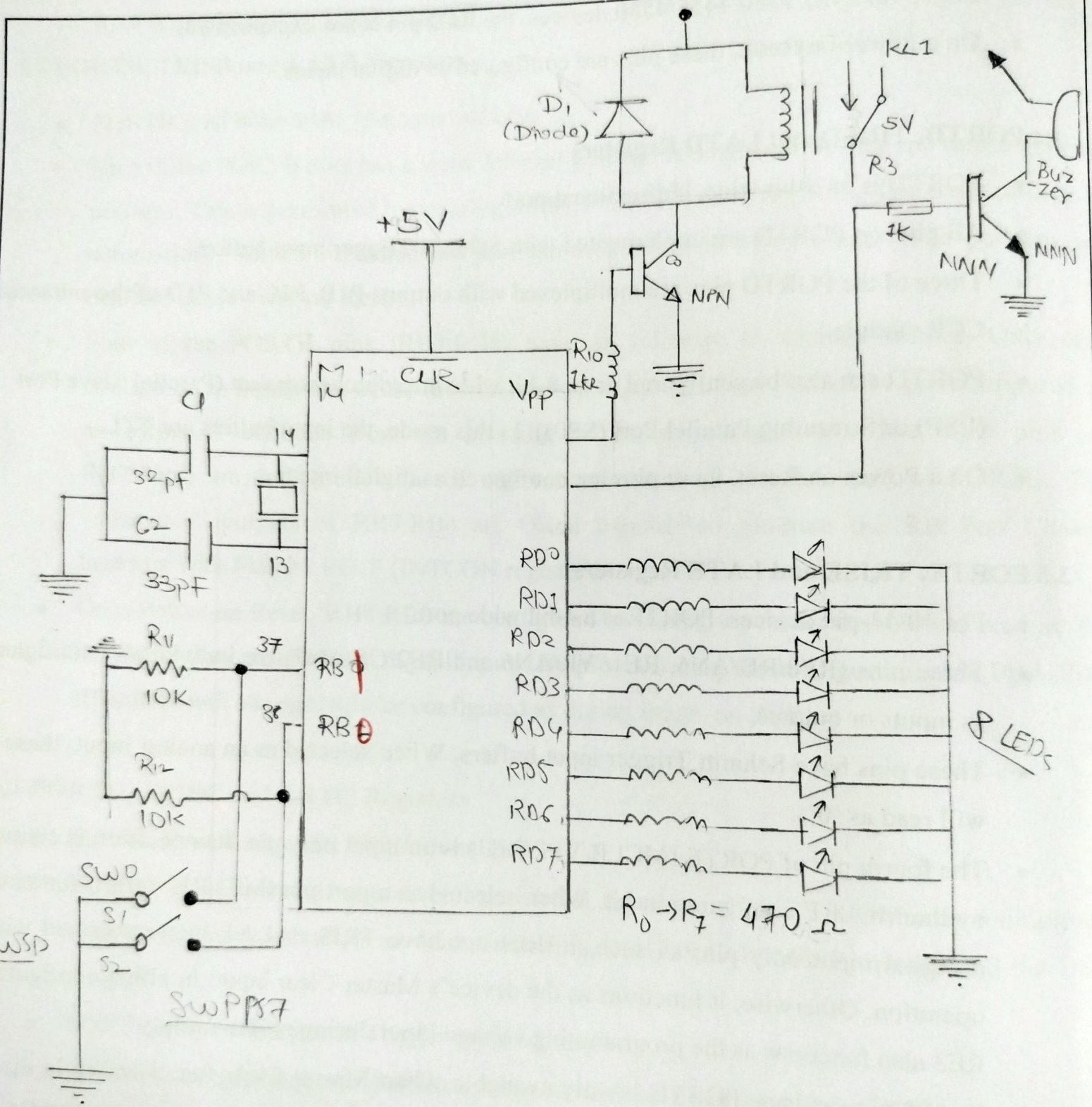


Explanation of pin connections:

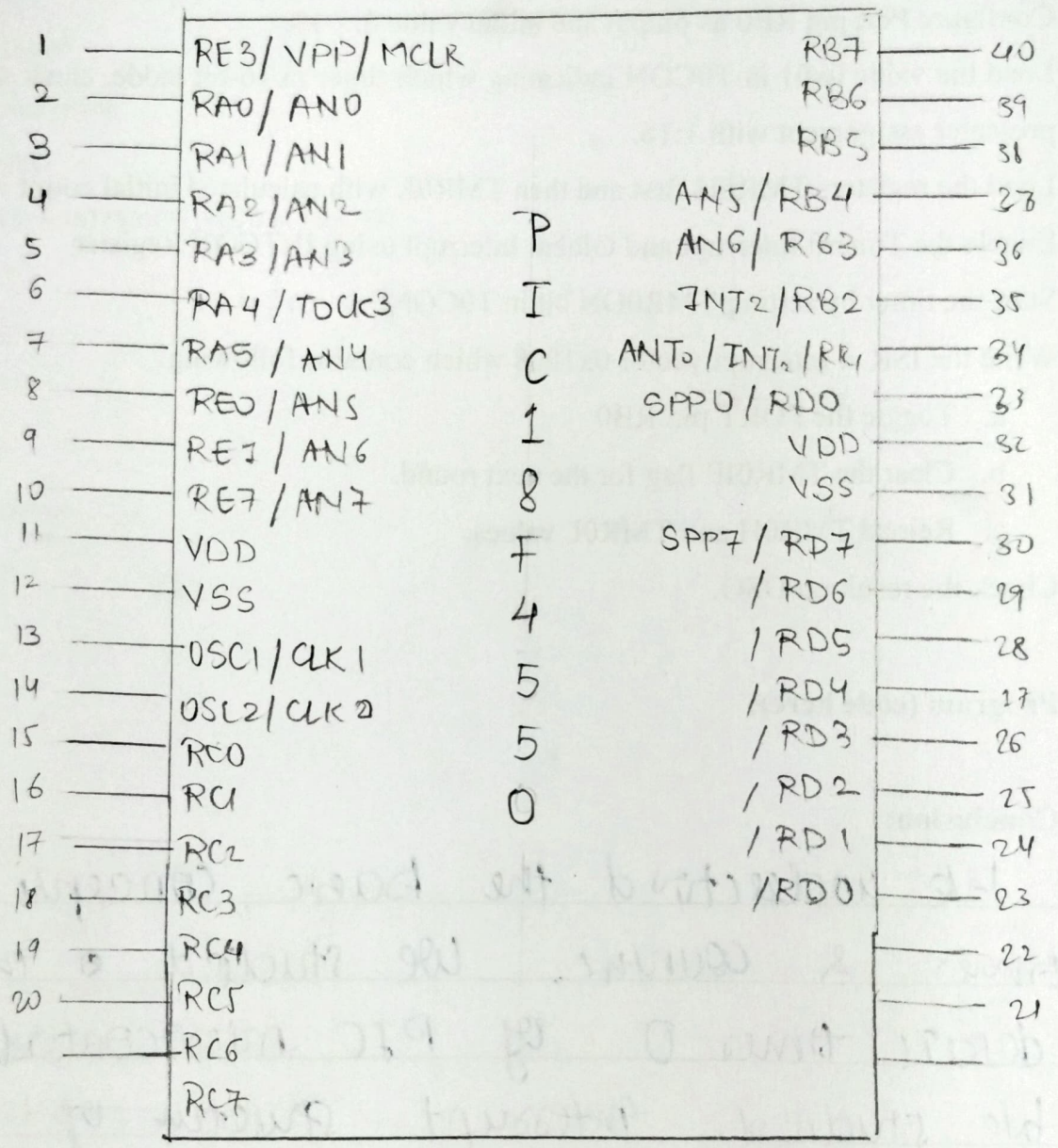
2. Interfacing Diagram



4. Interfacing Diagram



6. Interfacing Diagram

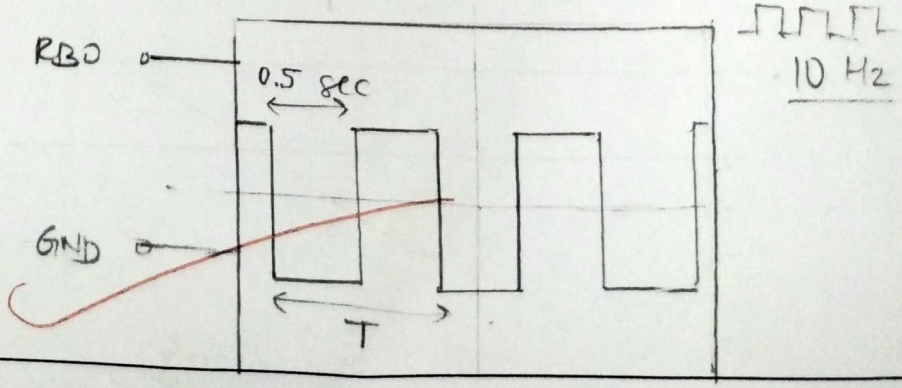


T = 0.1 sec

Tons = 50 m sec

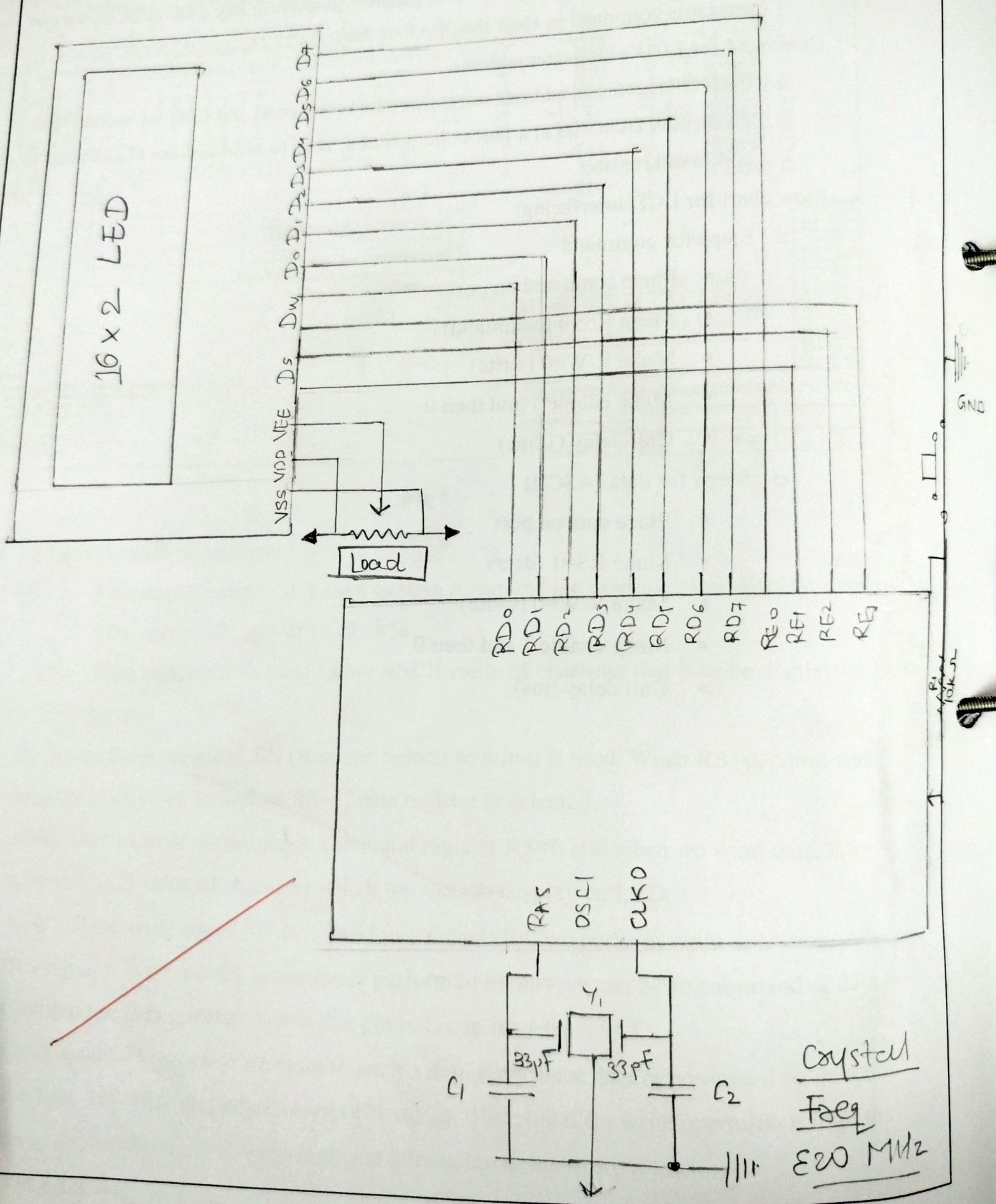
f = 10 Hz

Toff = 50 m sec



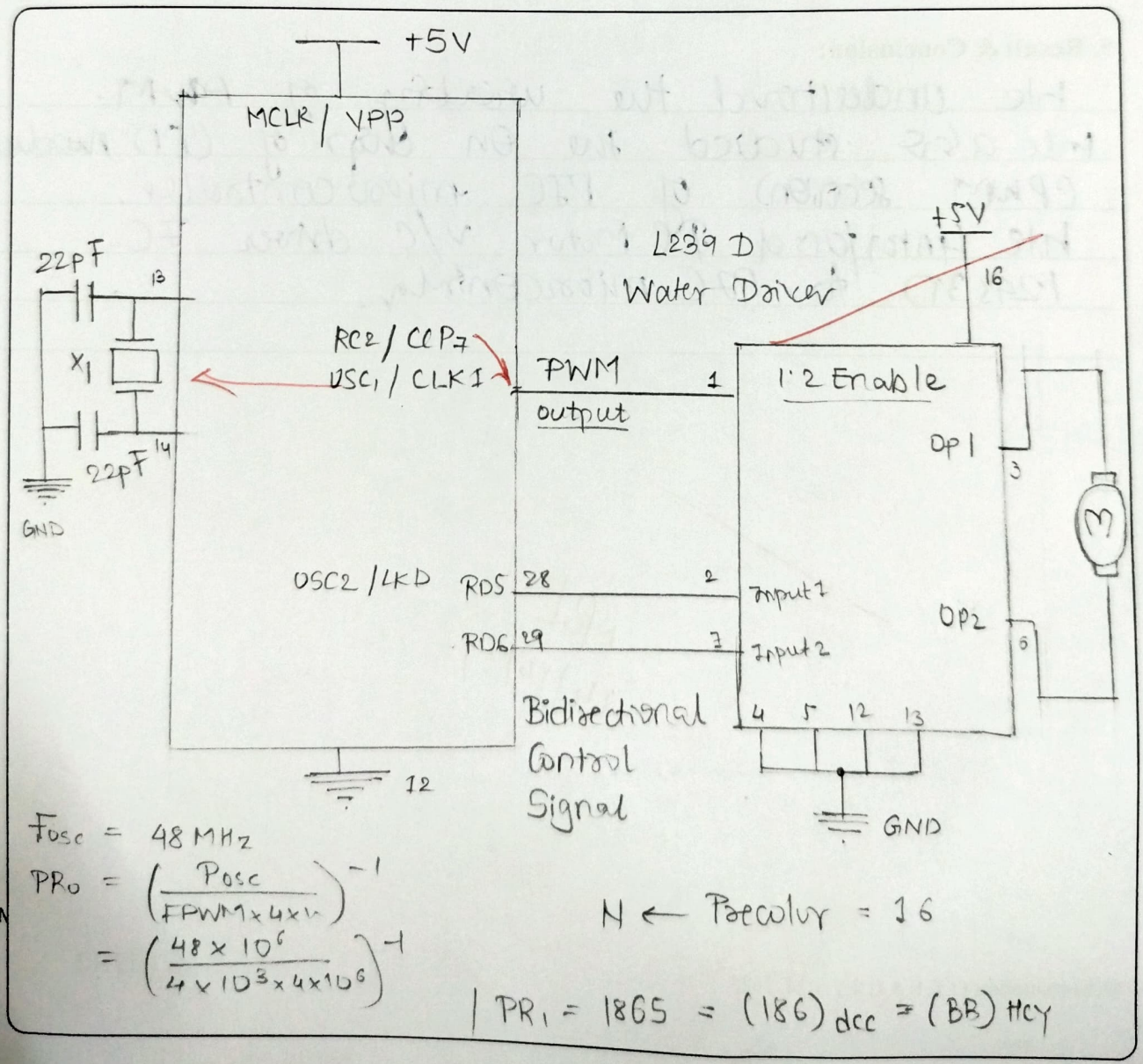
Oscilloscope

5. Interfacing diagram

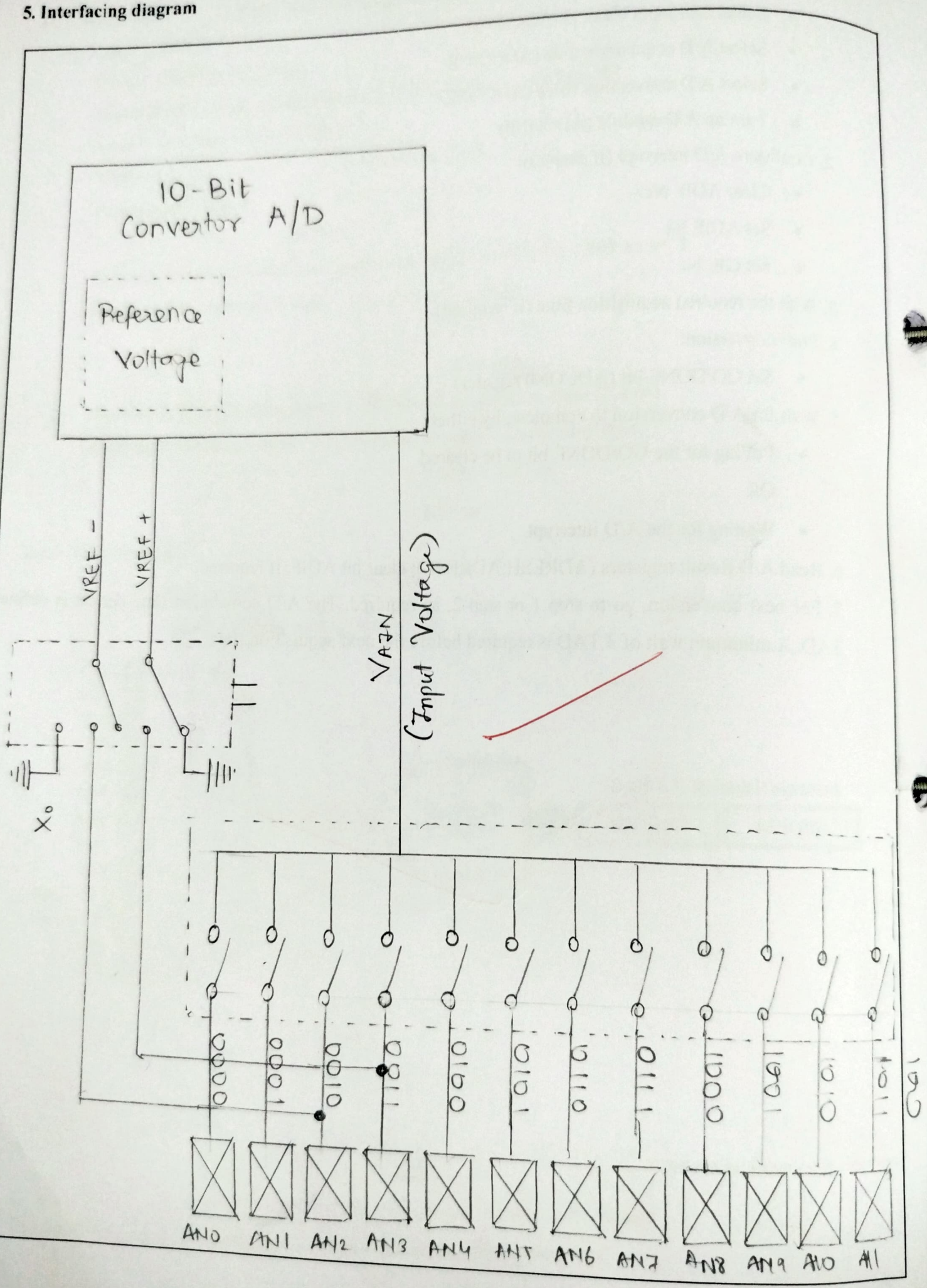


	Duty Cycle	CCPR1L Value	CCP1CON<5:4> DC1B1:DC1B0
Fosc = 48 MHz PWM = 4 Khz PR2 =	20%	0x 2F	10
	40%	0 x 4A	11
	60%	0 x 70	01
	80%	0 x 95	10
	100%	0 x BD	00

6. Interfacing diagram



5. Interfacing diagram



Sr.No.	Vin(Volts)	Result on ADC
1.	0	0
2.	1.22	250
3.	2.44	500
4.	3.66	750
5.	4.99 ≈ 5	1023

Conclusion:

We studied the working of PID controller Also we studied the on-chip ADC system of PIC microcontroller.
To interface analog input to PIC microcontroller.