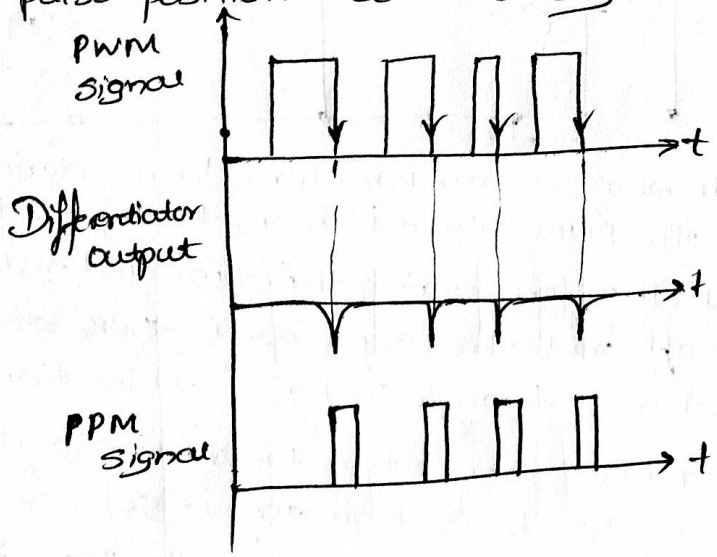
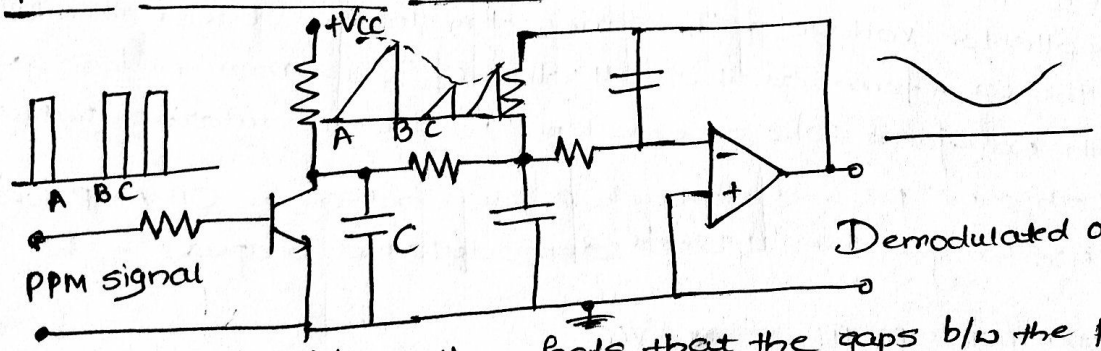
* The PWM signal is applied to pin no. 2 through the diode & R_1-C_1 combination. Thus the input to pin no. 2 is the negative trigger pulses which corresponds to the trailing edges of the PWM waveform.
* The 555 timer is working in a monostable mode and the coldeth of the pulse is constant (governed by an R_2-C_2 combination)
* The negative trigger pulses decides the starting time of the output pulses and thus, the output at pin no. 3 is the desired pulse position modulated signal.



PPM DEMODULATOR CIRCUIT:



* This circuit utilizes the facts that the gaps b/w the pulses of a PPM s/g contain the information regarding the modulating s/g.
* During the gaps A-B b/w the pulses, the transmitter is cut off and the capacitor C gets charged through R-C combination.
* During the pulse duration B-C, the capacitor discharges through transmitter, and the collector voltage becomes low.
* Thus the waveform at the collector is approximately a saw-tooth waveform whose envelope is the modulating signal.
* When this is passed through a second order OP-AMP Low pass filter, we get the desired demodulated output.