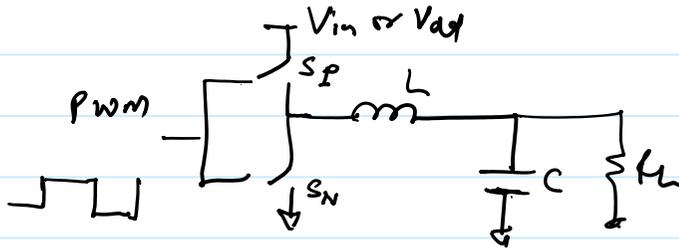
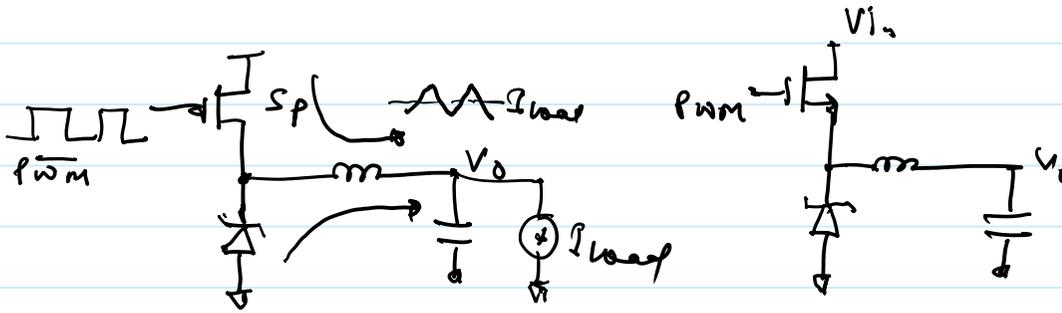


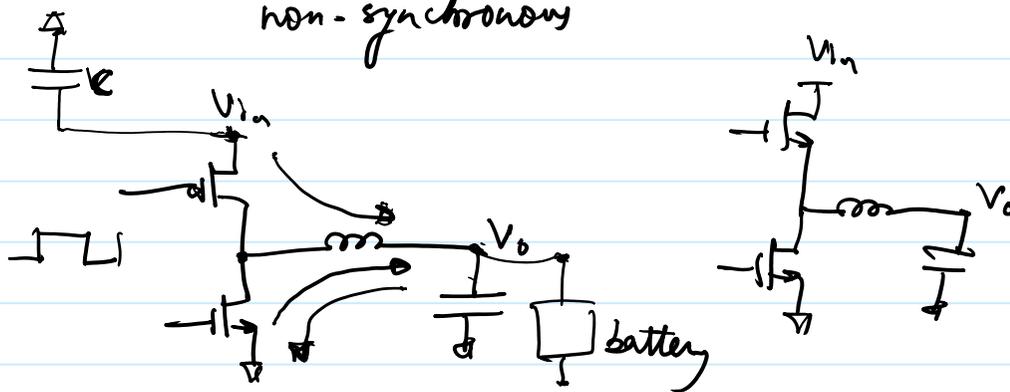
Power Switches



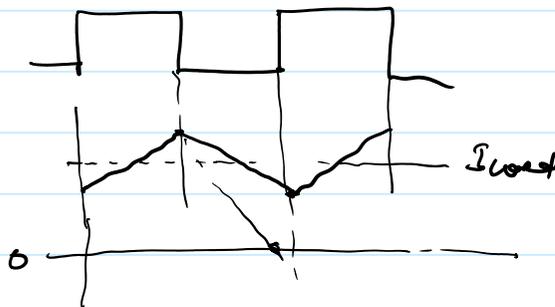
S_P and S_N power switches



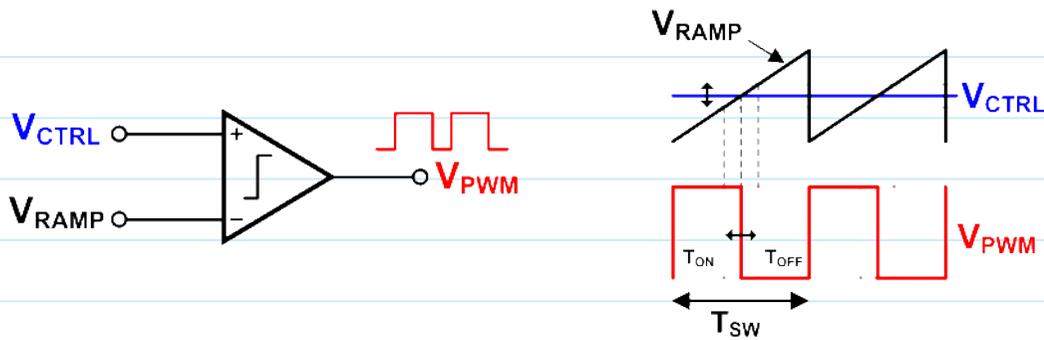
non-synchronous



Synchronous (bi-directional)

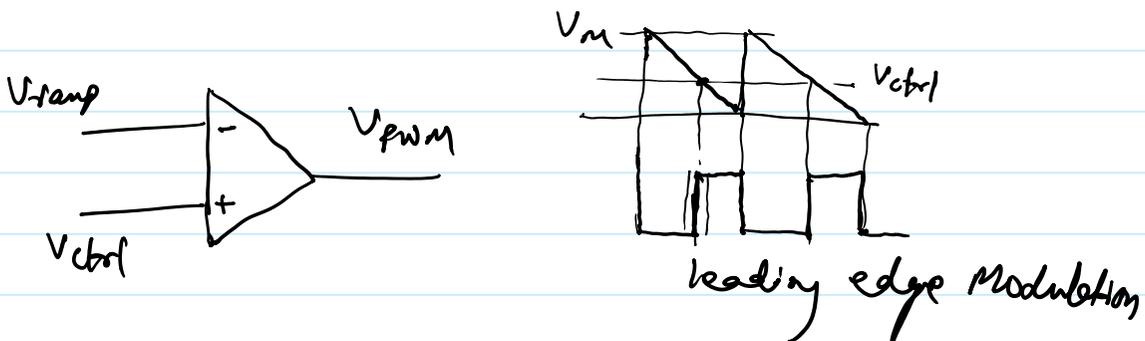
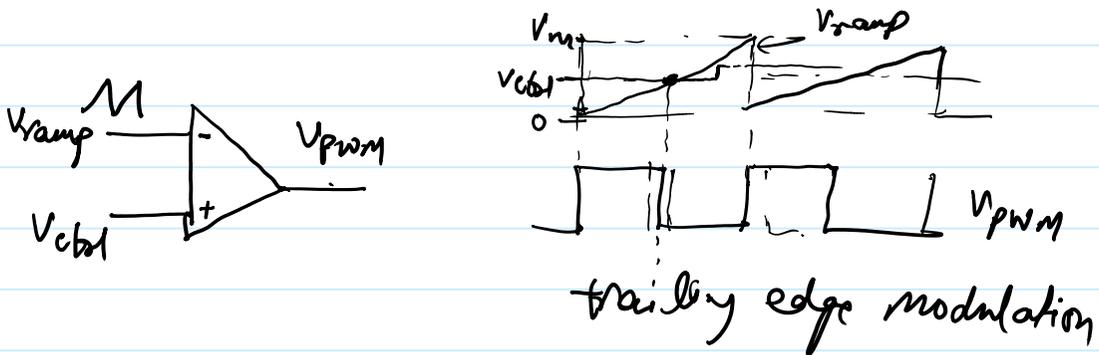


Pulse Width Modulation (PWM)



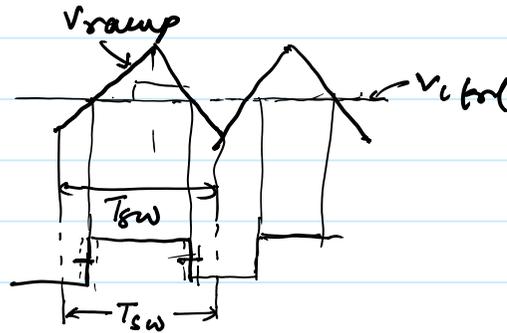
Types of PWM modulators:

- ① Single edge modulation
 - leading edge
 - trailing edge
- ② dual edge modulation



Dual Edge Modulation

Dual edge modulation = leading edge + trailing edge
both edges can move w.r.t. V_{ctrl}



- # Can respond faster compared to single edge modulation
- # change in switching frequency may be observed during transient.