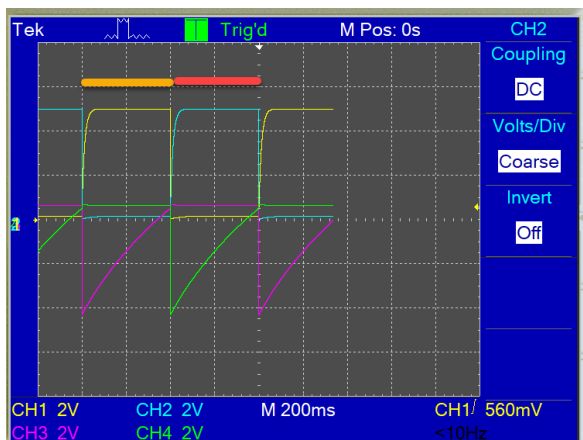
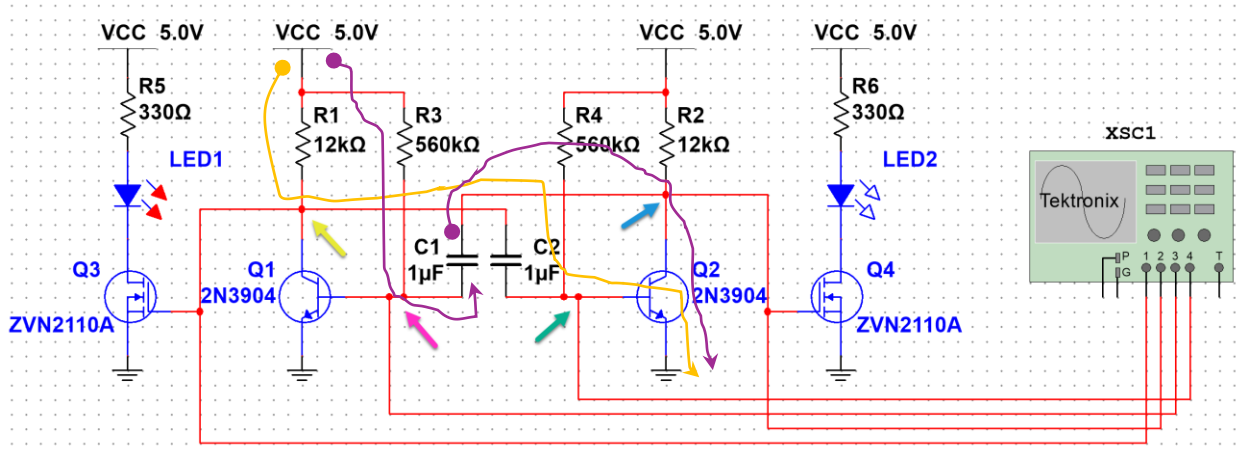


## Oscillator Operation by Rlaw



Q2 on, Q1 off, C2 charge, C1 discharge



Q2 off, Q1 on, C1 charge, C2 discharge



### Orange Time Frame:

At the beginning of the time frame Q2 is on, Q1 is off.

C2 charges, current flow from left 5V power supply thru R1 12kohm and Q2.

C1 discharges, current flow thru Q2, the left power supply and R3 560kohm.

At the end of the time frame C1 is fully discharged and starting to charge the opposite way.

Q1 turns on when the bottom of C1 is +0.7V, then the top of C2 becomes 0V, and the bottom of C2 becomes -4.3V, so Q2 turns off.

### Red Time Frame:

At the beginning of the time frame Q1 is on, Q2 is off.

C1 charges, current flow from right 5V power supply thru R2 12kohm and Q1.

C2 discharges, current flow thru Q1, the right power supply and R4 560kohm.

At the end of the time frame C2 is fully discharged and starting to charge the opposite way.

Q2 turns on when the bottom of C2 is +0.7V, then the top of C1 becomes 0V, and the bottom of C1 becomes -4.3V, so Q1 turns off.

From here everything repeats starting at the beginning of the orange time frame again.