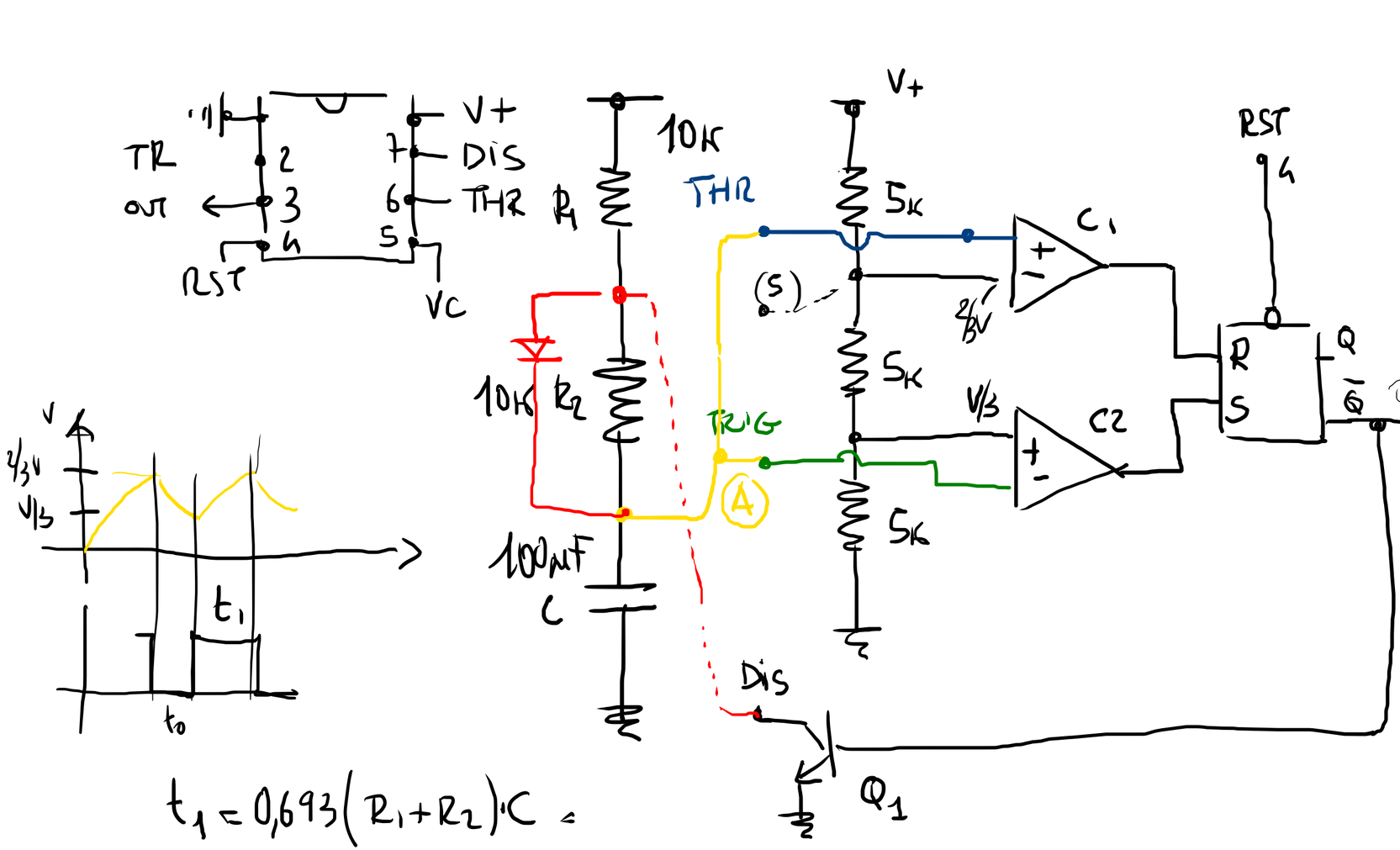
161 - 555 Timer



$t_1 = 0{,}693(R_1 + R_2)\cdot C$

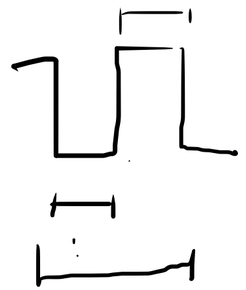
$t_0 = 0{,}693(R_2 C_1)$

$$t_1 = 0{,}693 \cdot (20 \cdot 10^3 \cdot 100 \cdot 10^{-6}) =$$

$$= 0{,}693\,(20 \cdot 10^3 \cdot 10^2 \cdot 10^{-6}) = \frac{0{,}693 \cdot 20}{10} = 1{,}38\ s$$

$$t_0 = 0{,}693\ \underbrace{10 \cdot 10^3 \cdot 100 \cdot 10^{-6}} = 0{,}693\ s$$

1



$$f = \frac{1}{t_1 + t_0} = \frac{1}{2{,}079} = 0{,}48\ Hz$$