

Önrezgő oszcillátorok



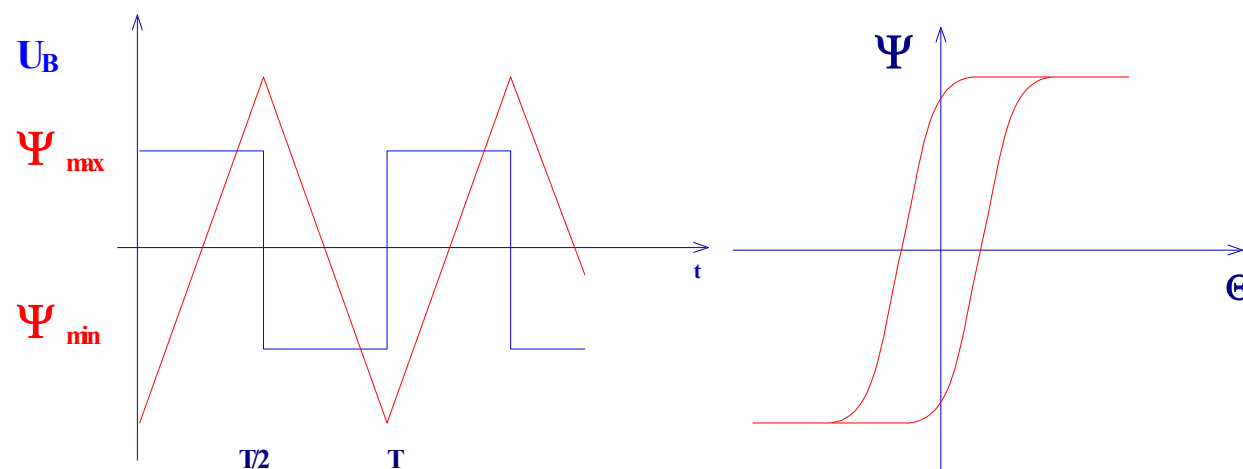
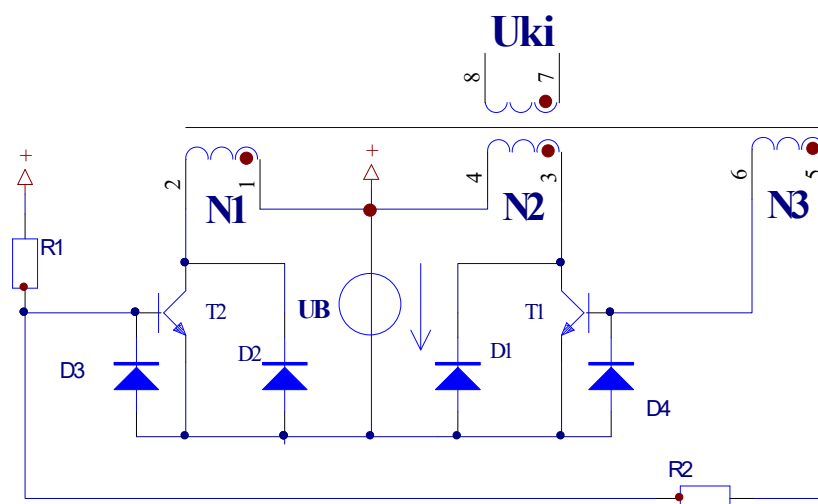
Molnár Károly

PowerQuattro Zrt.

Fejlesztési igazgató



1.



$$U = \frac{d\Psi}{dt}$$

$$\int_0^{\frac{T}{2}} U_B dt = \int_{-\Psi_{MAX}}^{\Psi_{MAX}} dt$$

$$U_B \frac{T}{2} = 2 \Psi_{MAX}$$

$$U_B = 4 f N A_V B_{MAX}$$

a., a vas „kapcsol”

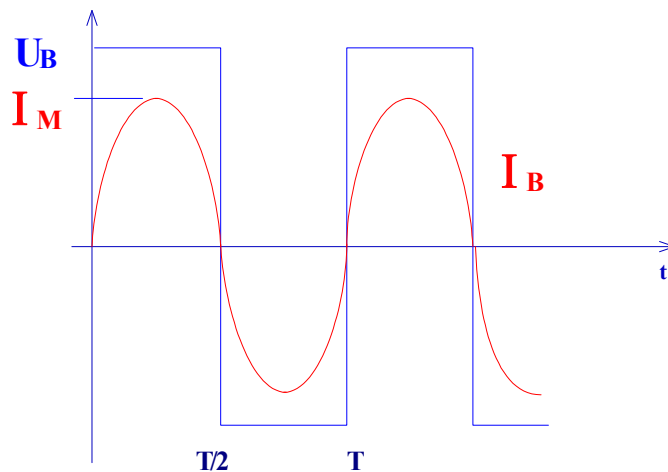
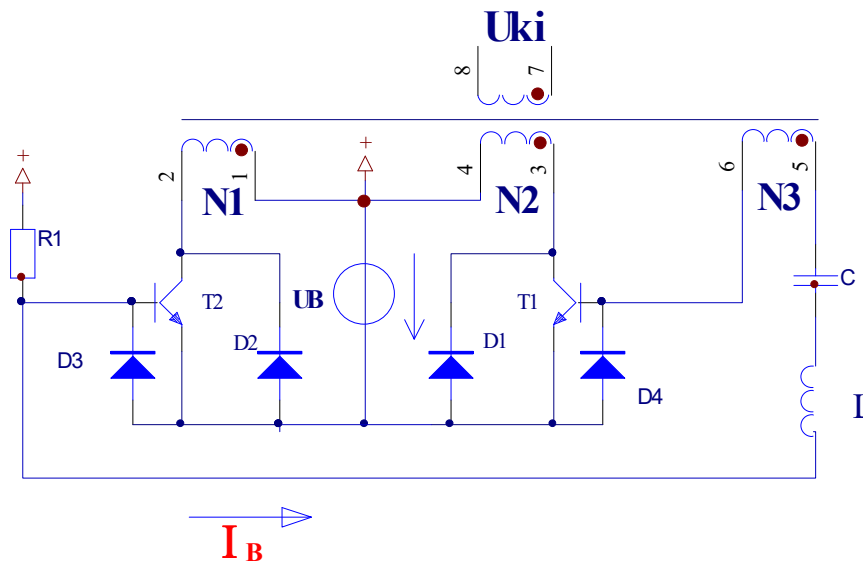
$$f = \frac{U_B}{4NA_V B_{MAX}} \Rightarrow f \cong kU_B$$

b., a tranzisztor „kapcsol”

$$f \neq kU_B$$

$$U_{KI} = k_1 U_B$$

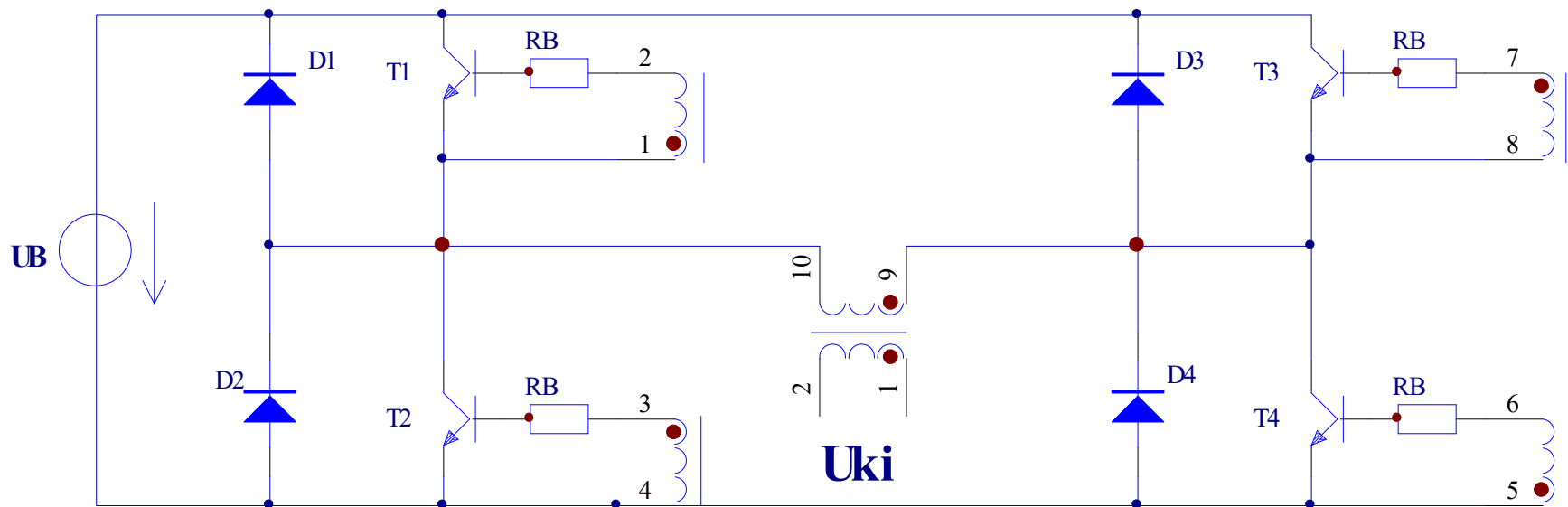
2. Állandó frekvenciás működés



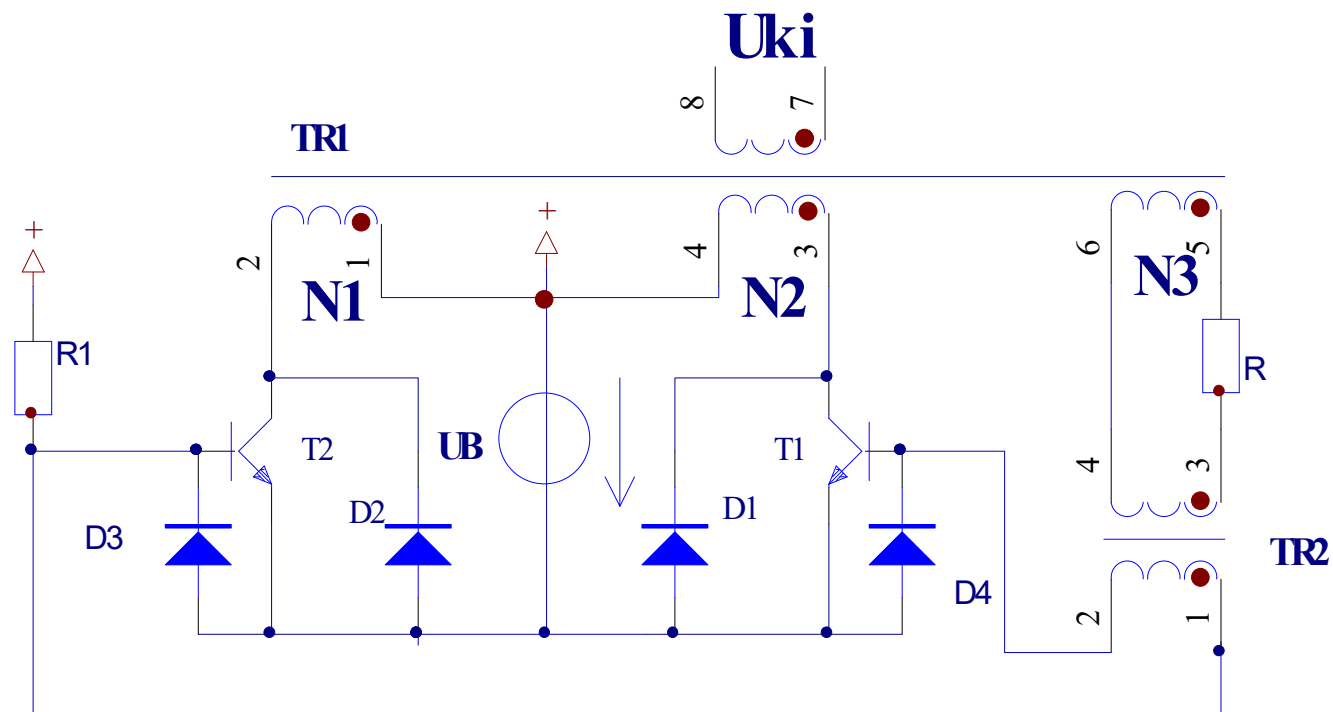
$$I_M = \frac{U_{N3}}{\sqrt{\frac{L}{C}}}$$

$$f \cong \frac{1}{2\pi\sqrt{LC}}$$

3.,



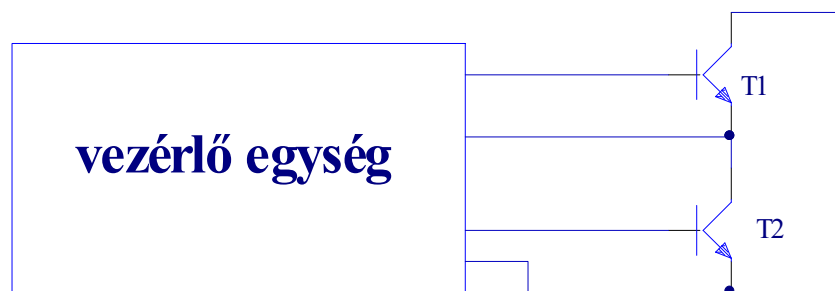
4.,



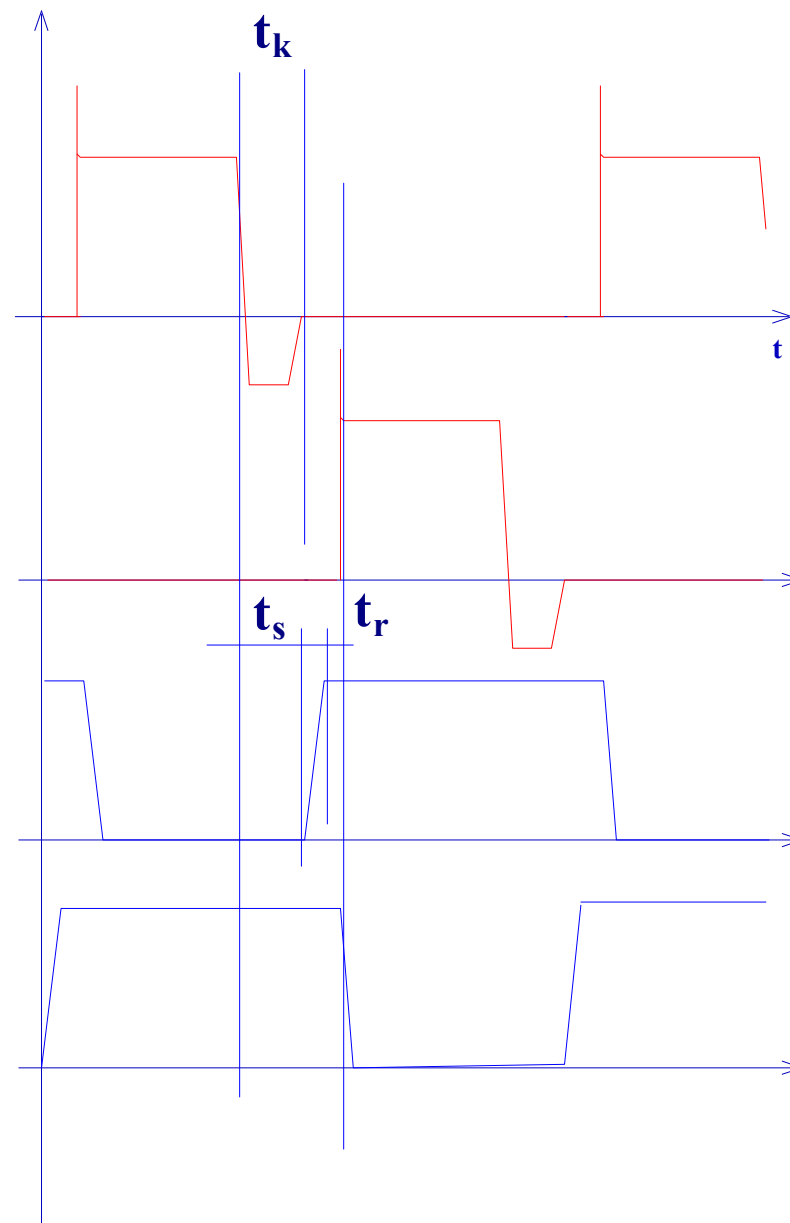
Csak a TR2 telít! Nincs jelentős túláram a kapcsolóelemeken!

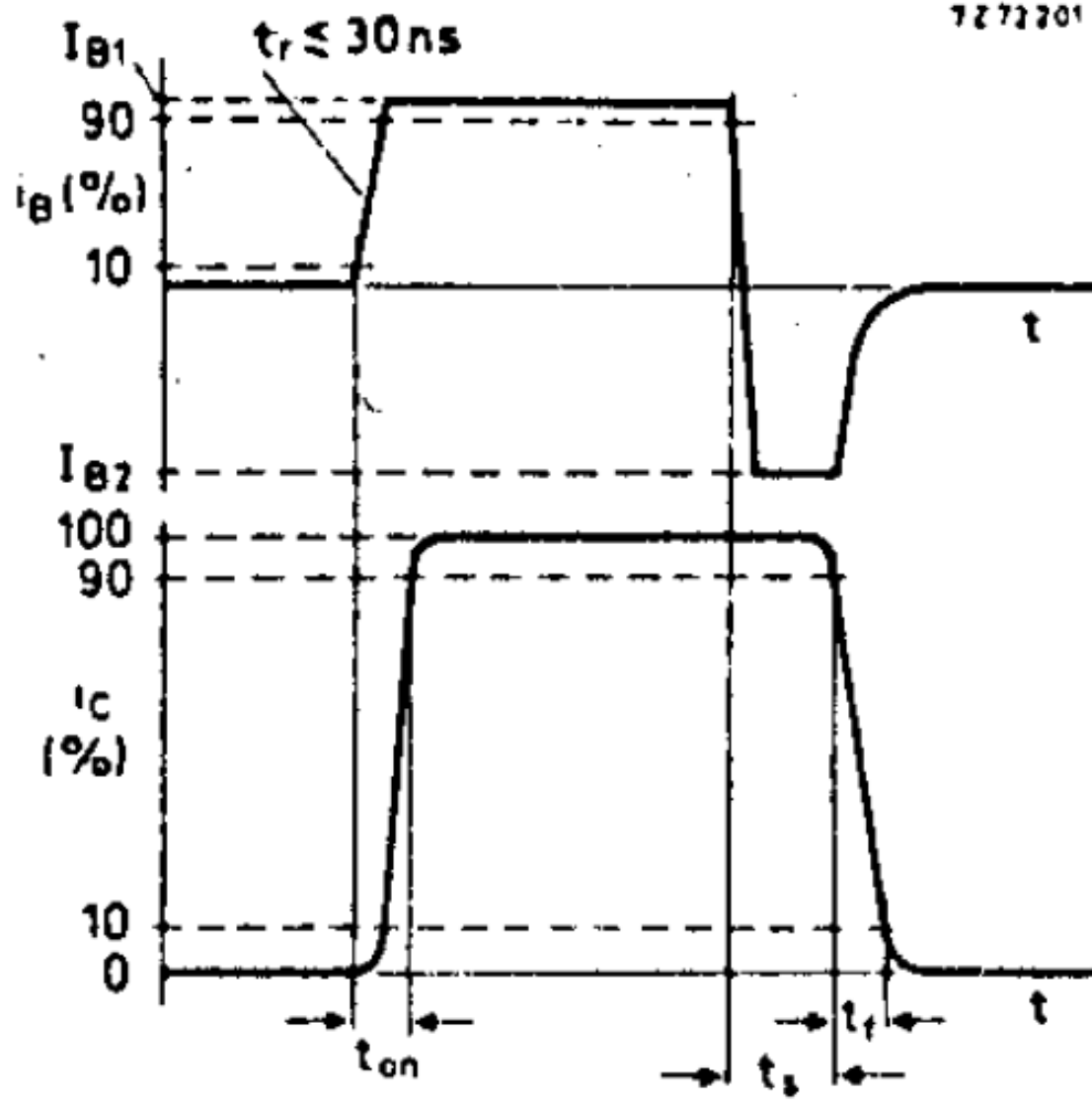
$$f \cong kU_B$$

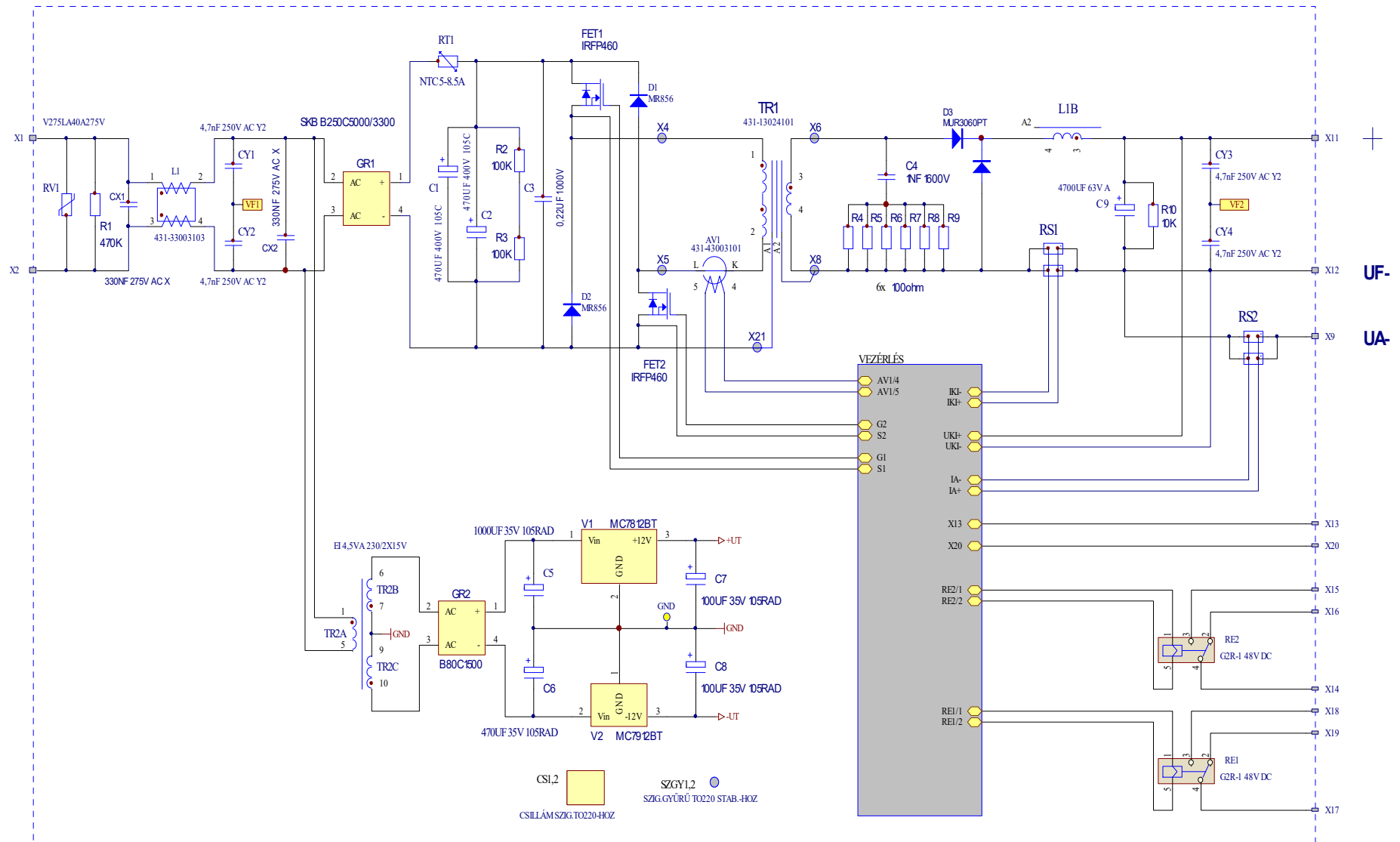
5.,



$$t_K \geq t_s + t_r$$

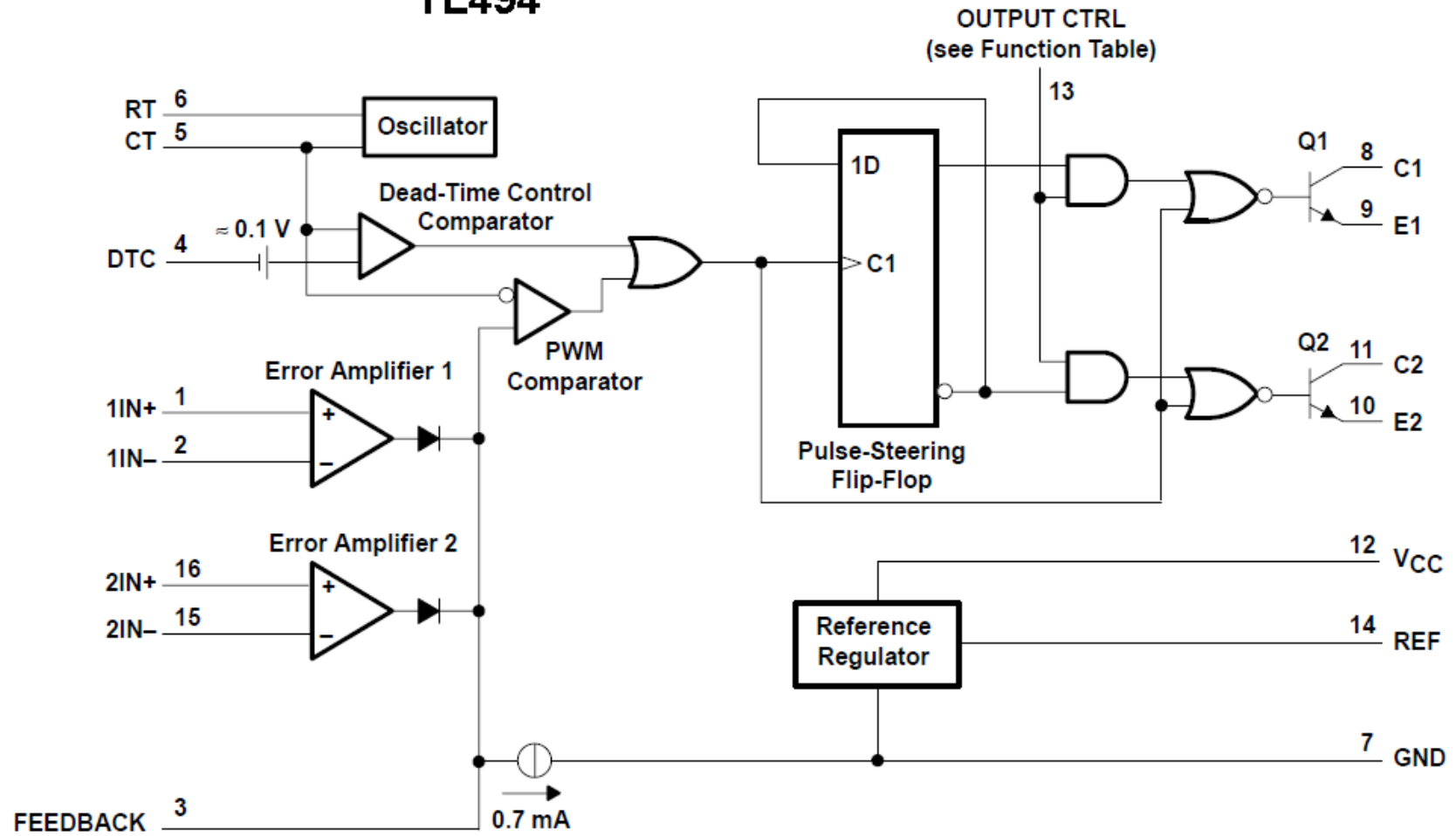






functional block diagram

TL494





Köszönöm a figyelmet!