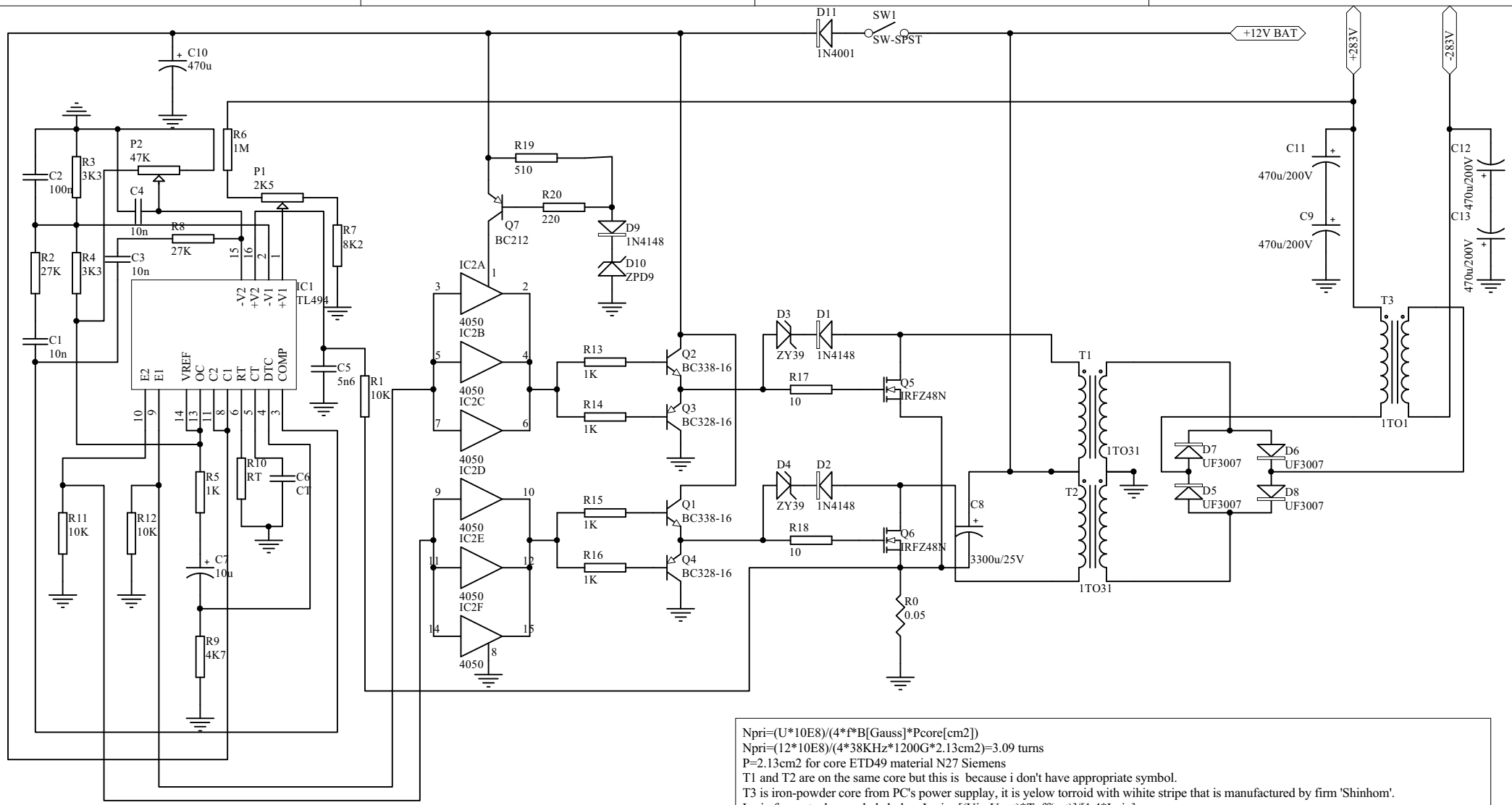

Npri=(U*10E8)/(4*f*B[Gauss]*Pcore[cm2])
Npri=(12*10E8)/(4*38KHz*1200G*2.13cm2)=3.09 turns
P=2.13cm2 for core ETD49 material N27 Siemens
T1 and T2 are on the same core but this is because i don't have appropriate symbol.
T3 is iron-powder core from PC's power supplay, it is yelow torroid with wihite stripe that is manufactured by firm 'Shinhom'.
Lmin for mutualy coupled choke : Lmin=[(Uin-Uout)*Toff(est)]/[1.4*Imin]
Toff(est)=(1-d)*T=0.3*T=0.3*1/f=7.9us=7.9E-6s
d-duty cycle
Uin-Uout=10V
Imin=0.5A
Lmin=113uH=113E-6H
Al for this core=70[(nH)/(N2)]
N for choke=1000*sqrt[(Lmin[H])/Al]=40turns

R0 is 2 turns of heavy Cu wire with diameter of 2mm.