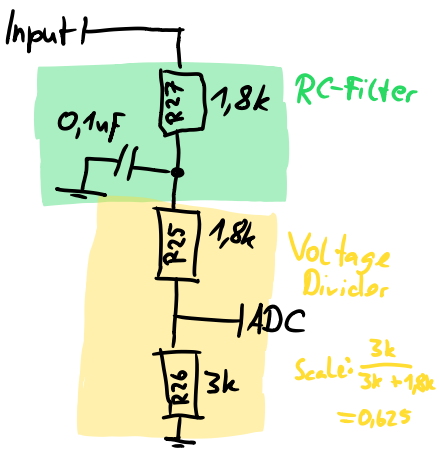
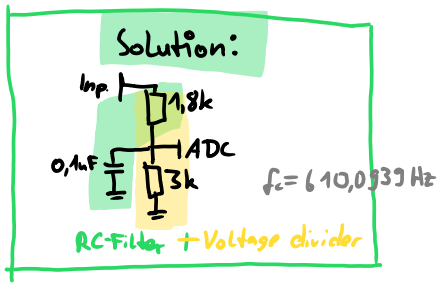
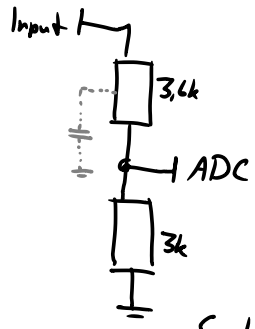
Circuit (for current sense)



ISSUE:
Won't R27 & R25 form a 3,6k resistor and chang the Voltage Divider scaling?

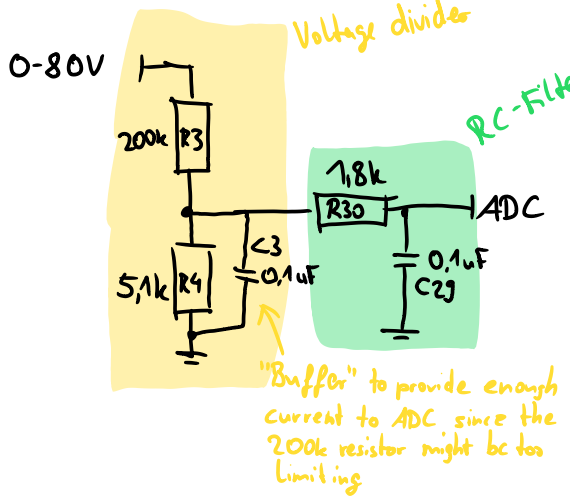


Equivalent Circuit



Scale = 0,476

Circuit (for voltages)

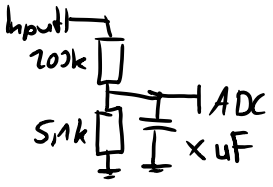


ISSUE:
Doesn't C3 form another RC-Filter with R3?

SOLUTION
Just remove C3

ISSUE 2:
R3 & R4 change the RC-filters corner frequency

new Circuit



$f_c = \frac{1}{2\pi (R_1 \| R_2) C}$ $\quad R_1 \| R_2$ = if R_1 & R_2 were parallel

~~$\frac{1}{f_c} = 2\pi (R_1 \| R_2) C$~~

~~$C = 2\pi (R_1 \| R_2) f_c$~~ $\quad [f_c = 2\,kHz,\ 1\,kHz,\ 0,5\,kHz]$

$C = \frac{R_1 + R_2}{2\pi \times f \times R_1 \times R_2}$

$C(500Hz) = 6,4 \times 10^{-8}\ F$
$= 64\,nF$

$C(500Hz) = 6,25 \times 10^{-7}\ F$ $\quad [f = 500Hz,\ R_1 = 20k,\ R_2 = 510\Omega]$
$= 600\,nF$

those are abit too small for 80V (0,3W power loss)

$f = 320,026\ Hz$ $\quad [R_1 = 200k,\ R_2 = 5,1k,\ C = 0,1\,uF]$