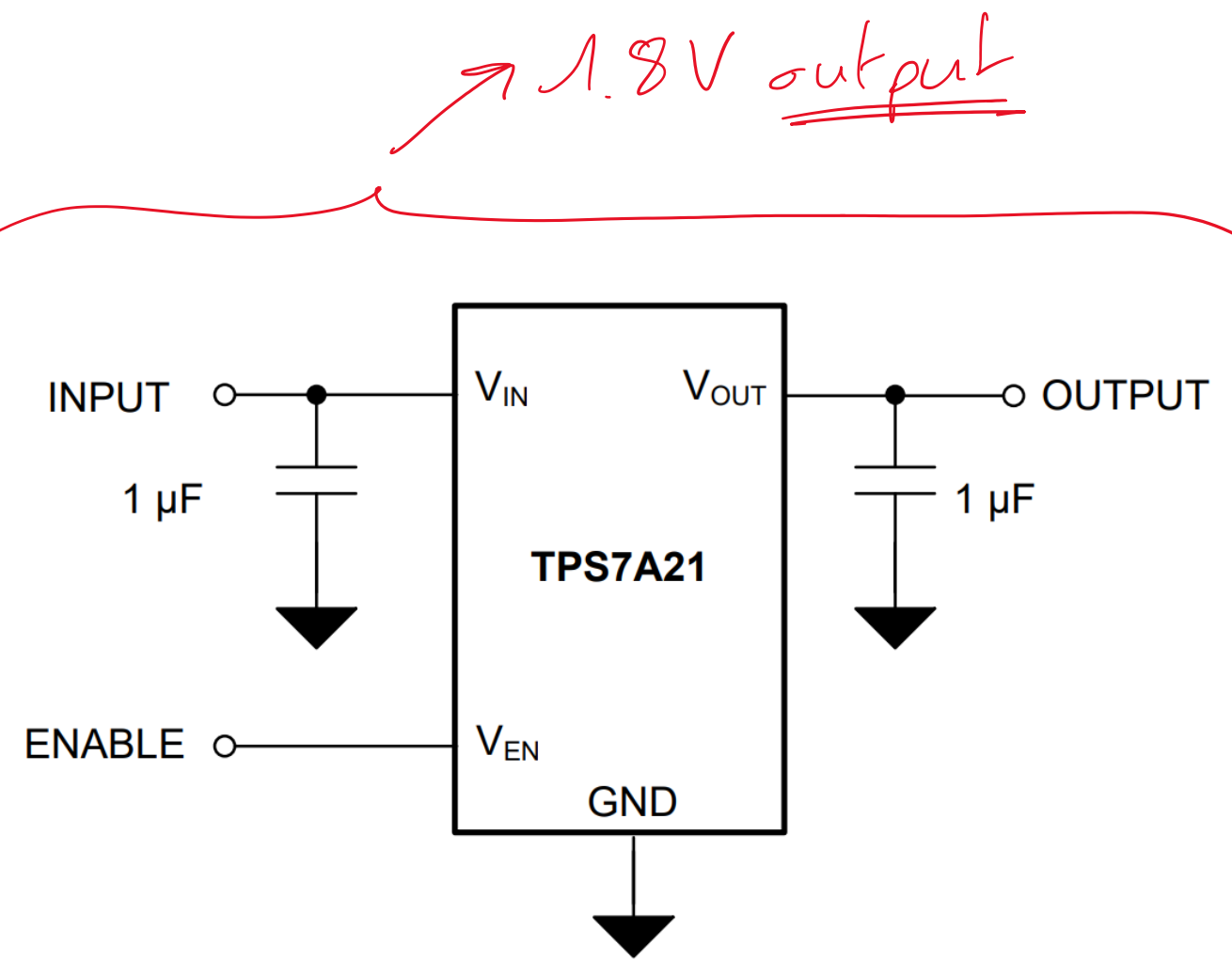


→ useless with L5011B7DH03 Sharp Mem. LCD
160x68 → +3.3V only

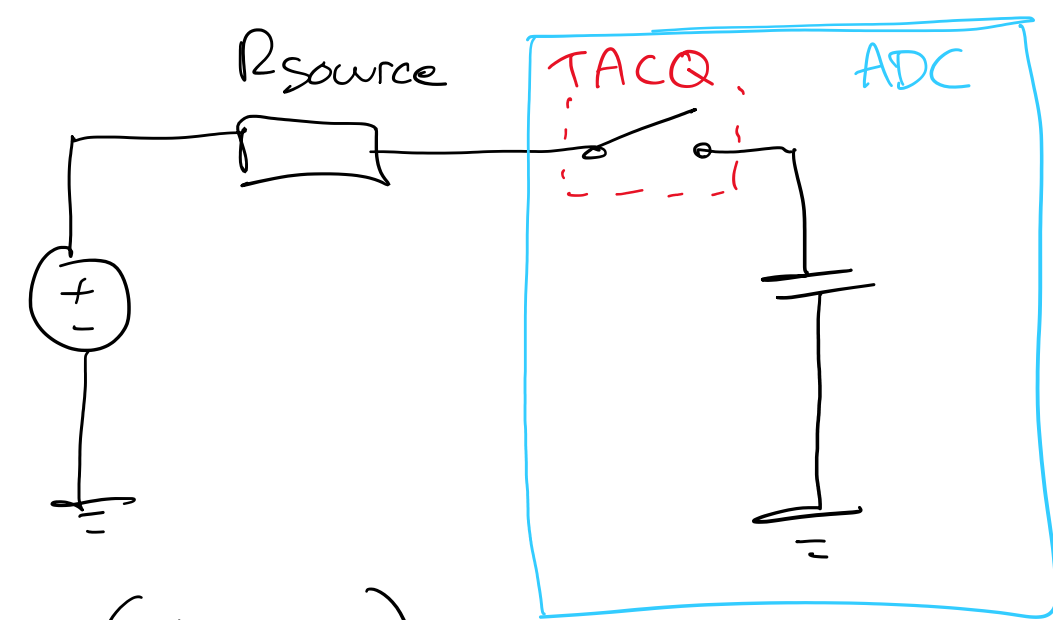
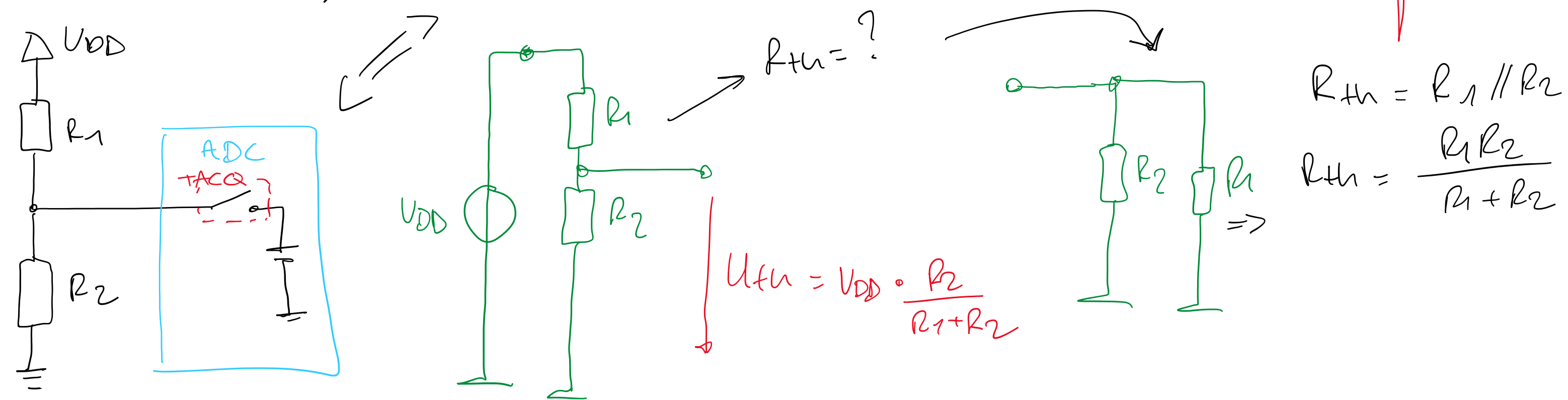


Battery Level monitoring with ADC.

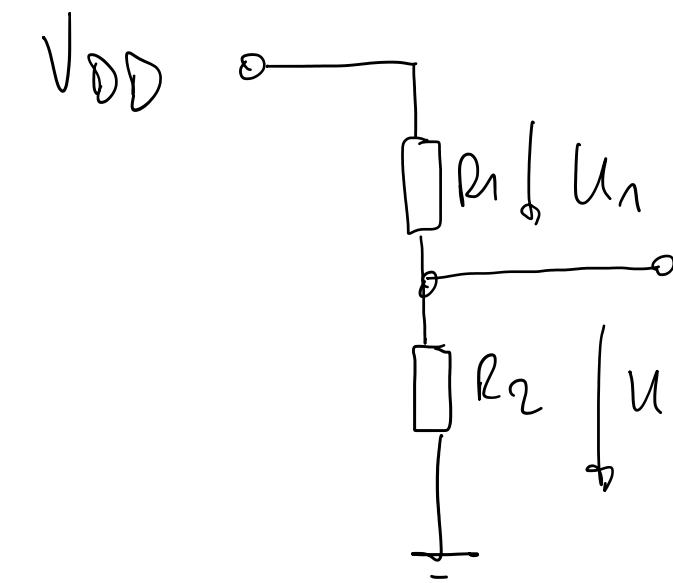
Max $R_{\text{source ADC}}$: $t = 40 \mu\text{s}$ (TACQ)

$R_{\text{source}} = 800 \text{ k}\Omega$

Circuit:


$$R_{\text{source}} = \underline{R_{th}}: (\text{Thevenin})$$


$$R_{thmax} \leq \frac{R_{source}}{R_1 + R_2}$$

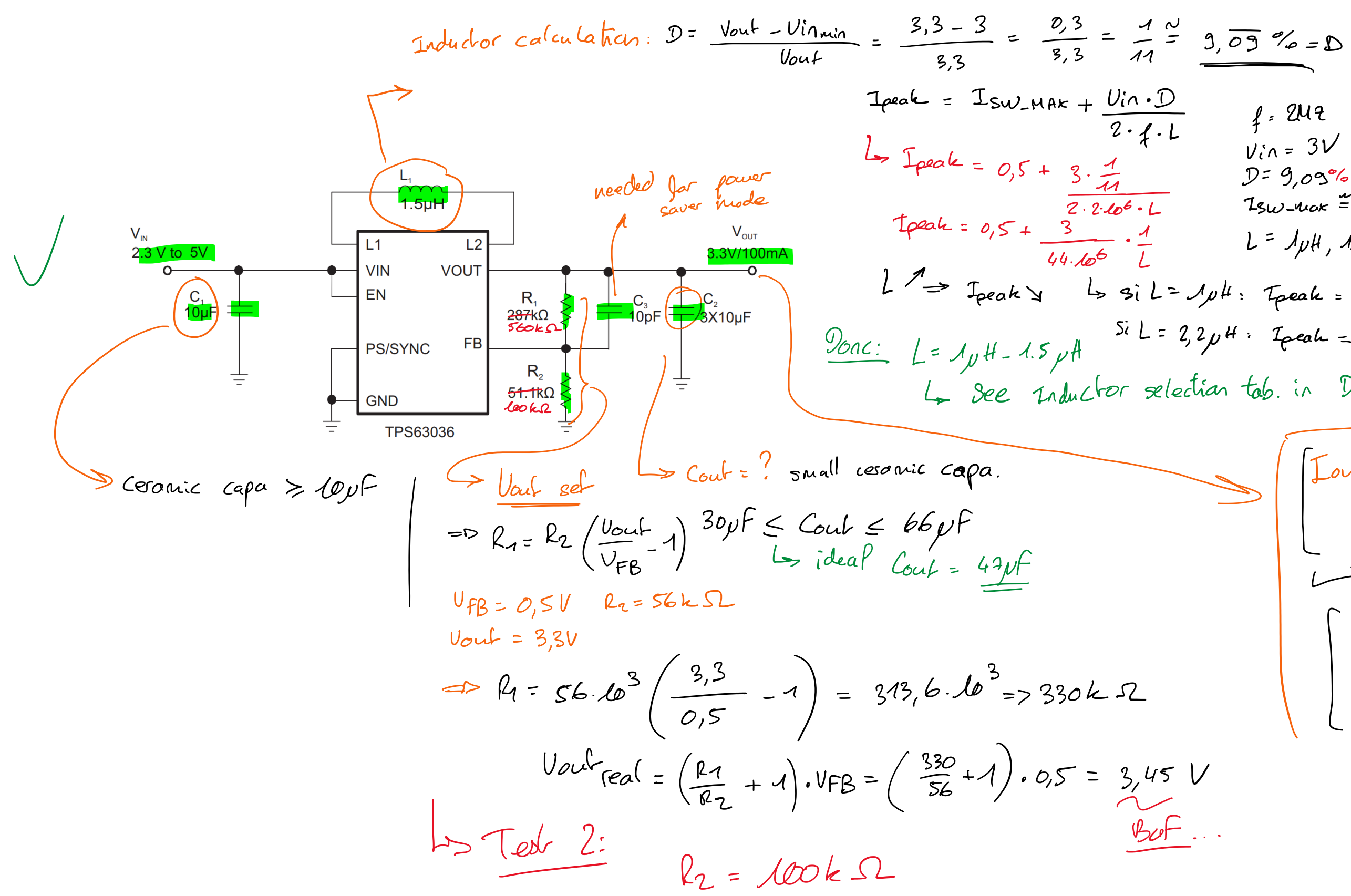


$$U_2 = V_{DD} \cdot \frac{R_2}{R_1 + R_2} = 1,8V$$

$$V_{OD} = 4,35V$$

$$\frac{V_2}{V_{DD}} = \frac{R_2}{R_1 + R_2} \Rightarrow R_1 V_2 + R_2 V_2 = R_2 V_{DD}$$

$$R_1 = R_2 \cdot \frac{V_{DD} - V_2}{V_2} = \frac{4,35 - 1,8}{1,8} =$$



$$\hookrightarrow R_1 = 100k \left(\frac{3,3}{0,5} - 1 \right) = 560k\Omega = 560k\Omega$$

$$\hookrightarrow V_{\text{out real}} = \left(\frac{560}{100} + 1 \right) \cdot 0,5 = \underline{\underline{3,3V}} \text{ ok}$$