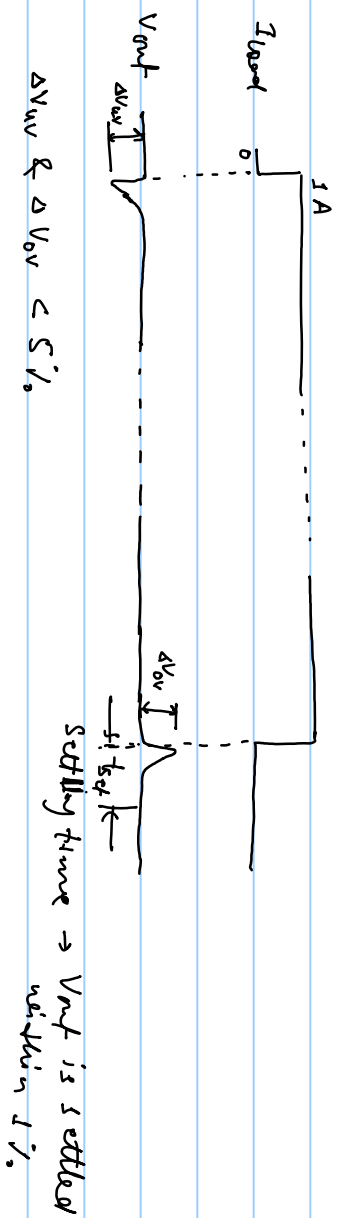


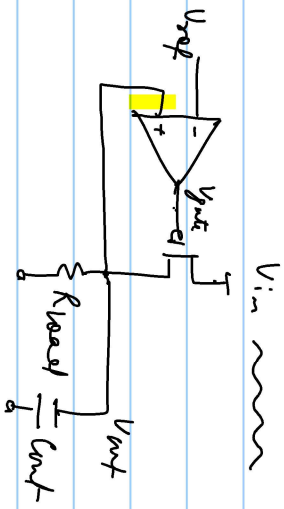
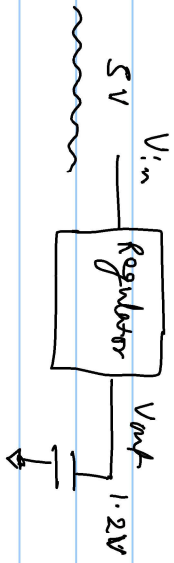
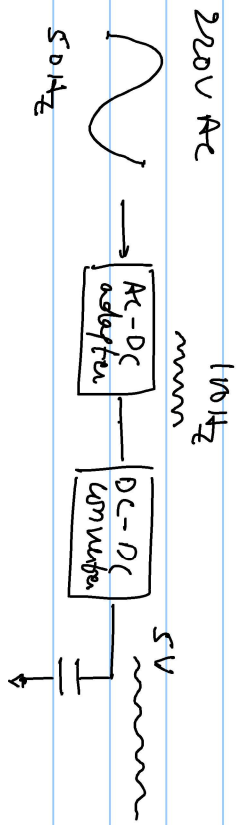
Load Regulation



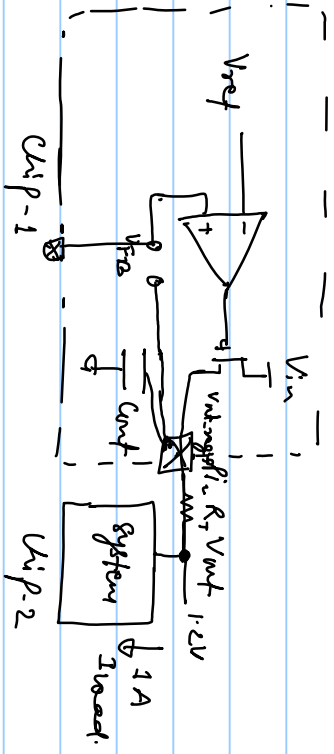
PSRR \rightarrow Power supply Rejection Ratio

$$PSRR = \frac{\Delta V_{out}(ac)}{\Delta V_{in}(ac)}$$

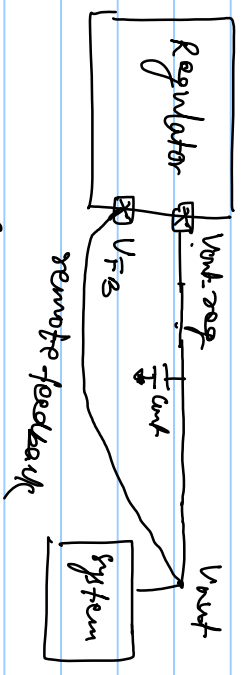
$$PSRR(dB) = 20 \log_{10} \frac{\Delta V_{out}(ac)}{\Delta V_{in}(ac)}$$



Remote Feedback



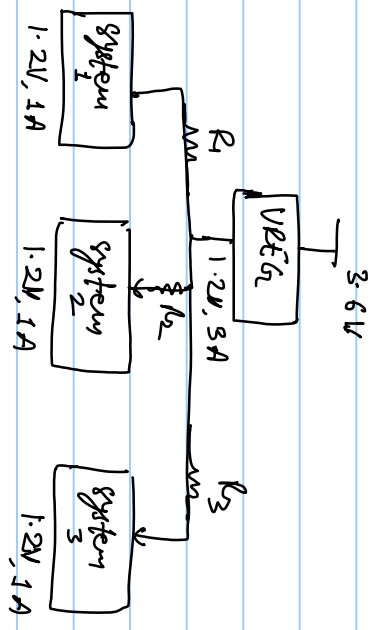
$$V_{out} = V_{out-reg} - I_{load} \cdot R_f$$



$$V_{out-reg} = V_{out} + I_{load} \cdot R_f$$

POL \rightarrow Point of Load Regulator

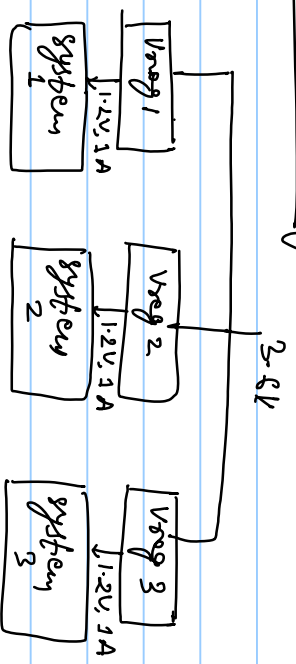
centralized supply



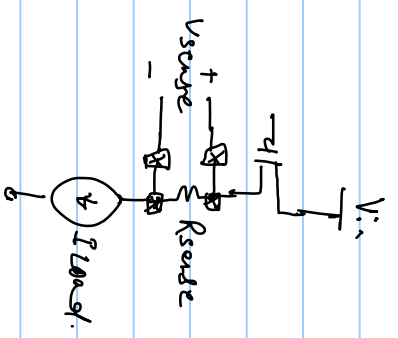
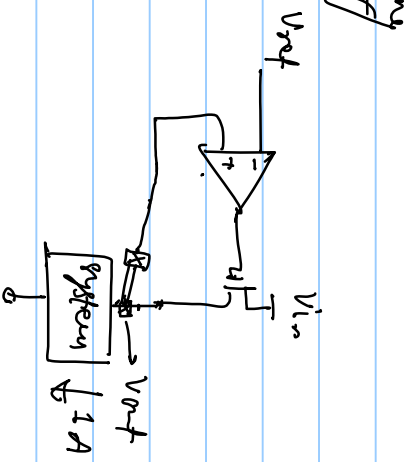
$R_1 \neq R_2 \neq R_3$

Remote feedback can't regulate all three points.

distributed supply

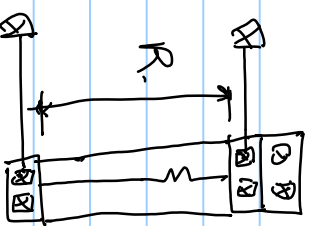
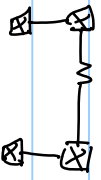


Kelvin Sensing



$$I_{load} = \frac{V_{sense}}{R_{sense}}$$

4-pin Beads



Drop Compensation

