

$V_{ES} = 4.1V$ ← Threshold for battery depletion

$$V_{startup} = \left(\frac{1.2V}{R_2} + 1.2\mu A \right) \times R_1 + 1.2V$$

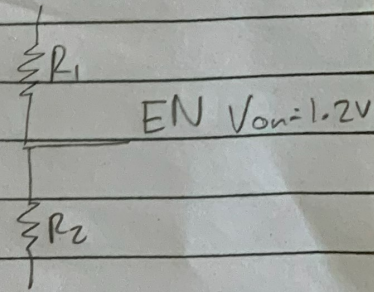
choose $R_2 = 100k$

$$\frac{V_S - 1.2}{\left(\frac{1.2V}{R_2} + 1.2\mu A \right)} = R_1$$

$$R_1 = 212k = 220k$$

$$R_2 = 100k$$

$$V_S = 4.1V$$



Component selection:

Catch Diode

$$I_{diode} = \left(1 - \frac{V_{out} + V_D}{V_{in} + V_D} \right) \times I_{LOAD(max)}$$

$I_{LOAD(max)}$ 3C for 2300mAh SO $3 \times 2300mAh = 6.9A$
Back max $\rightarrow 2A$

at $I_{LOAD} = 2A$ $V_D = 0.4V$

$$I_{diode} = \left(1 - \frac{5 + 0.4}{6 + 0.4} \right) \times 2A$$

$$= 0.3125 \text{ A fin for } I_{max, diode} = 4A \checkmark$$