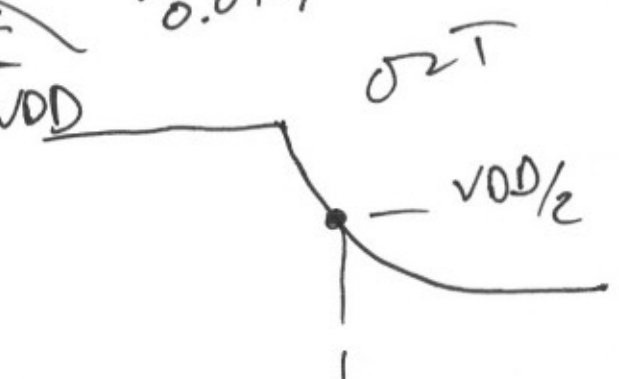


$$t_d = ? \text{ ns}$$

$$= R \cdot C \quad \text{with } C = 1 \text{ pF}$$

$$R_N = ? \text{ k}\Omega$$

MOSIS $\rightarrow L_{min} = 2$
 Book $\rightarrow L_{min} = 1$
 Crossed out

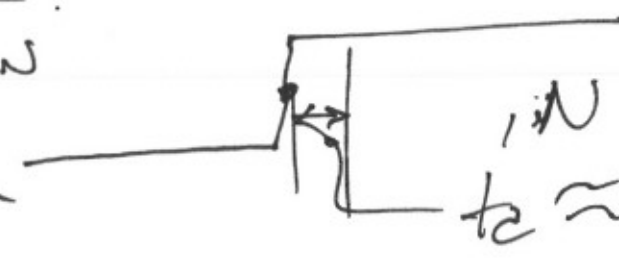


$$R_N' = R_N \cdot \frac{W}{L}$$

$$R_N = R_N' \cdot \frac{L}{W}$$

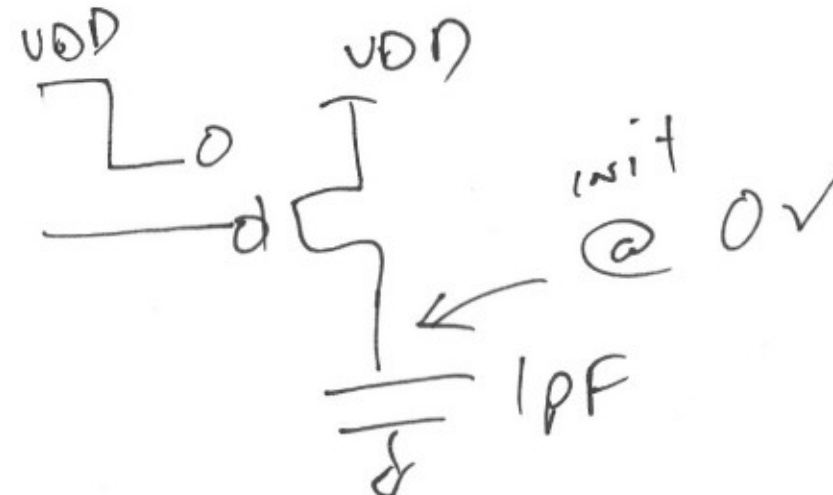
$$R_N \approx 2 \text{ k}\Omega$$

Scale = 25 um



$$t_c \approx RC$$

$$0.7 RC$$

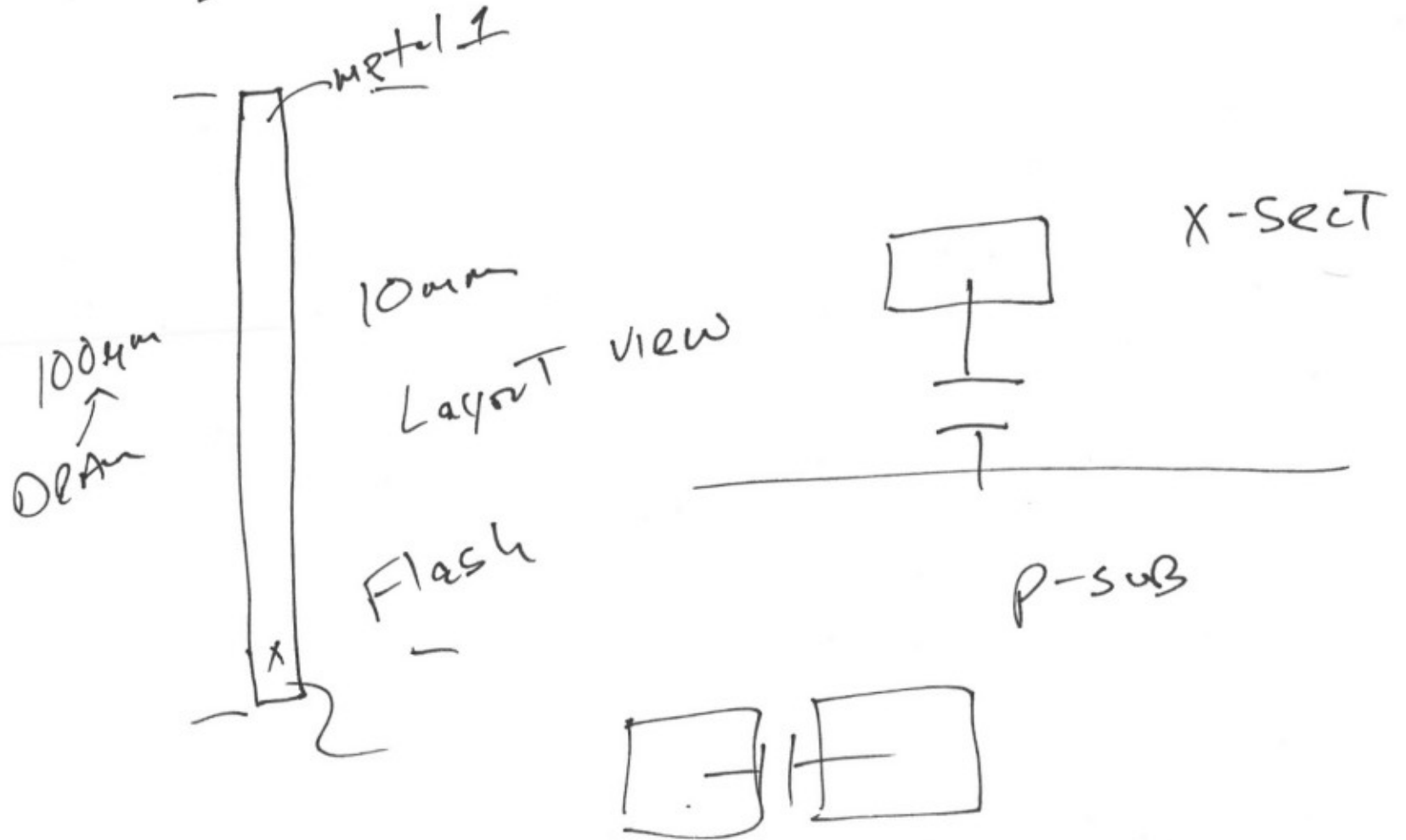


$$R_N' = 2 \text{ k}\Omega$$

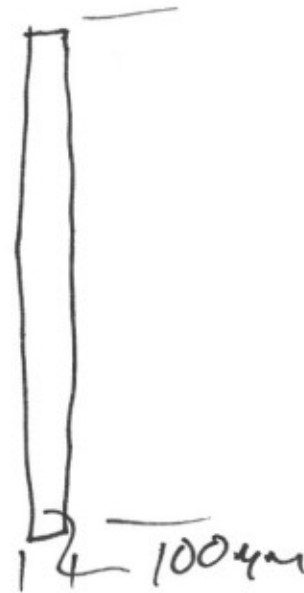
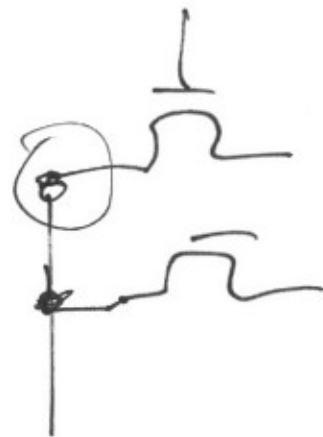
$$R_N = 2 \text{ k}\Omega \cdot \frac{L}{W}$$

1)

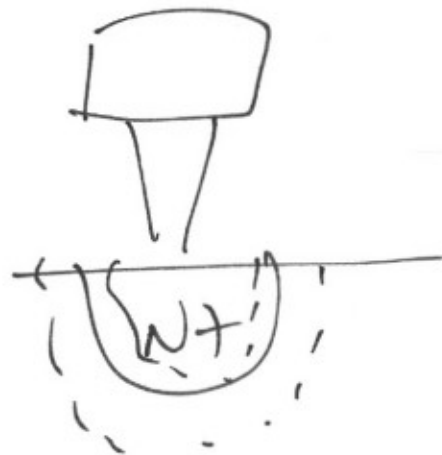
Bit line, Digit line, Column line



25mm



$$\frac{100}{.025} = 4,000$$



P-1 VB



57

