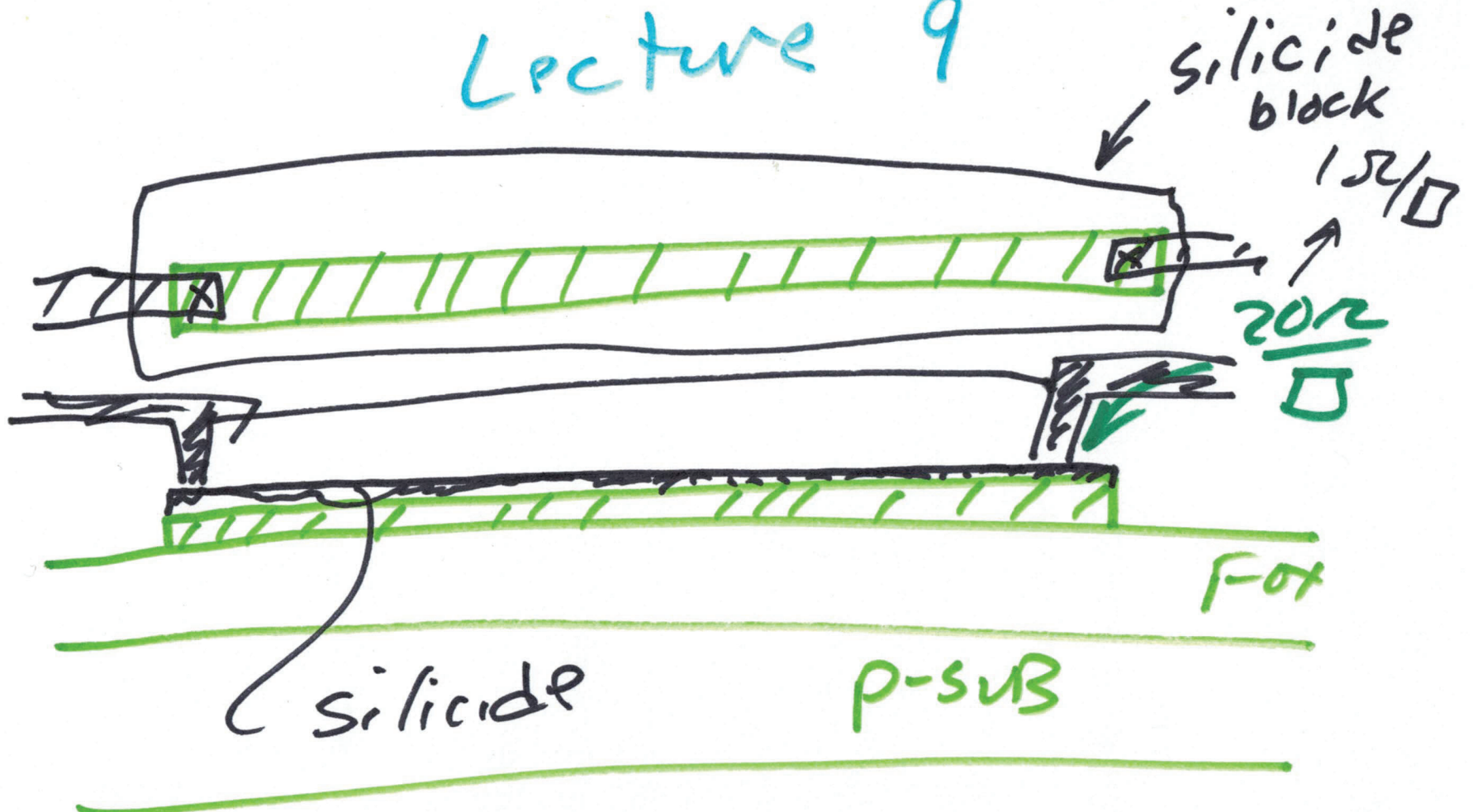
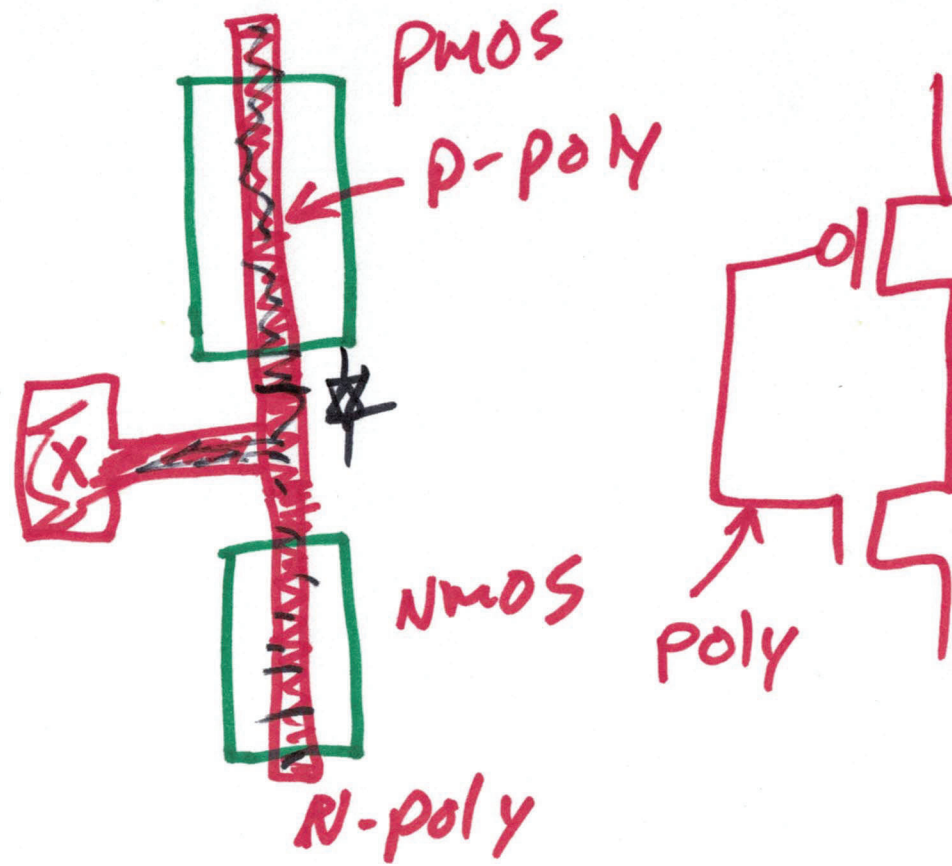


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Lecture 9

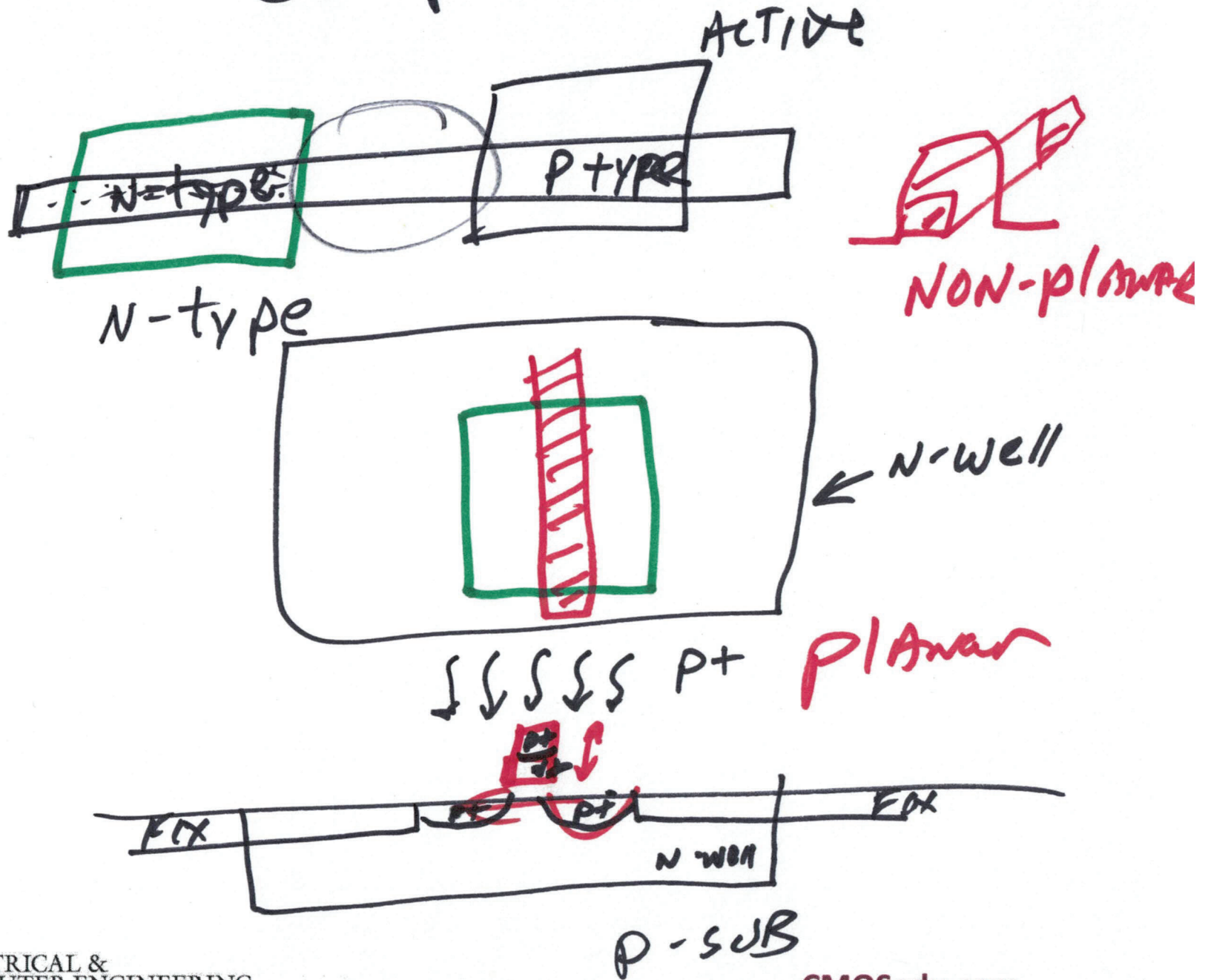




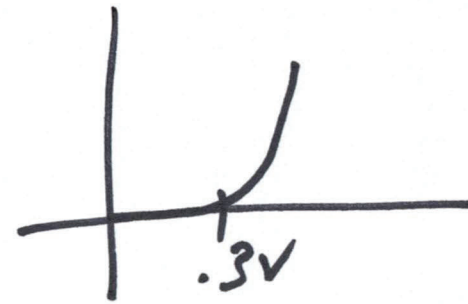
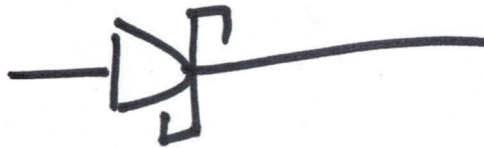
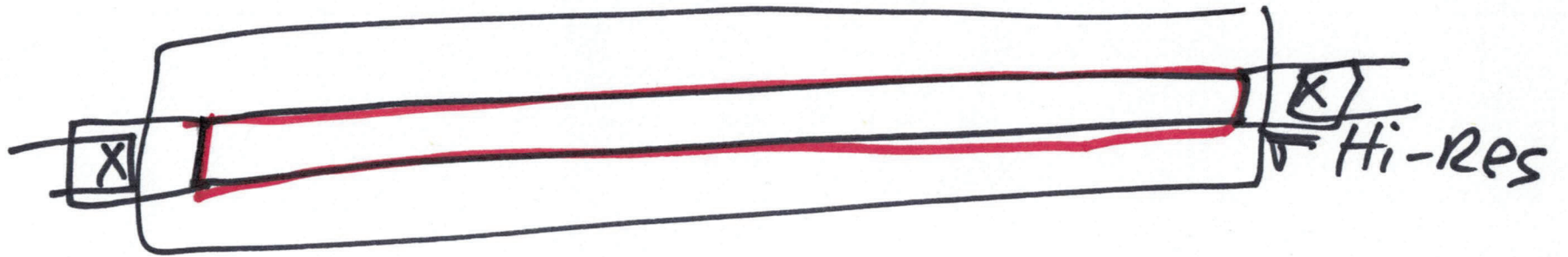
in-situ

2)

CS PROCESS

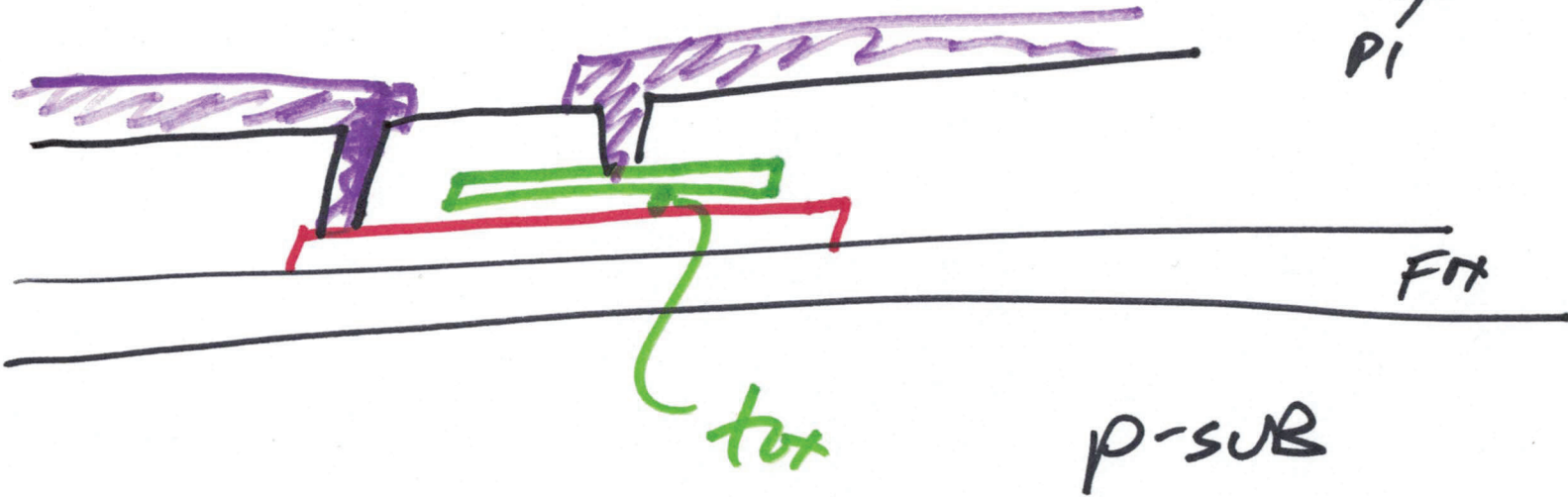
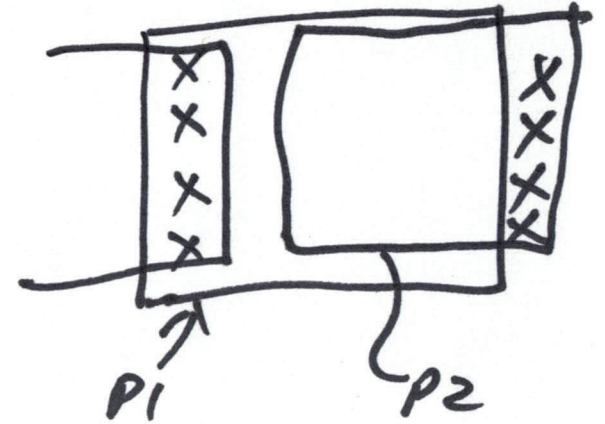
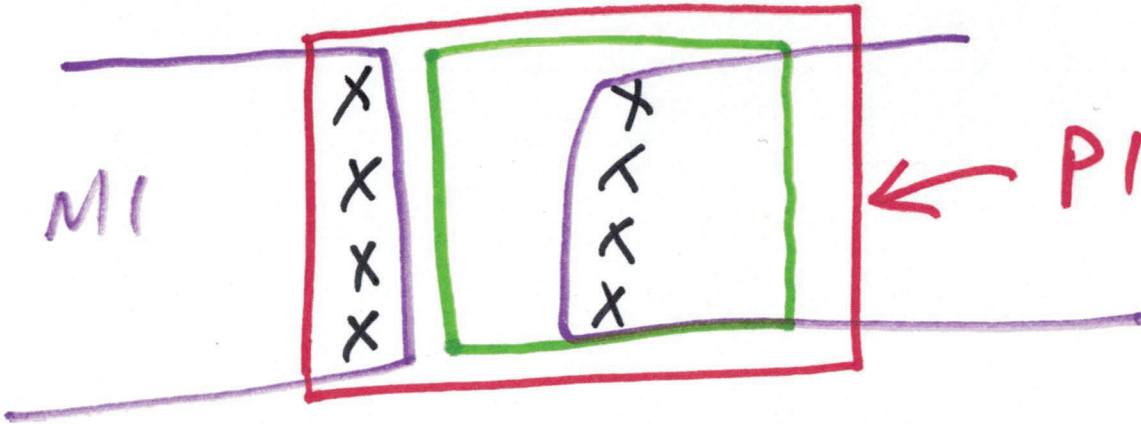


3)



4)

$$C = \frac{\epsilon A}{t}$$



1pF CAP

$$1,000 \text{ fF} = 1 \text{ pF} = \frac{0.9 \text{ fF}}{1 \mu\text{m}^2} \cdot L \cdot W$$

↑
plate

$$L \cdot W = 1111.111$$

$$W = L = 33.3 \mu\text{m}$$

$$\text{fringe} = 4.33 \cdot \frac{0.065 \text{ fF}}{1 \mu\text{m}} = 8.58 \text{ fF}$$

$$C_{\text{TOTAL}} = 1 \text{ p} + 0.00858 \text{ p} = 1.00858 \text{ pF}$$