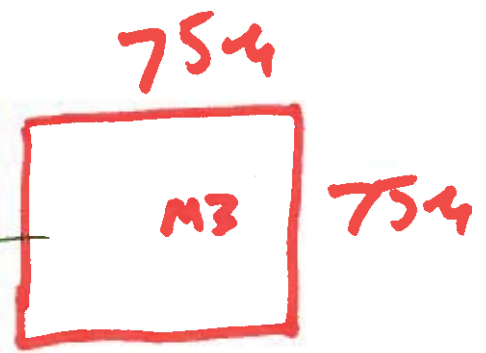


EE421 IELG 621 Digital

IC Design

9/11/2019

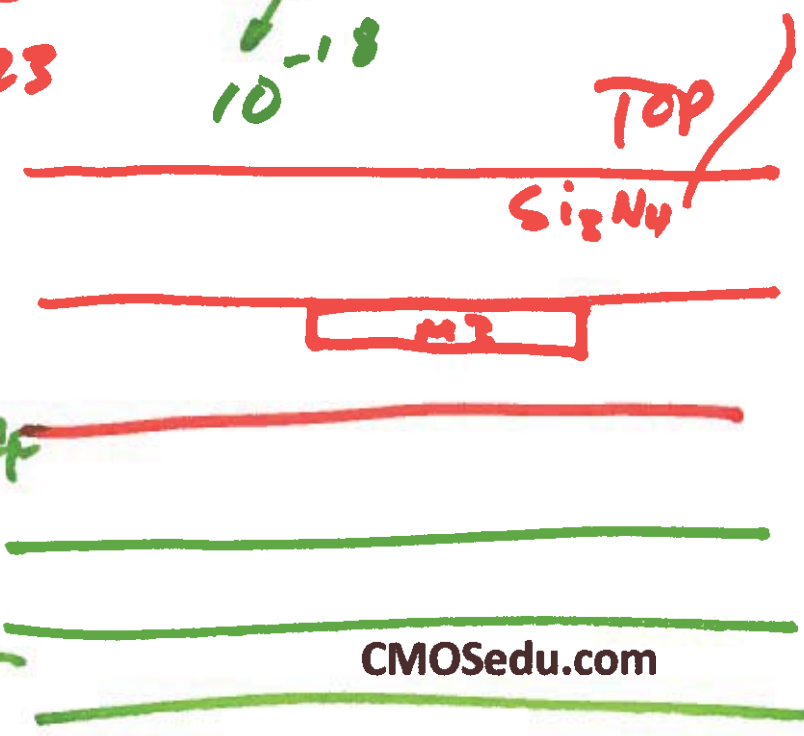
Lecture 5



- N-well
 - Metal 1
 - Metal 2
 - Metal 3
- CONTACT
VIA12
VIA23

$10 \text{ aF}/\mu\text{m}^2$ Passivation Layer

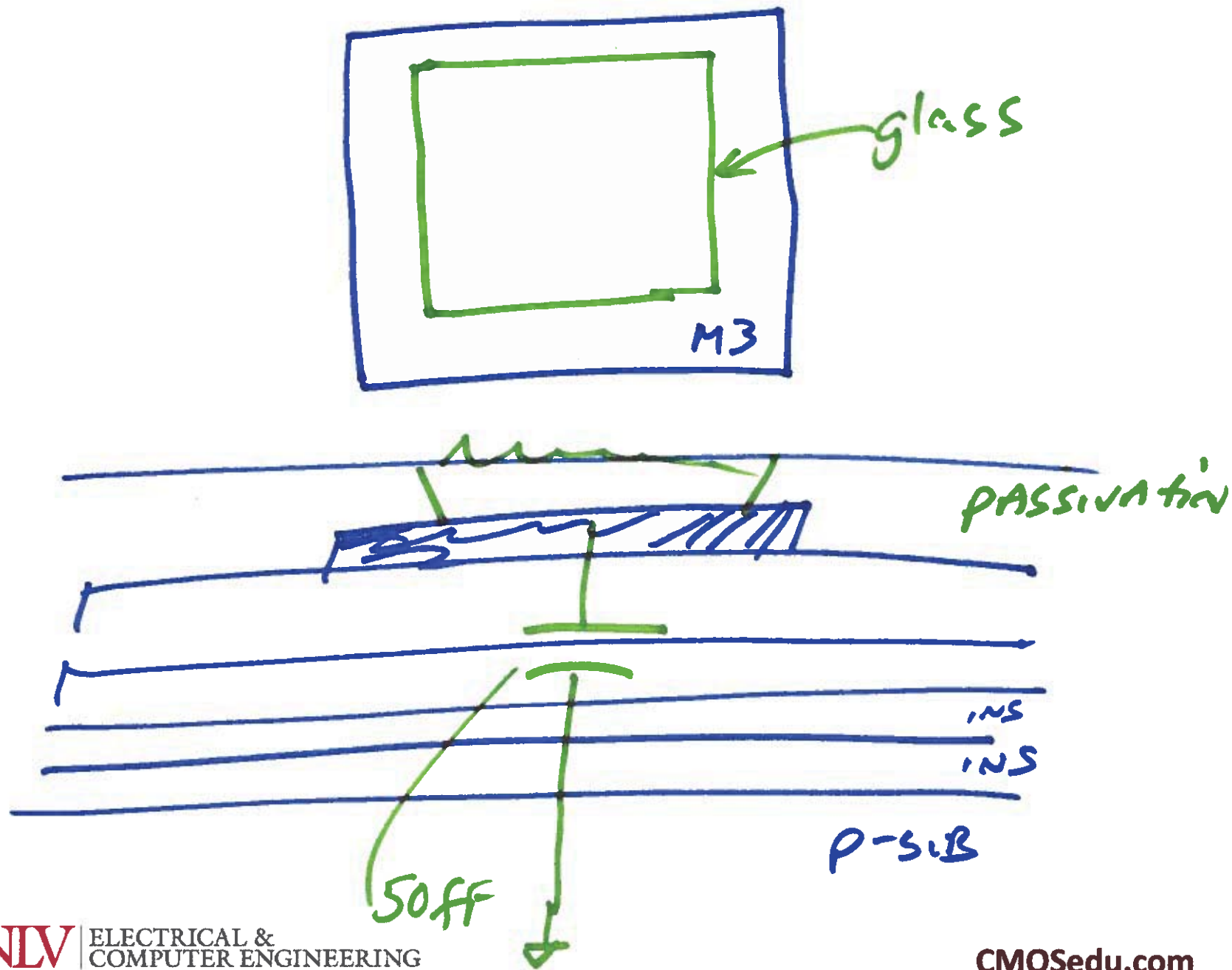
10^{-18}



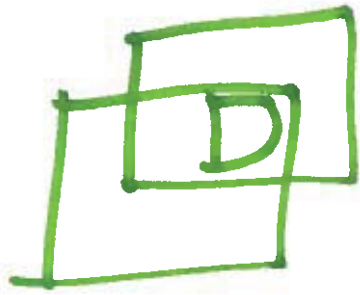
$$75 \mu\text{m} \cdot 75 \mu\text{m} \cdot \frac{10 \text{ aF}}{\mu\text{m}^2}$$

$$75 \cdot 750 \text{ aF} \approx 7.5 \cdot 7.5 \text{ fF}$$

$$\approx 50 \text{ fF}$$



2)



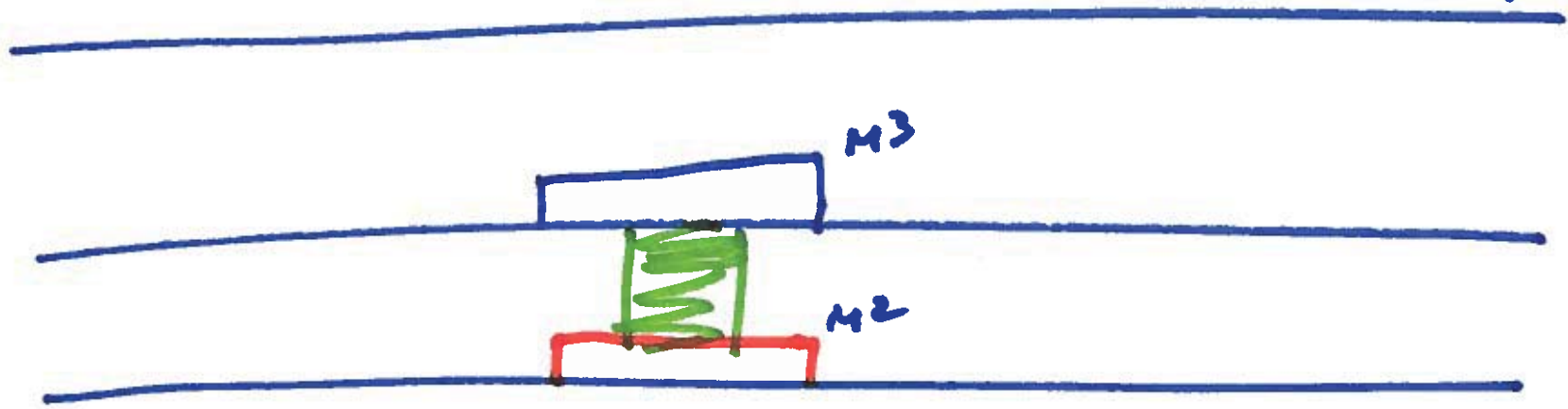
← M2
VIA32

$$0.64 \quad 0.64$$

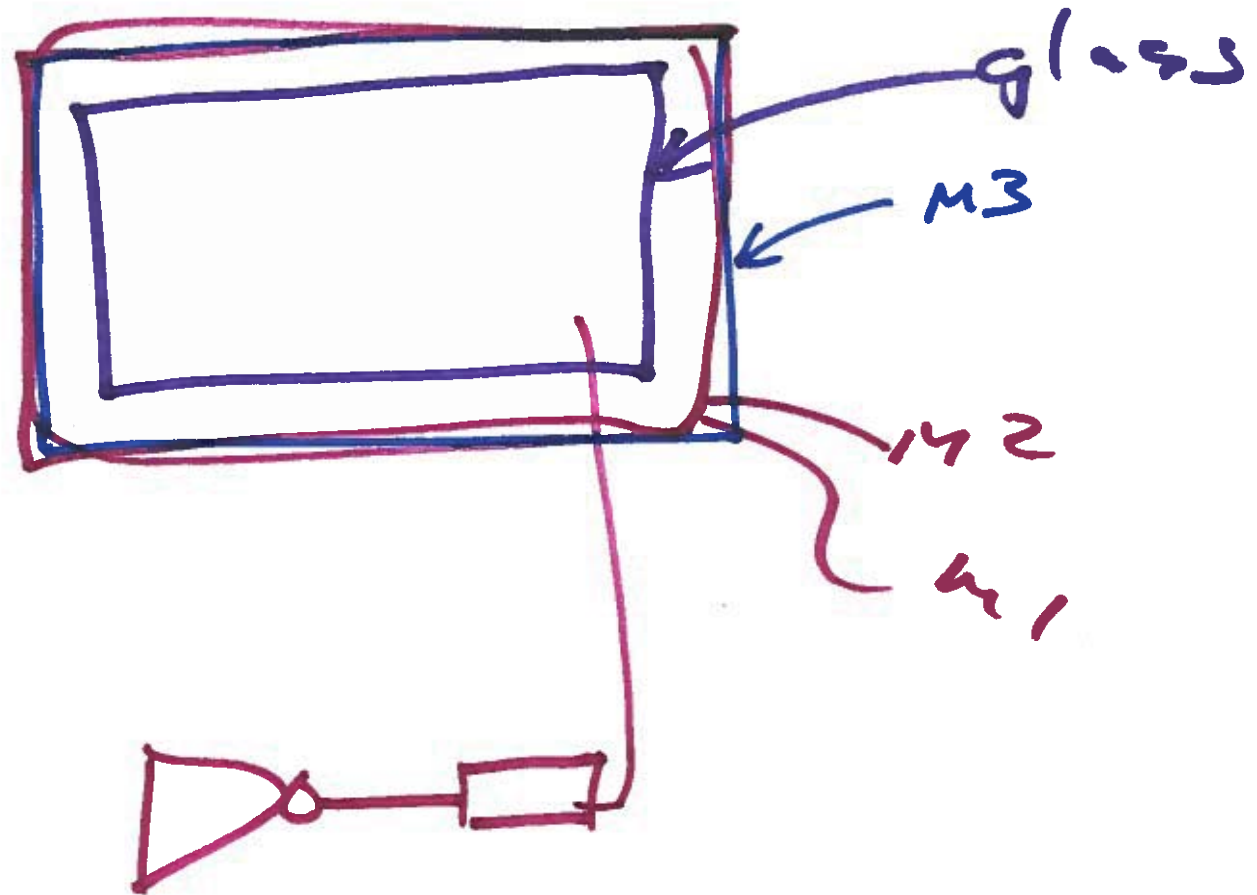
$$2\lambda \quad \times \quad 2\lambda$$

$$\lambda = 0.34$$

TOP



3)



4)