



**Faculty of Engineering**  
**Electrical and Computer Engineering Department**  
**Integrated Circuits design**

IC homework#3

**Student name:**

Mohammad Mouadi

**Student ID:**

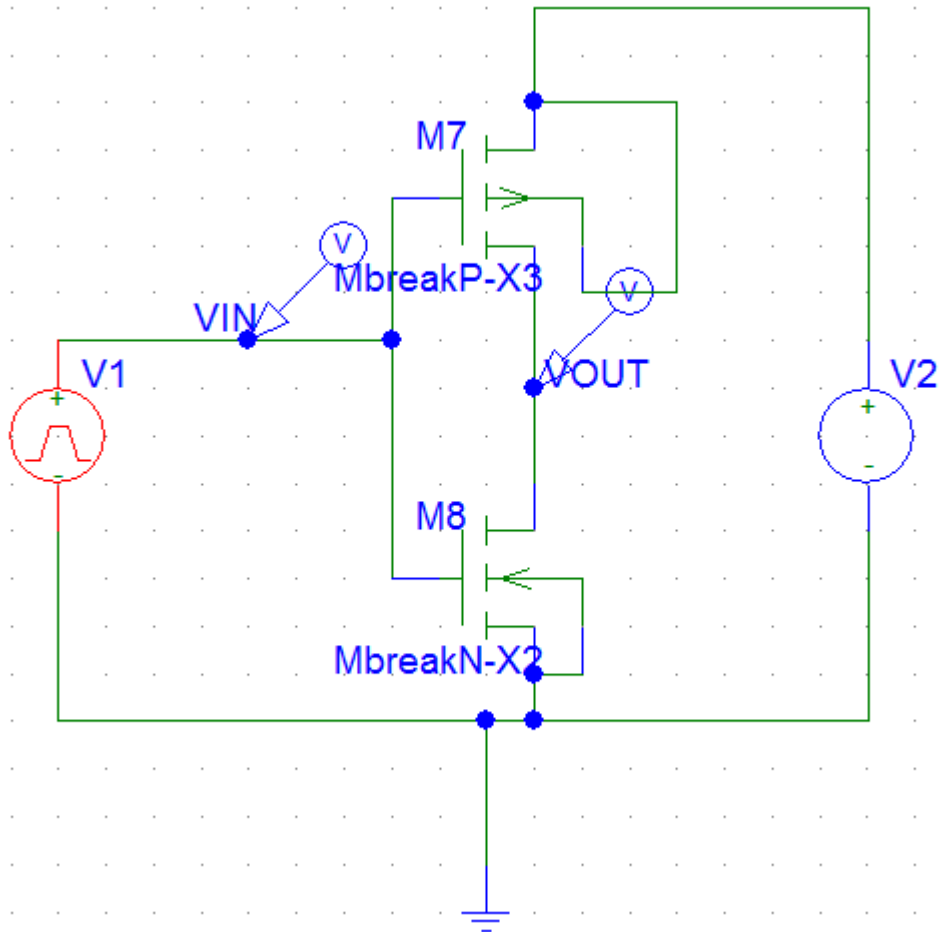
1162246

**Instructor name:**

D. Khader Mohammad

Part1:

Schematic:



## NMOS specifications:

M8 PartName: MbreakN

Name	Value
L	= 30n

L=30n  
W=60n  
AD=  
AS=  
PD=  
PS=  
NRD=

Include Non-changeable Attributes  
 Include System-defined Attributes

Save Attr  
Change Display  
Delete  
OK  
Cancel

## PMOS specifications:

M7 PartName: MbreakP

Name	Value
L	= 30n

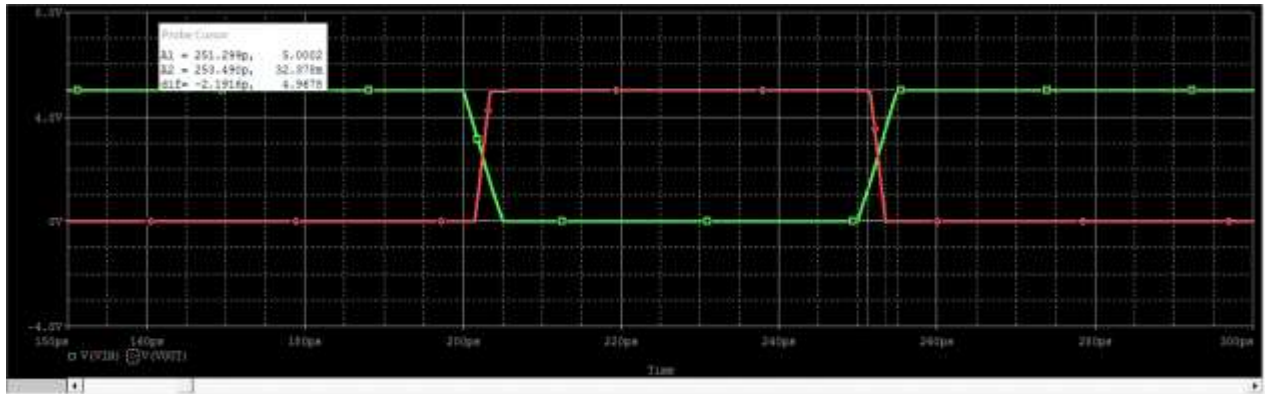
L=30n  
W=120n  
AD=  
AS=  
PD=  
PS=  
NRD=

Include Non-changeable Attributes  
 Include System-defined Attributes

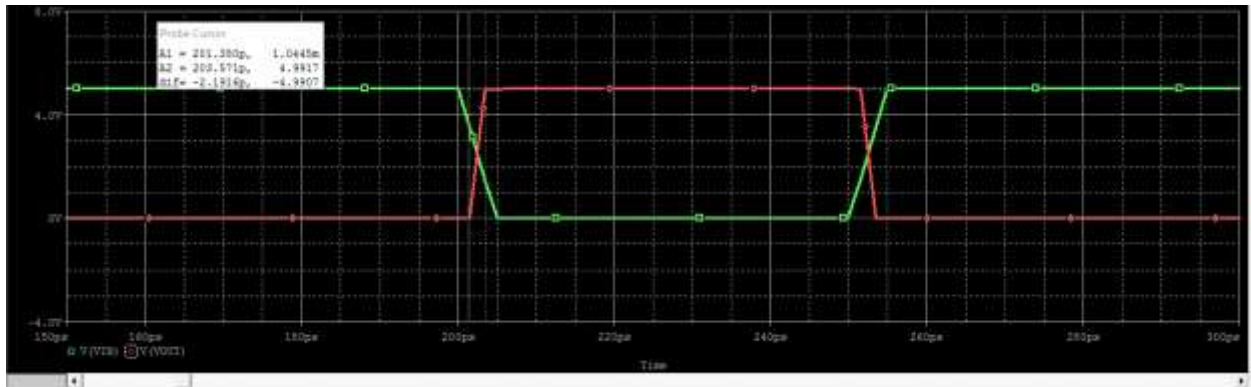
Save Attr  
Change Display  
Delete  
OK  
Cancel

Simulation:

Fall time (2 ps):

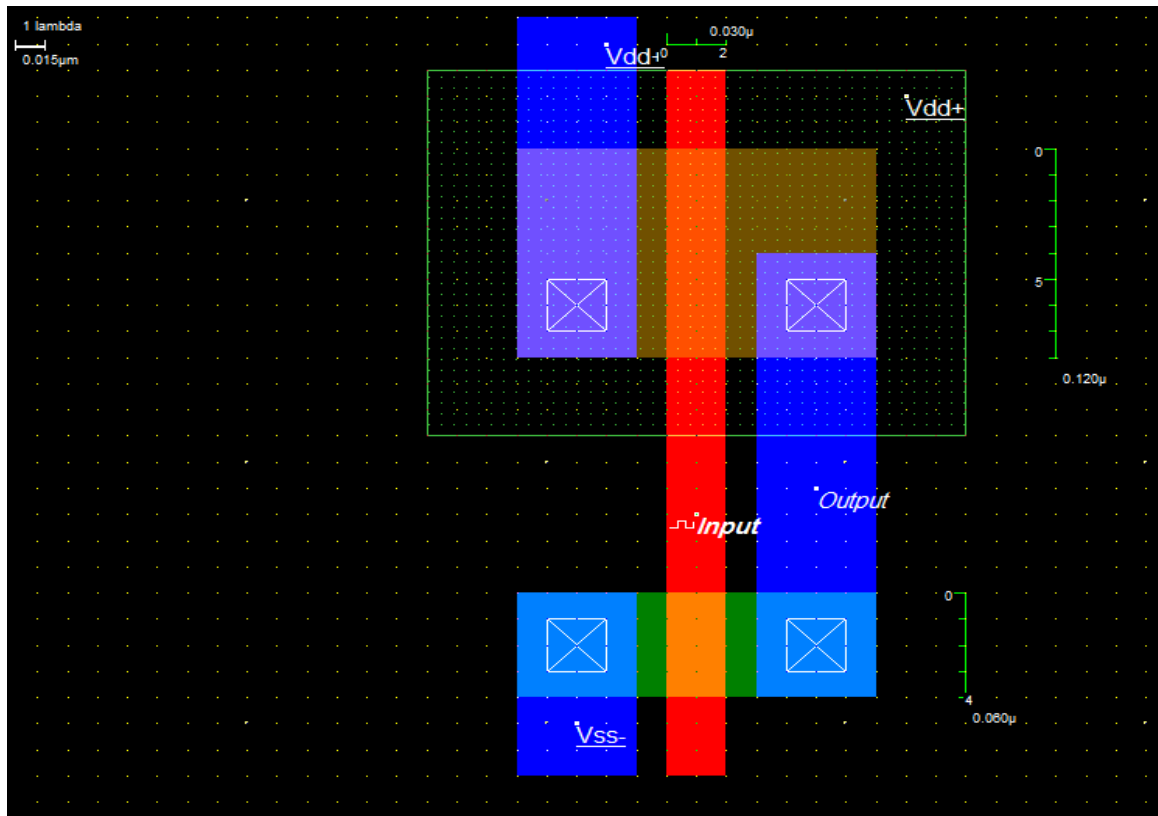


Rise time (2 ps):

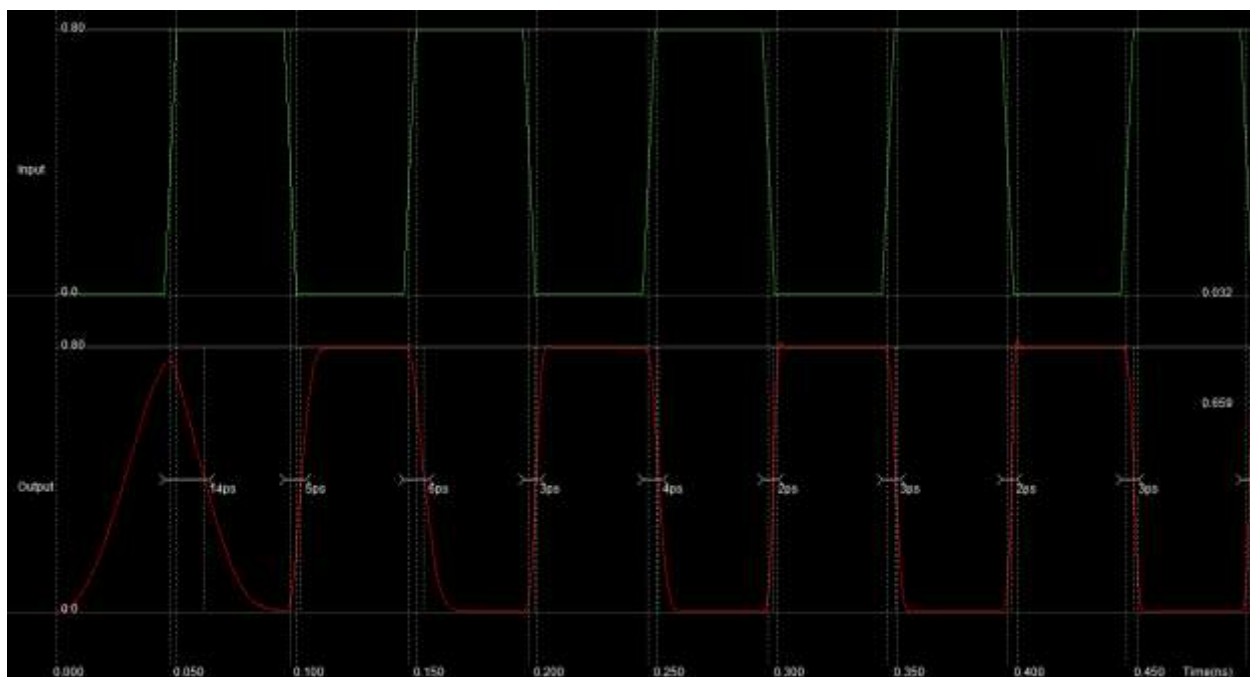


Part2:

Layout:

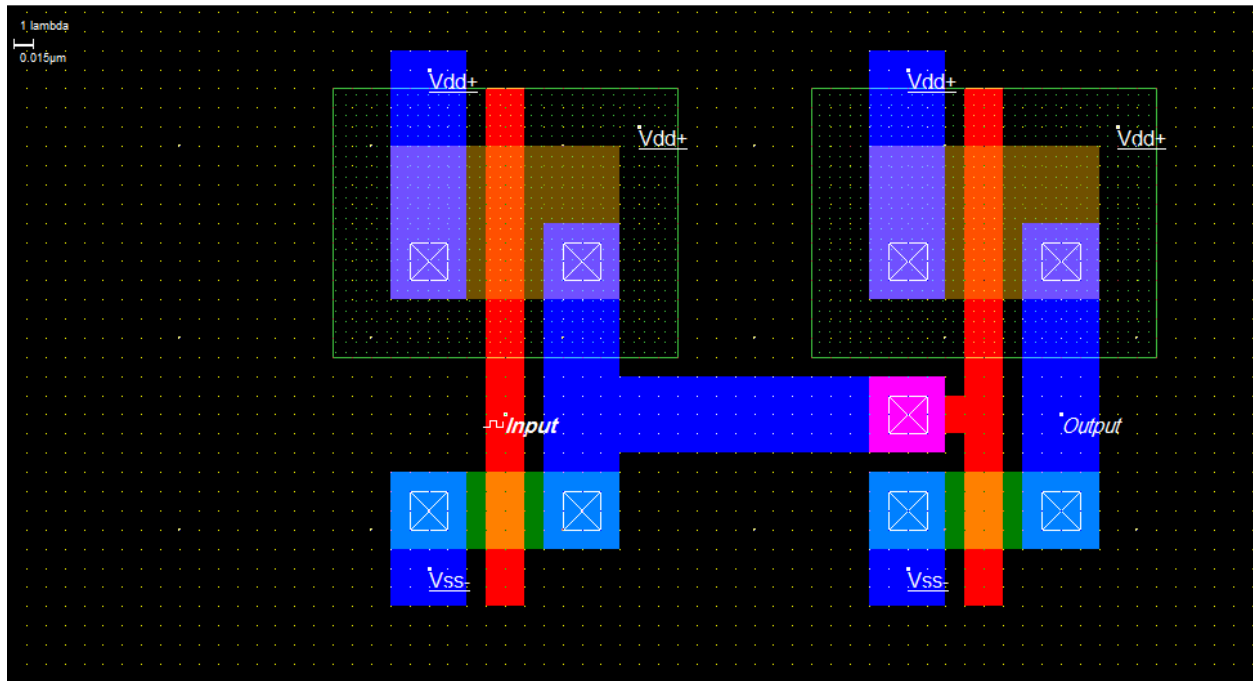


Simulation(Fall and rise time almost 2 ps):



Part3:

Layout:



Simulation:

