**ECEN 454**

**LAB 2**

**NAME:** Jason Gilman

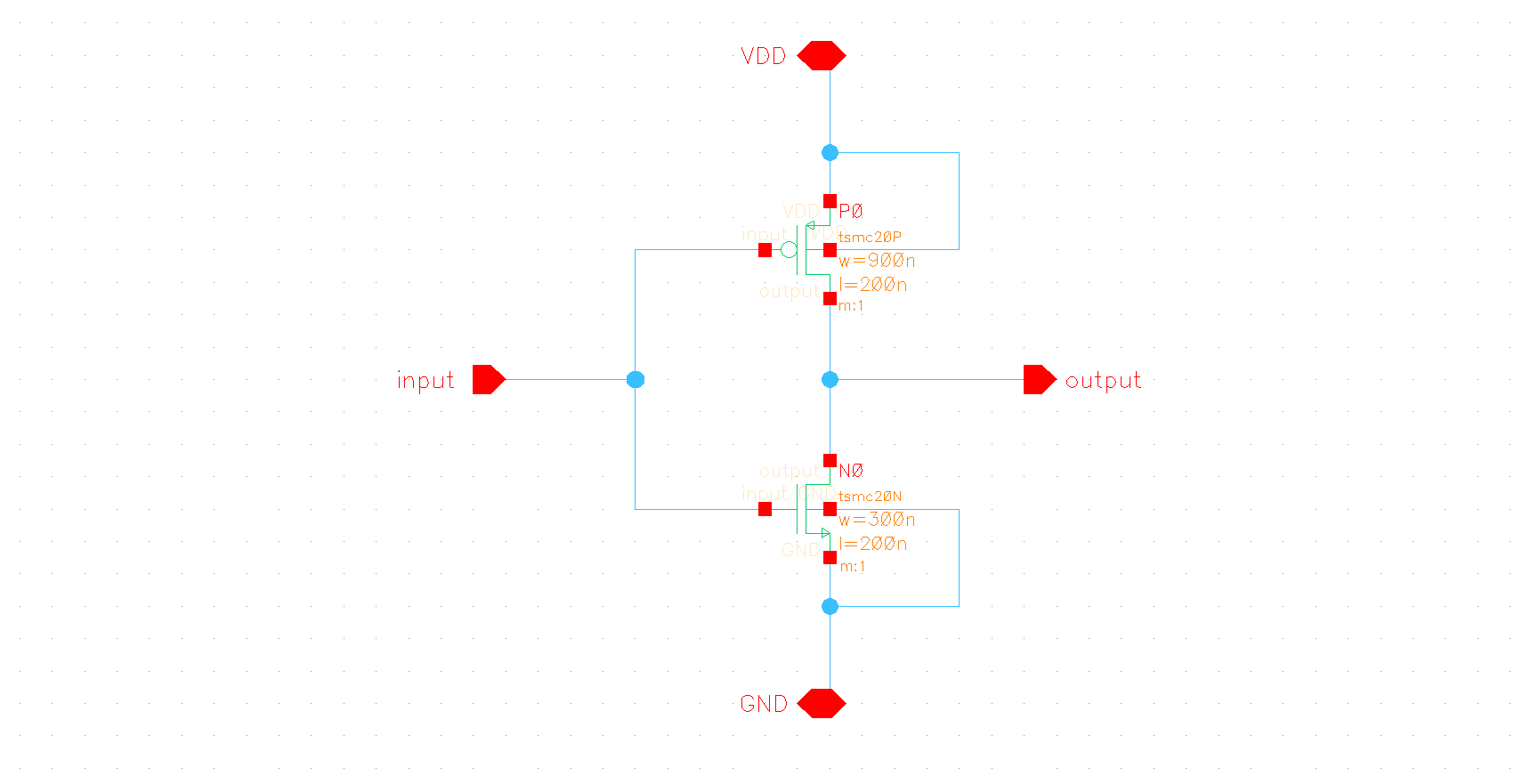
**UIN:** 126006979

**SECTION:** 511

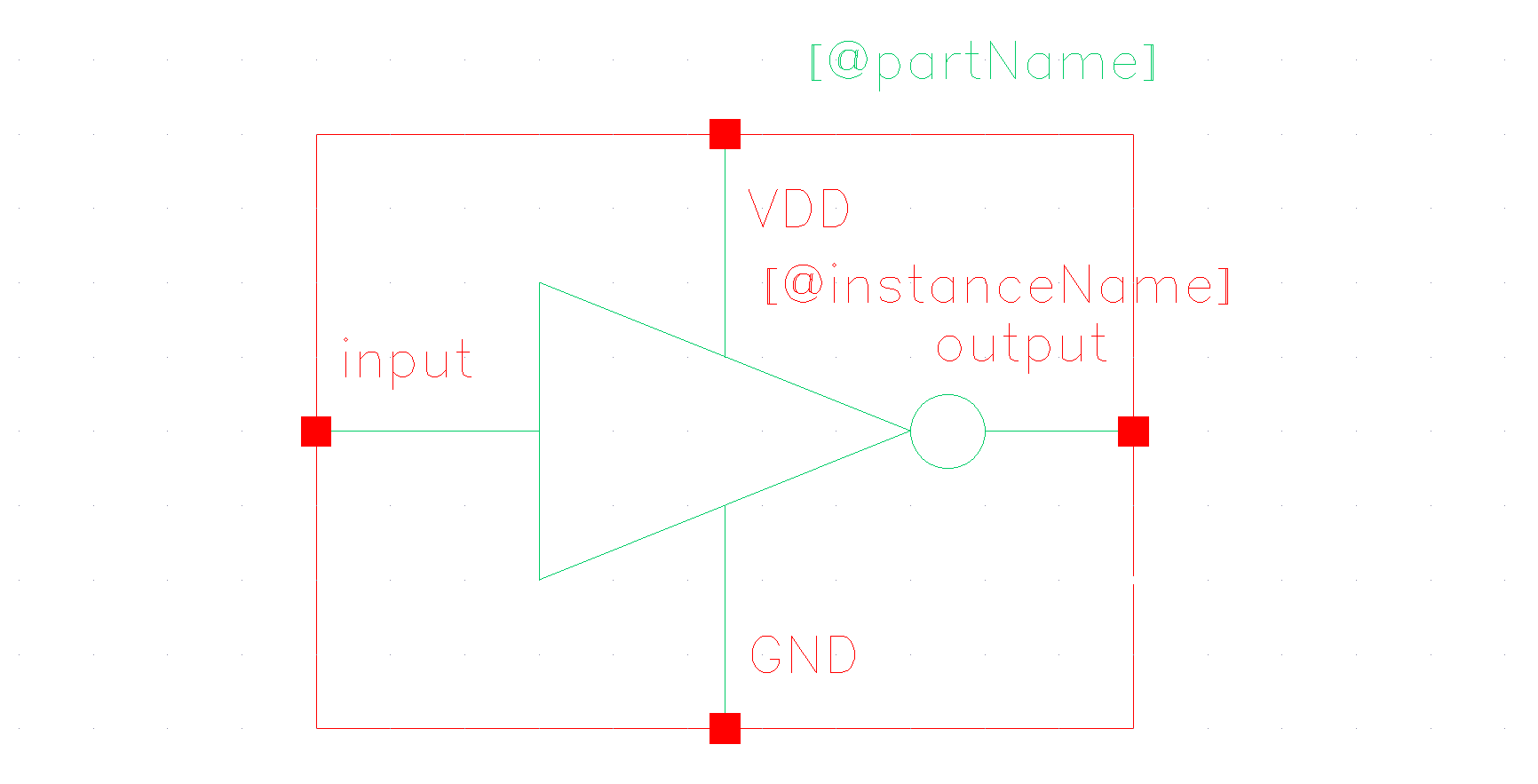
**TA:** Guaynu Gao

**INVERTER**

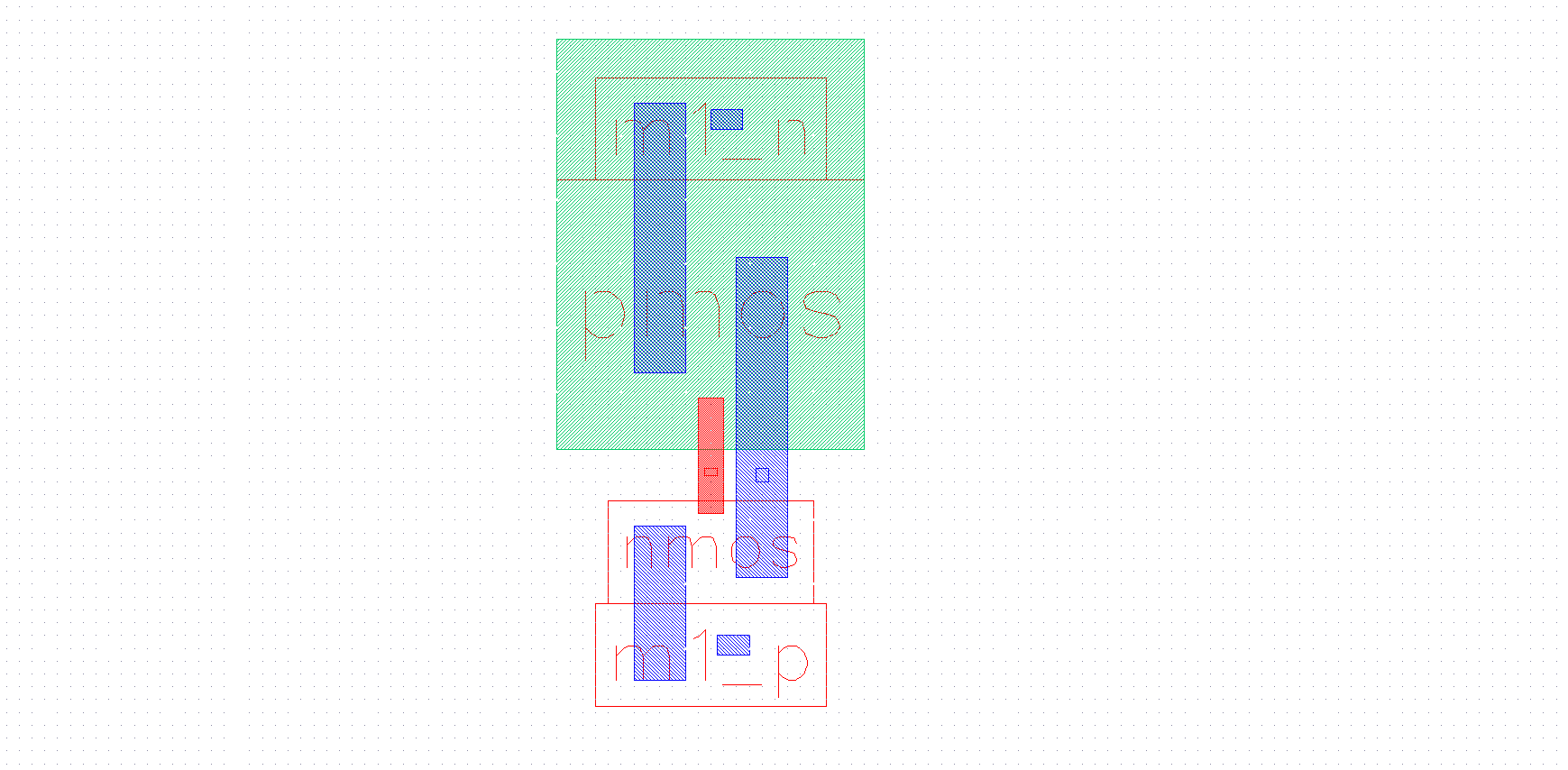
Schematic - inverter



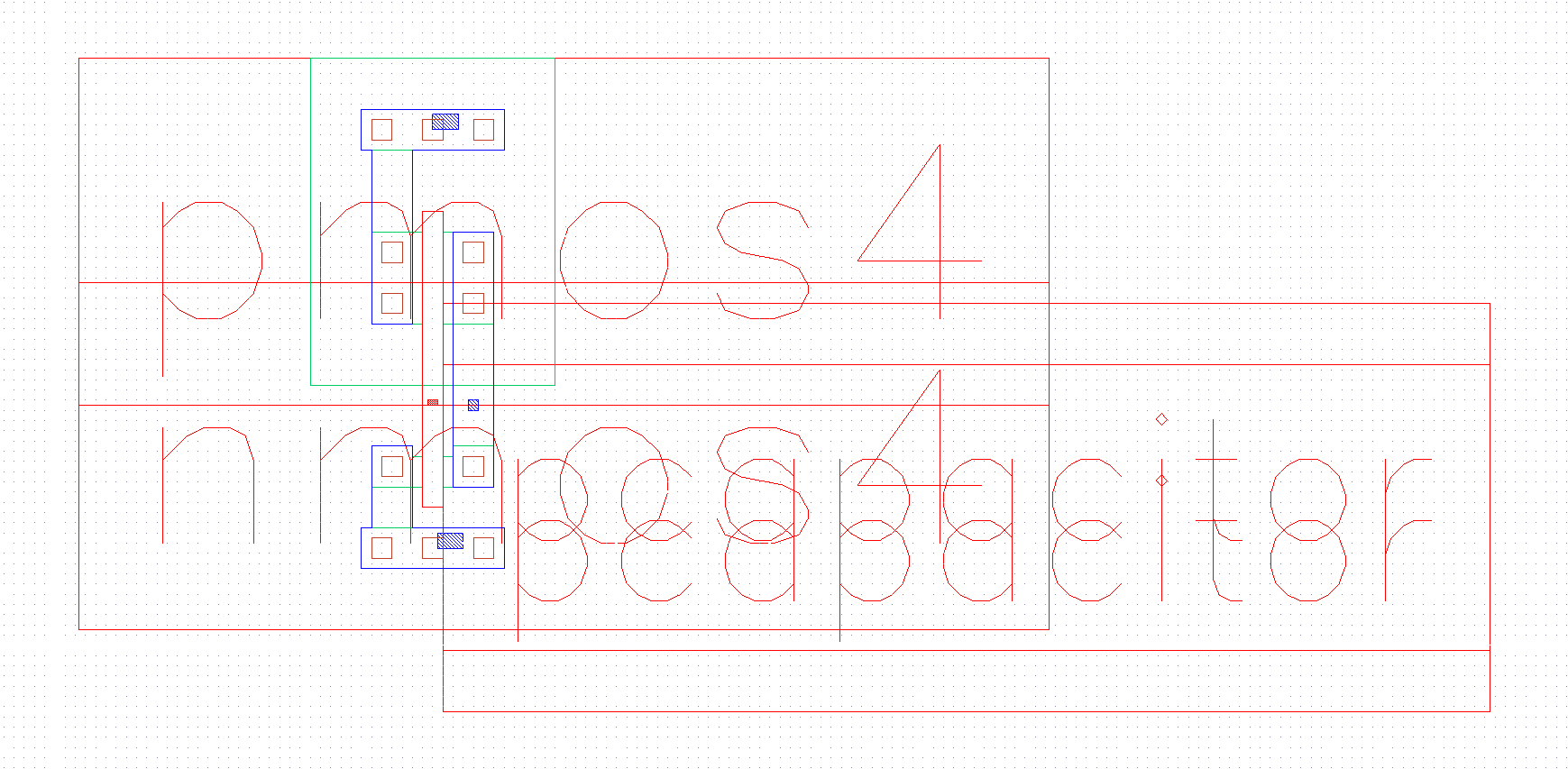
Symbol - inverter



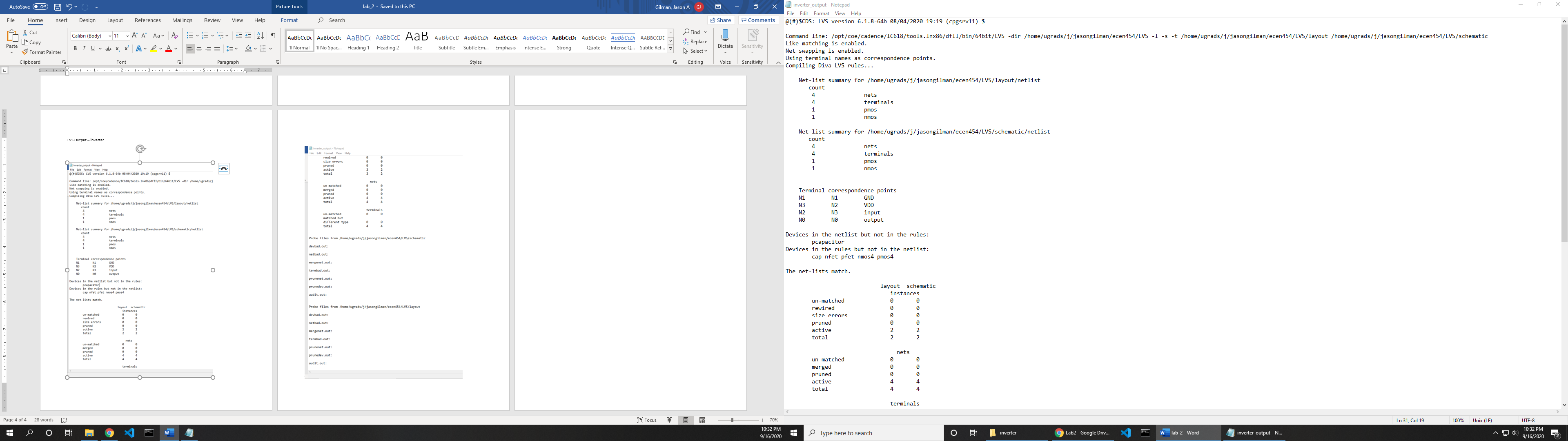
Layout – inverter

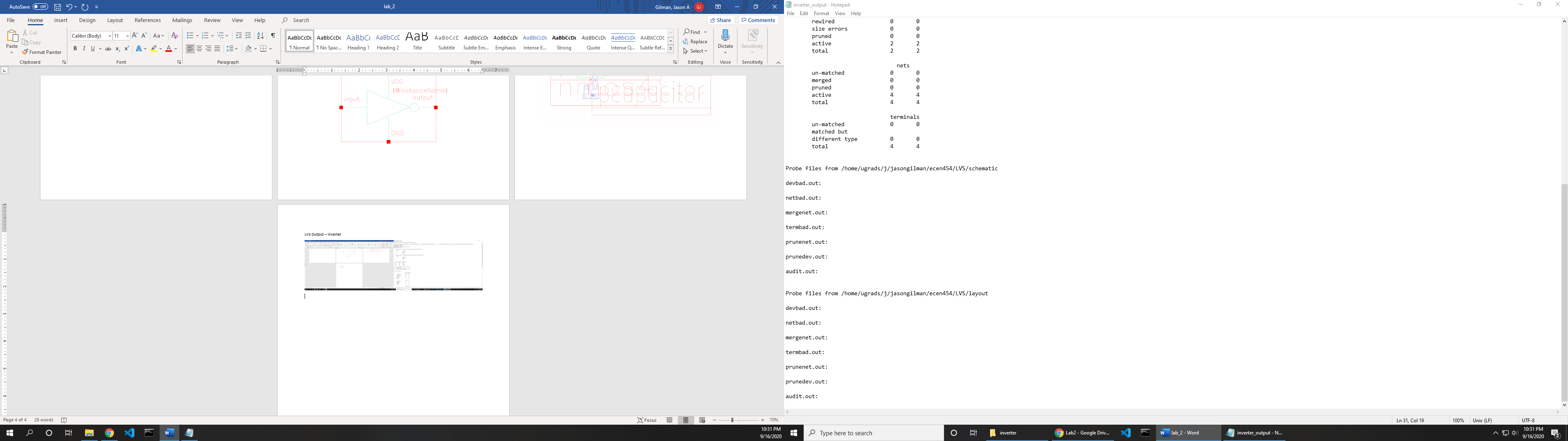


Extracted – inverter



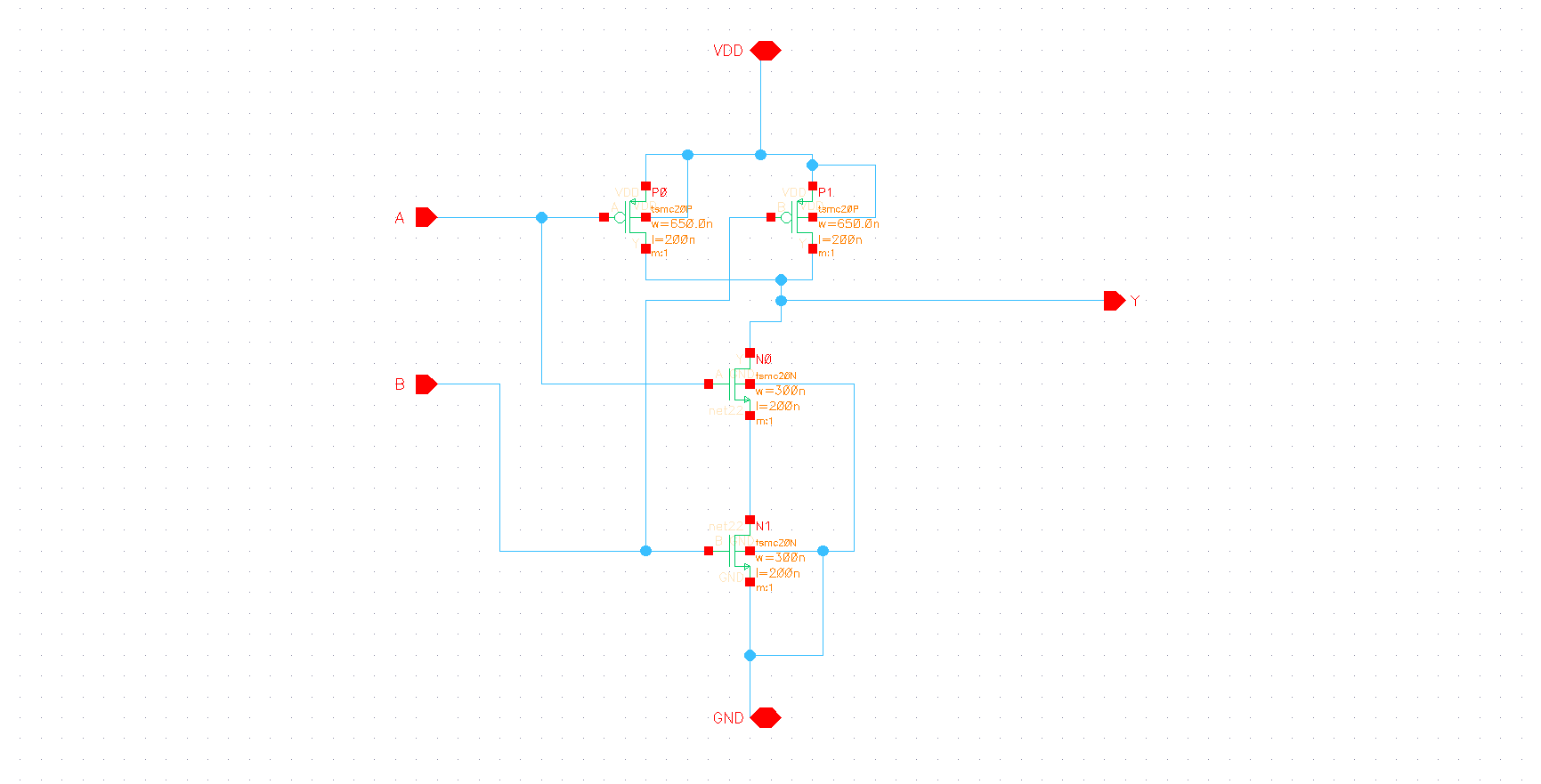
LVS Output – inverter



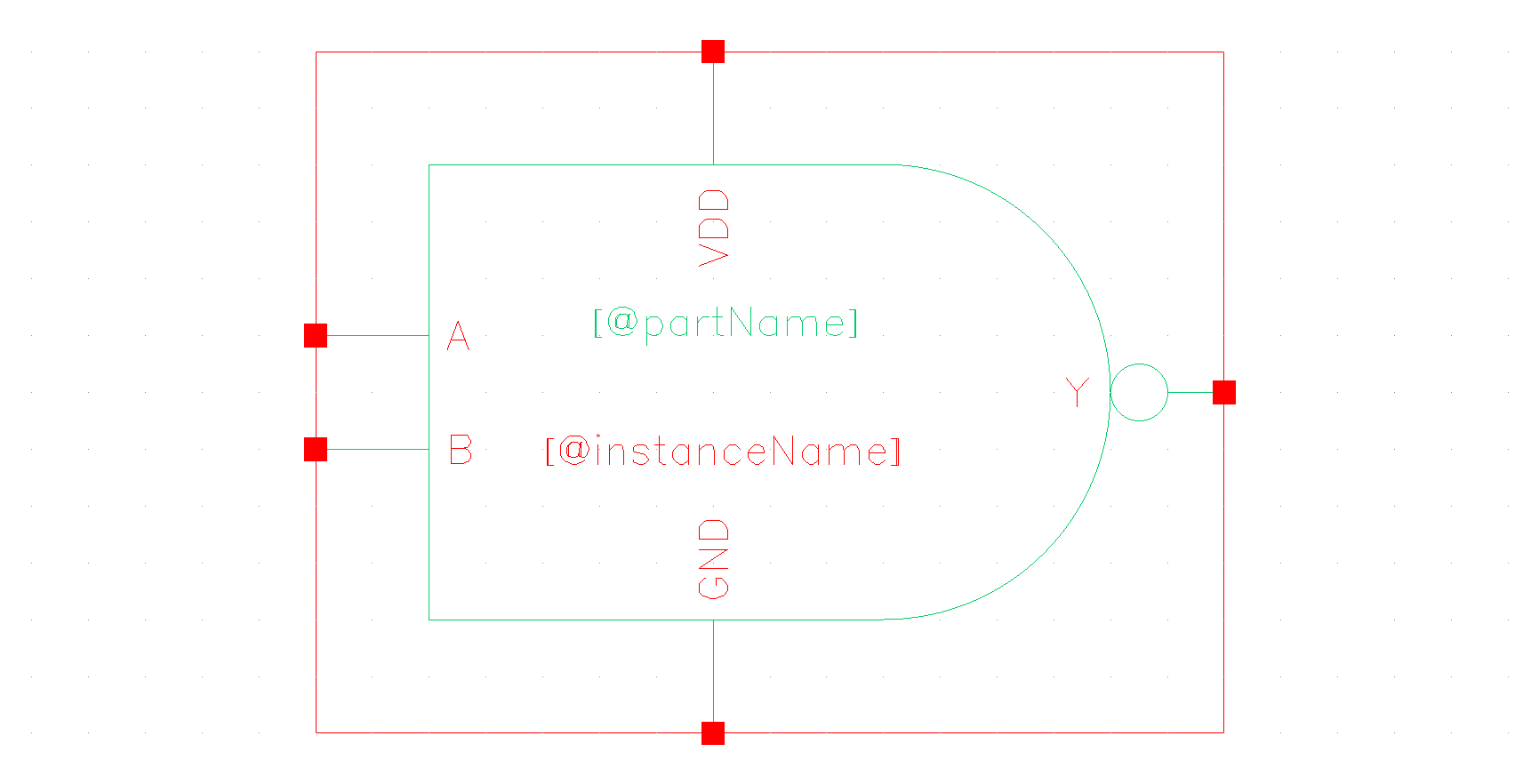


**NAND**

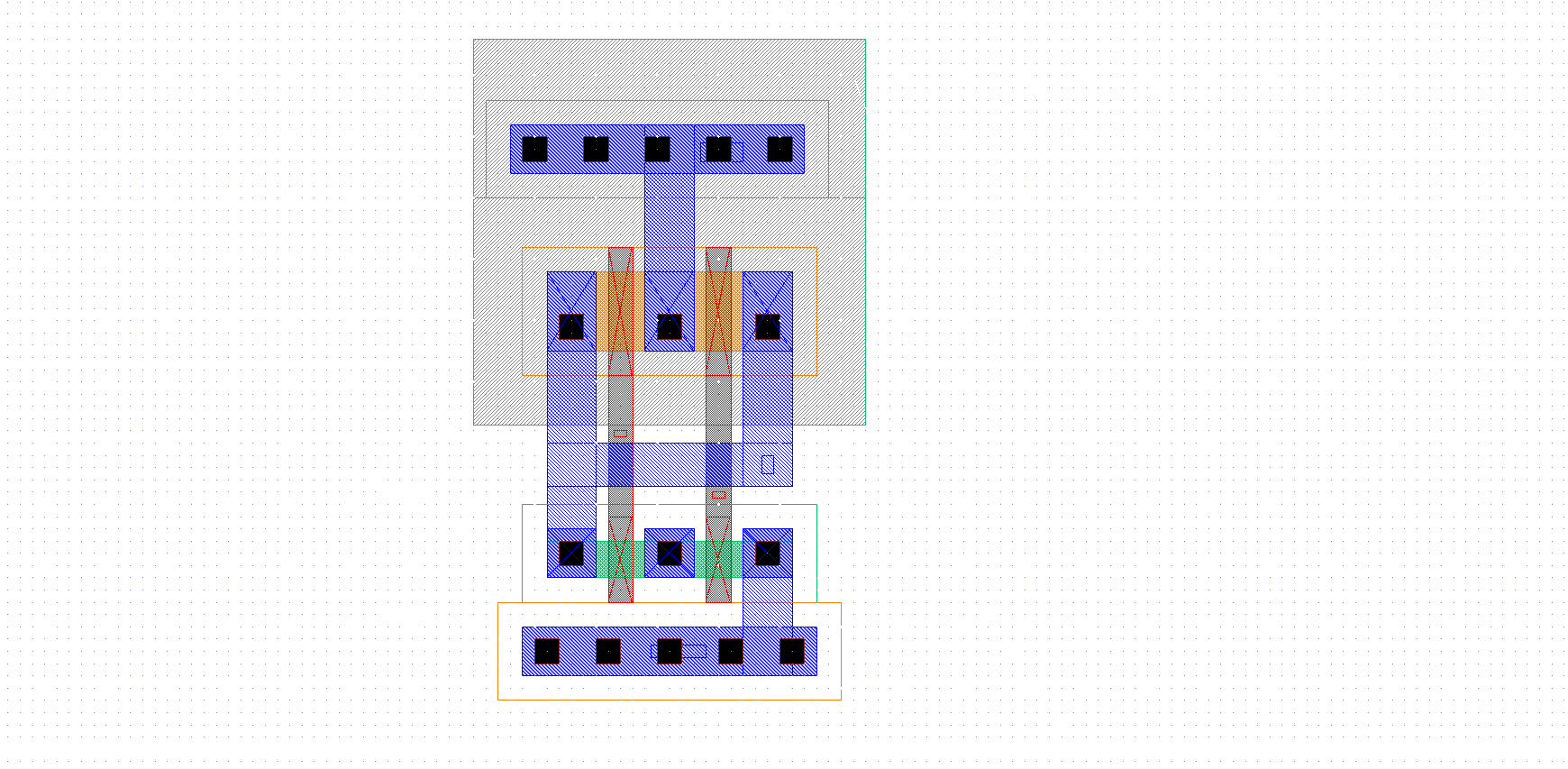
Schematic – nand

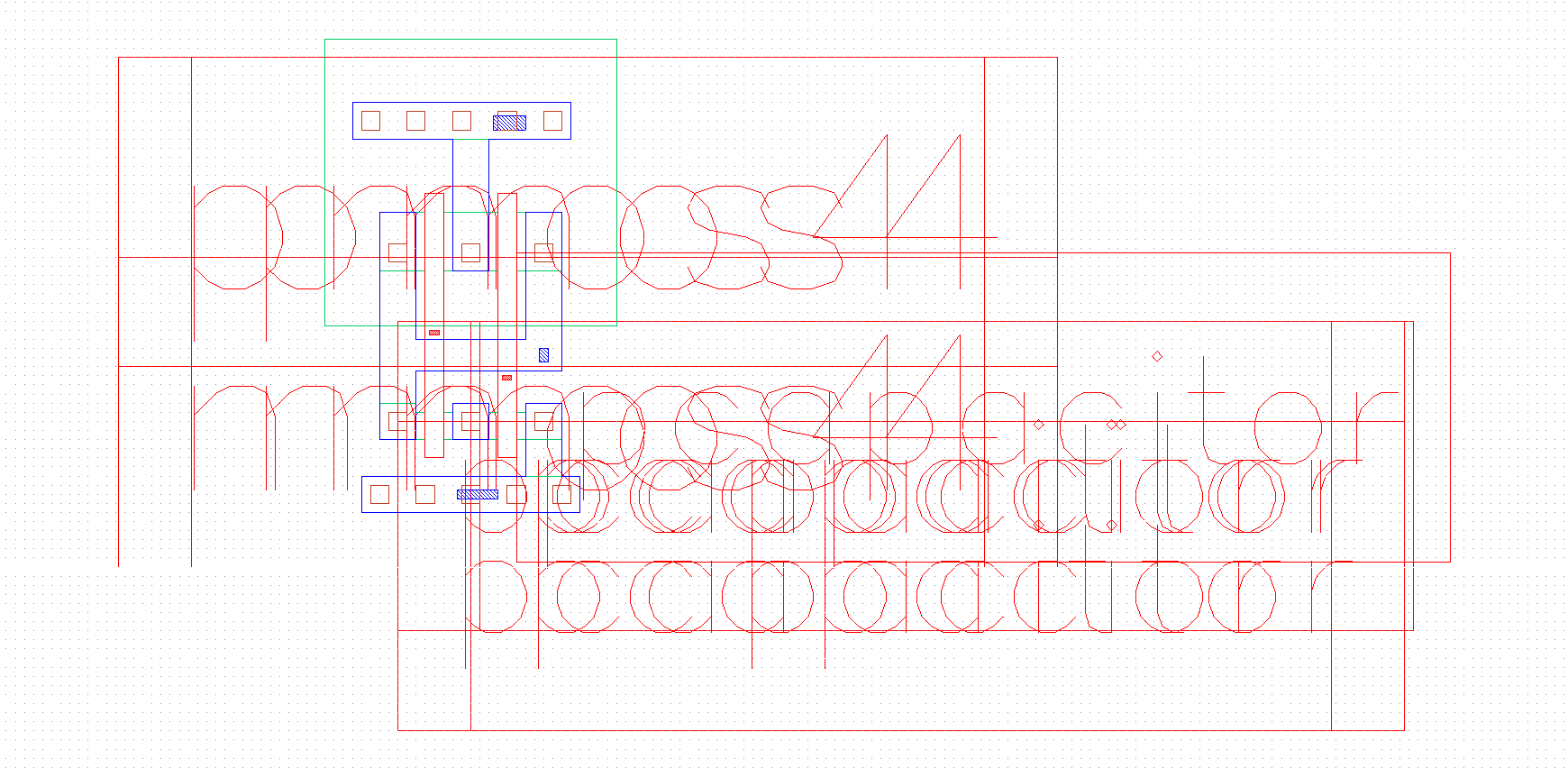
Sybol 

Symbol – nand

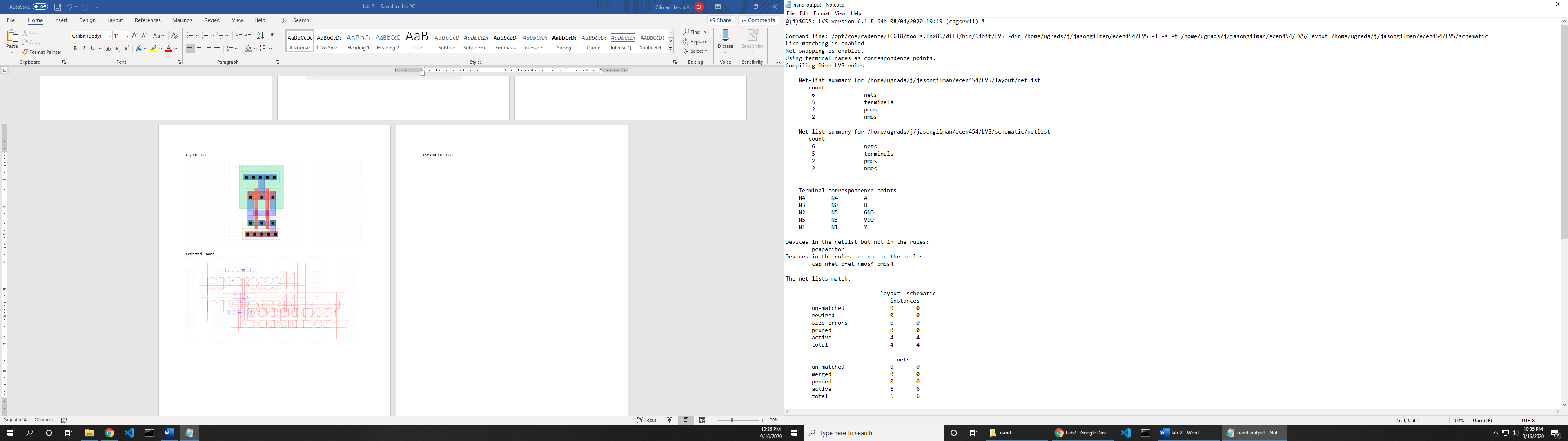


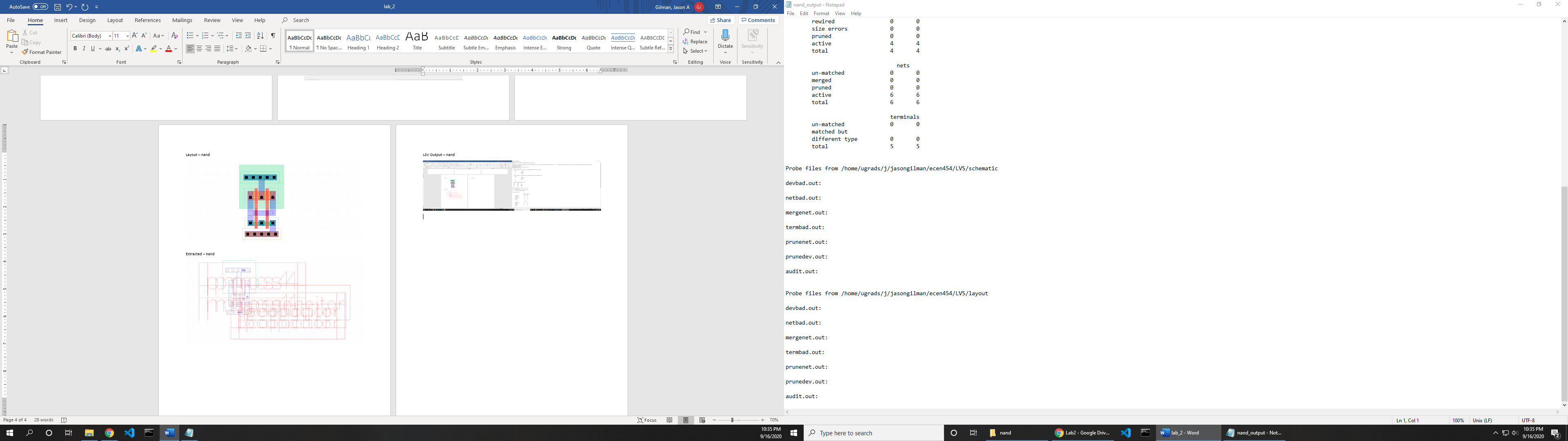
Layout – nand



Extracted – nand

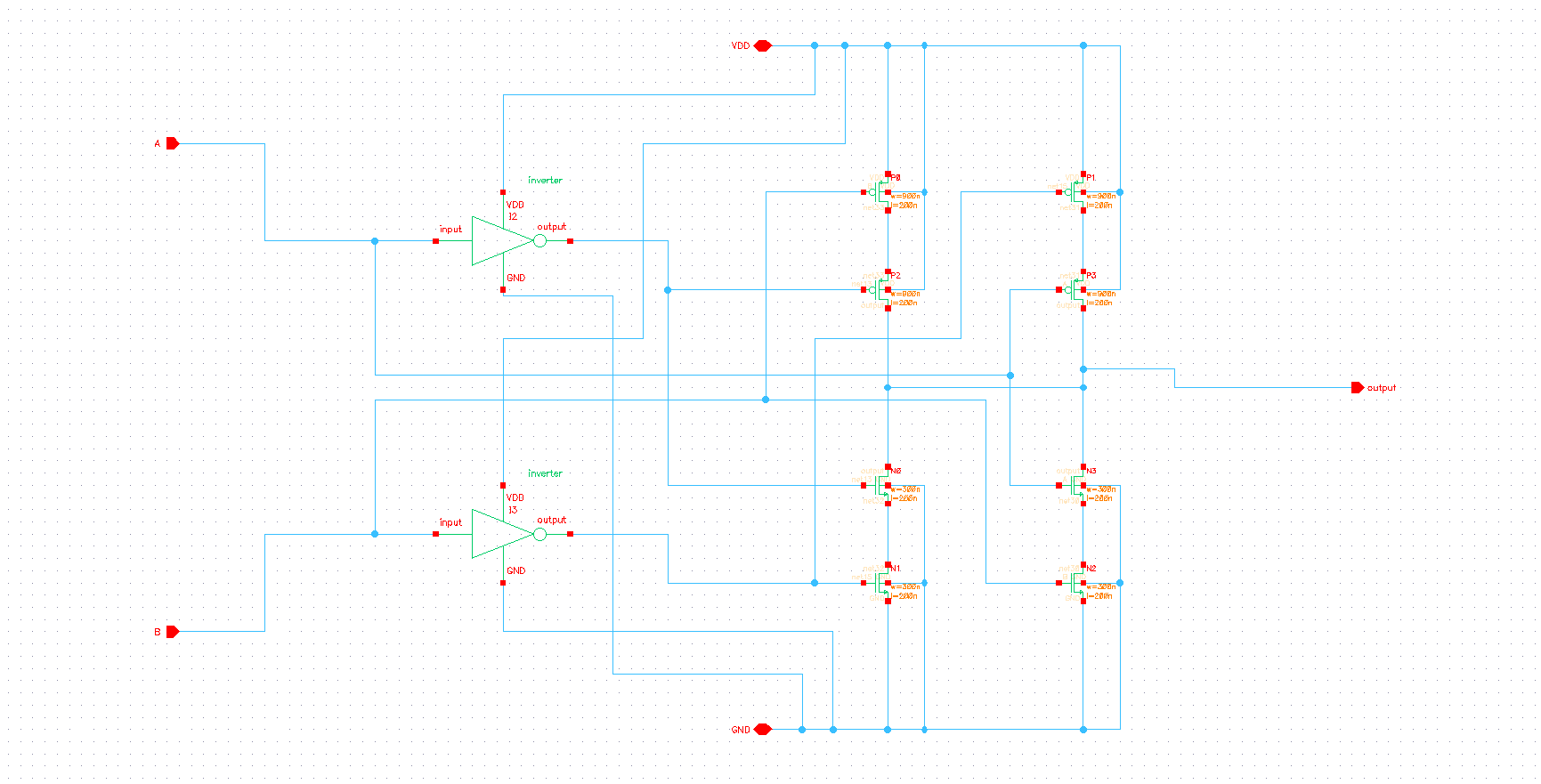
LSV Output – nand



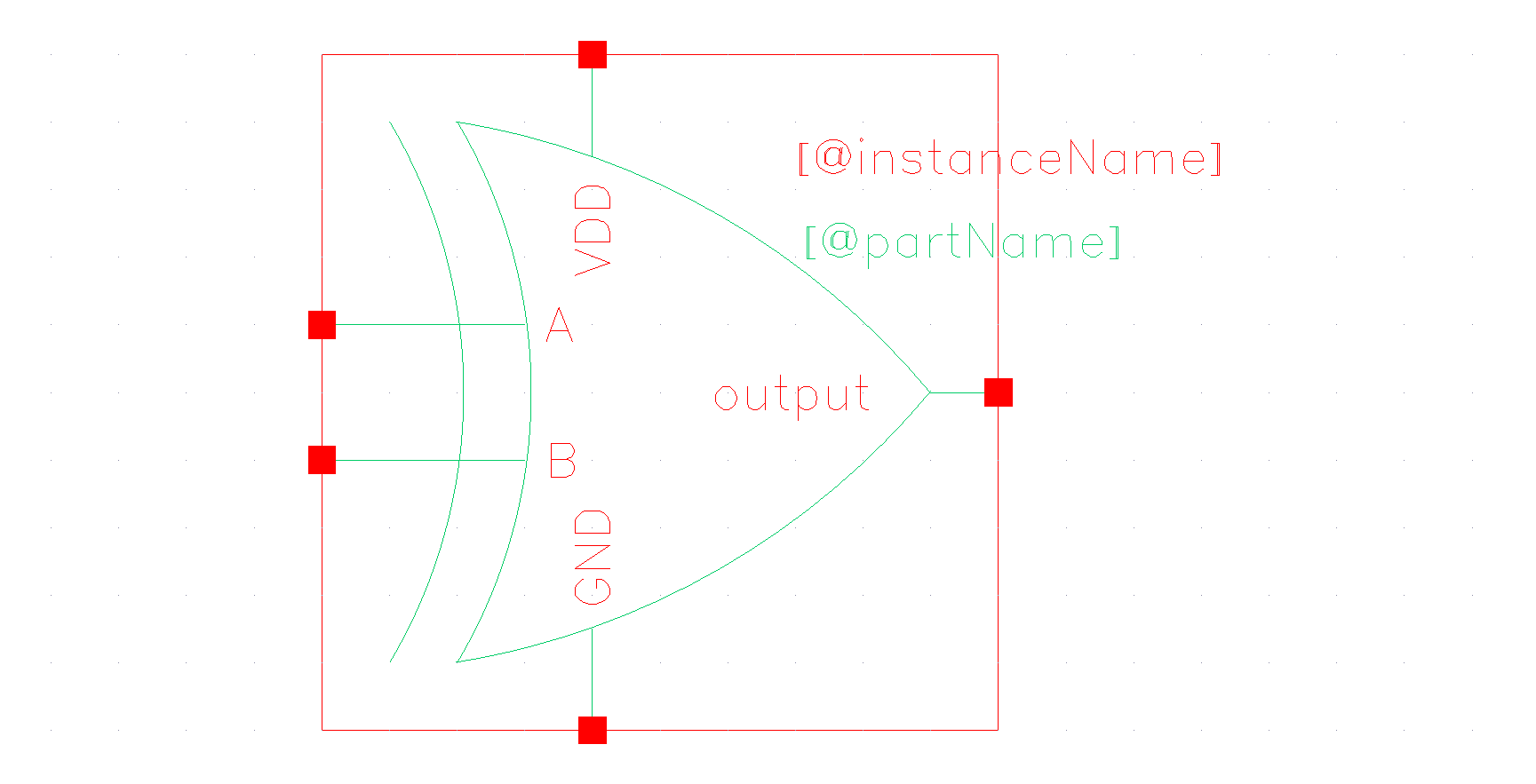


**XOR**

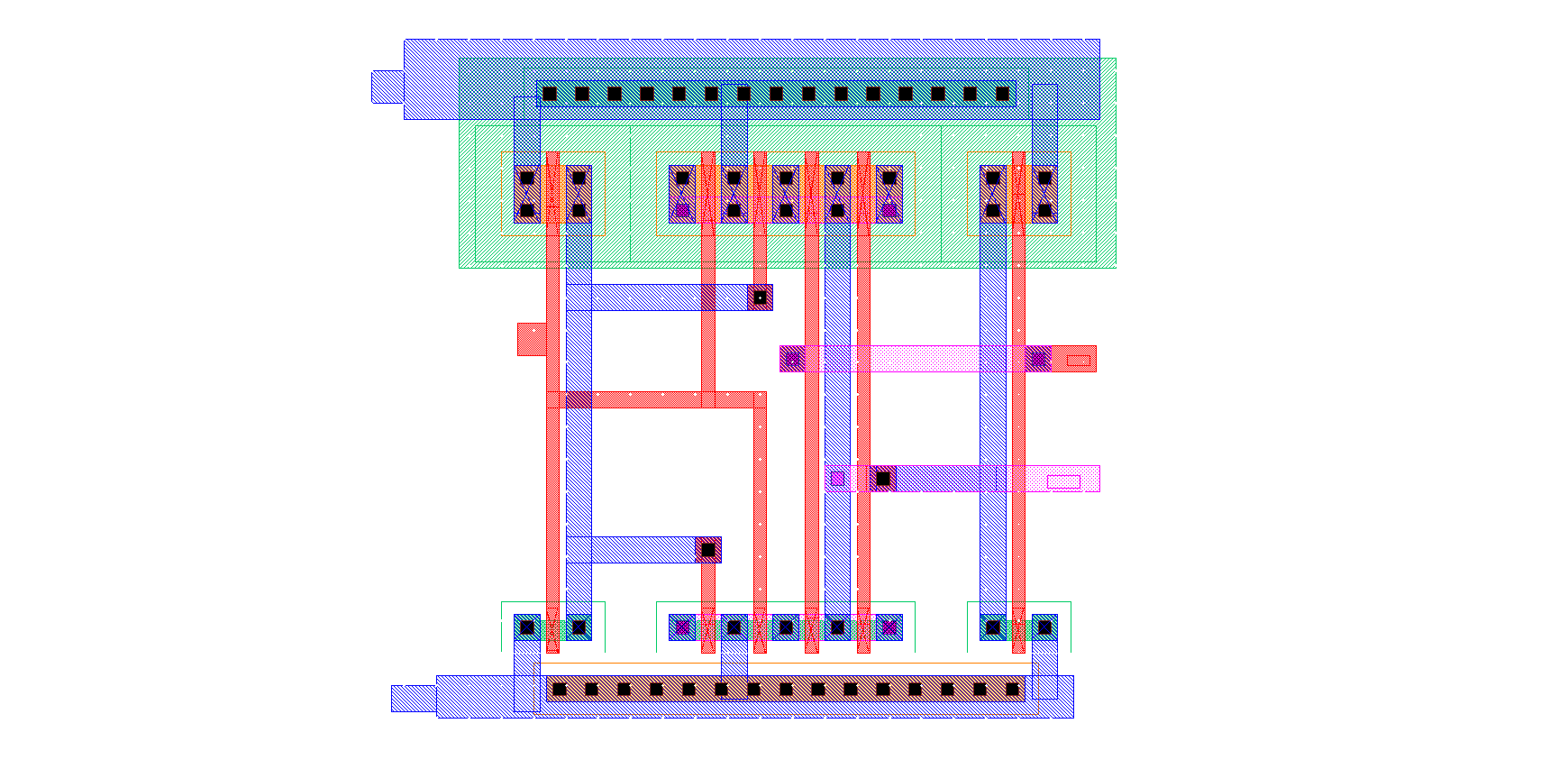
Schematic – xor



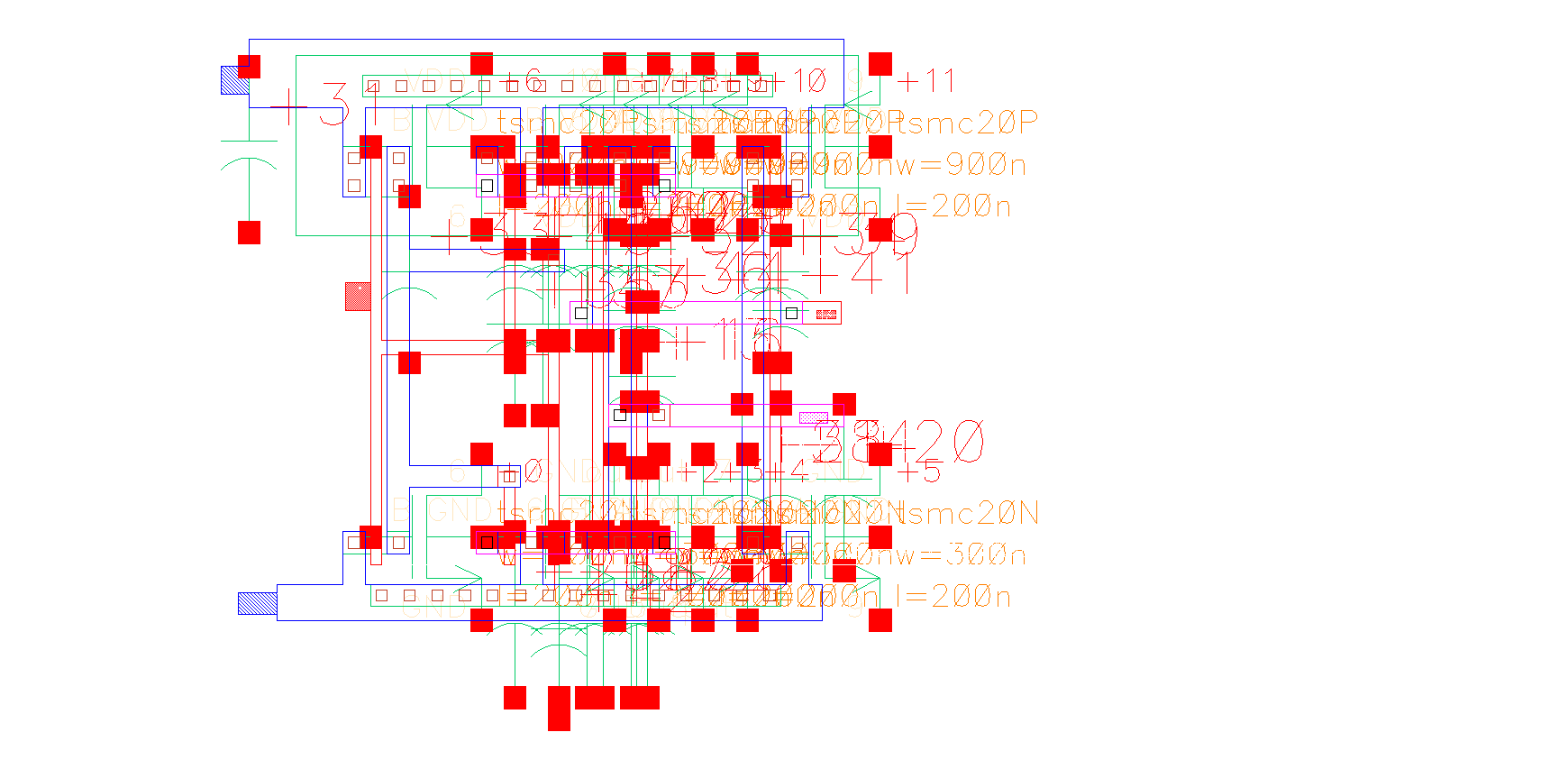
Symbol – xor



Layout – xor



Extracted – xor



LSV Output – xor

