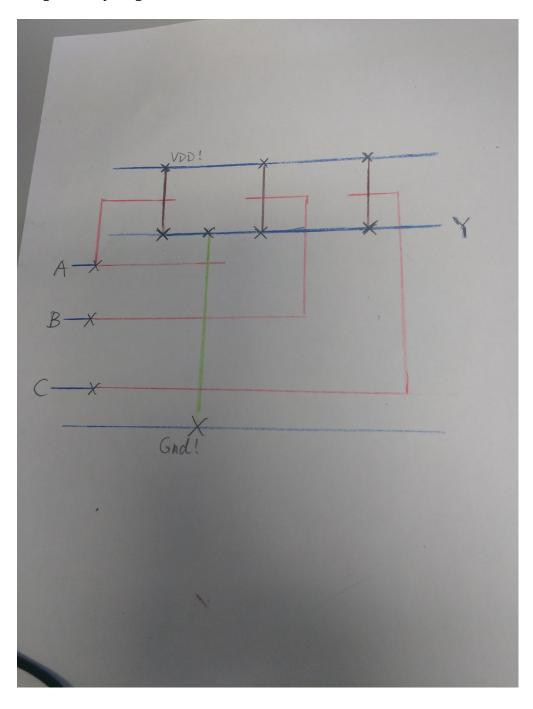
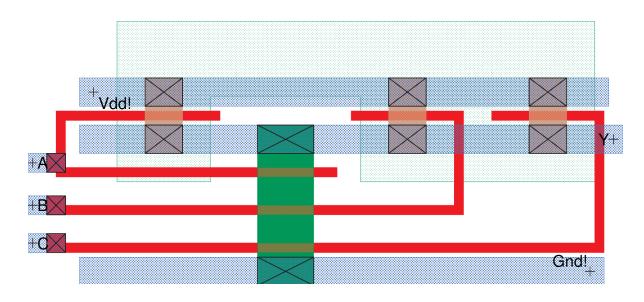
# ECE 425 VLSI Circuit Design Lab 1

Lab partners: YI HAN, Kemal Dilsiz. Time: Jan,31,2017

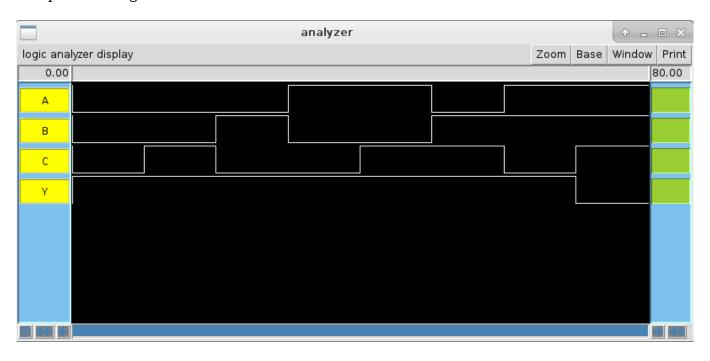
### 3-inputs NAND gate sticky diagram



### 3-inputs NAND gate diagram



### 3-inputs NAND gate results



The cell sizes and are of 3-inputs NAND gate:

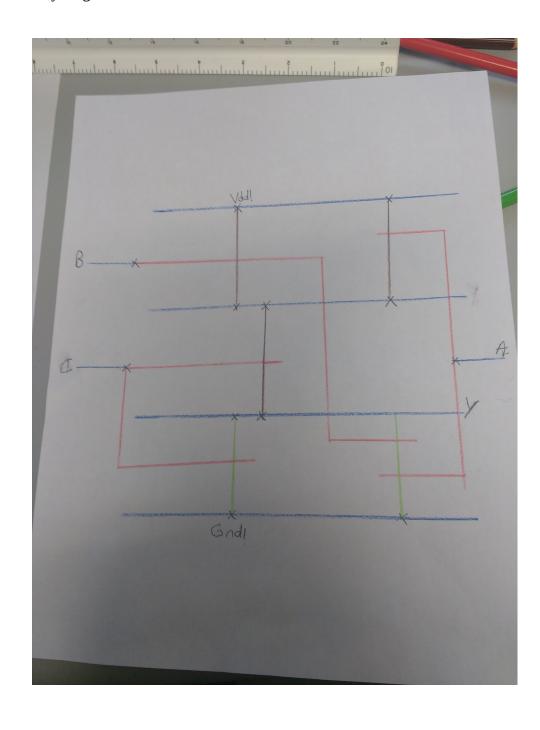
Root cell box:

```
width x height ( llx, lly ), ( urx, ury ) area (units^2)
```

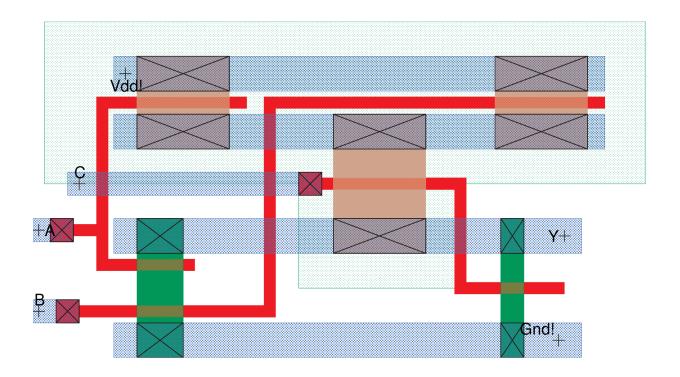
microns:  $38.10 \times 16.80 \quad (-24.30, -6.60), (13.80, 10.20) \quad 640.08$ 

lambda: 127 x 56 ( -81, -22 ), ( 46, 34 ) 7112

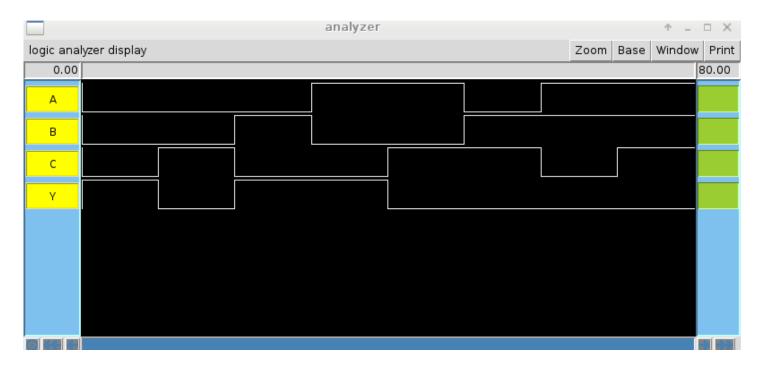
# AiO21 gate sticky diagram



# AiO21 gate diagram



#### AOI21 gate results



The cell sizes and are of AOI21 gate:

Root cell box:

width x height ( llx, lly ), ( urx, ury ) area (units $^2$ )

microns: 31.80 x 17.40 (-19.50, -6.60), (12.30, 10.80) 553.32

lambda: 106 x 58 ( -65, -22 ), ( 41, 36 ) 6148

Time uses for the: 3.5 hours