

Lab 9

A. NAND

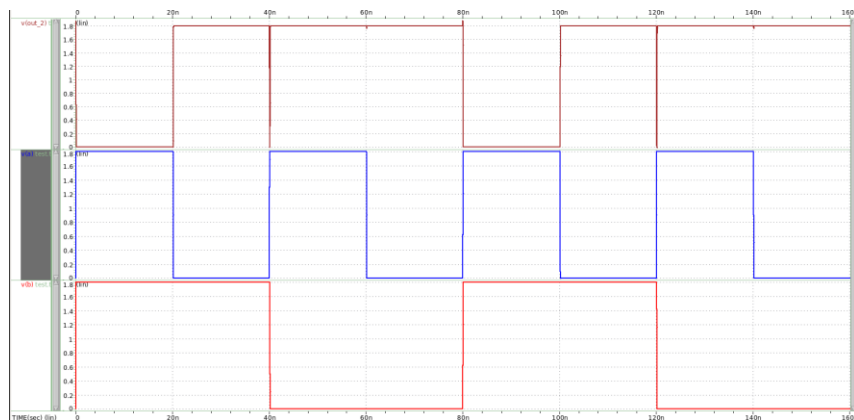
1. Presim

i. 請截取 terminal 顯示 job concluded 的圖

```
vlsicad9:/home/user2/vlsi22/vlsi22114 % hspice testbench.sp -o test.lis
Using: /usr/cad/synopsys/hspice/cur/hspice/linux64/hspice 'testbench.sp' -o test.lis

>info:          ***** hspice job concluded
vlsicad9:/home/user2/vlsi22/vlsi22114 % wv &
[1] 15379
```

ii. 請截取 WaveView 中的波形



2. Post-sim

i. 請截取 terminal 顯示 job concluded 的圖

```

Applications, Places, System
Terminal
Win 10 11: 2:48 AM v10.21.14

File Edit View Search Terminal Help
connection with this process to deliver software updates and pursue software pirates and infringers.

Display localhost:11.0 ==> Current mode : TrueColor
The PseudoColor mode is not available under current setting. Switch to use TrueColor mode.
*** Limitation: PLINKING is not supported under TrueColor mode.
fontPath(FPS_PATH) = /usr/cad/synopsys/faber/cour/TTFont
Feature "Laser_L3" checked out successfully (Elapsed Time: 6.23s)
log s: memubar: grabber: MLL: exc1: 1, spring: 1, ve: 848
log s: group: call: grabber: MLL: exc1: 6, spring: 6, ve: 903
viscad6:/home/user2/vsi22/vsi22114/L08 of L089
viscad6:/home/user2/vsi22/vsi22114/L08 of 8
NANO v0.9.4
viscad6:/home/user2/vsi22/vsi22114/L08 of 8 NANO/
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & hspice test
testbench.sp - testbench.sp
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & hspice testbench.sp -o test.lis
Using: /usr/cad/synopsys/Hspice/cour/Hspice/Ltwin44/hspice "testbench.sp" -o test.lis

>info: ***** hspice job aborted
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test
testbench.sp - testbench.sp test.lis test.sto
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test
test.lis test.sto
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test.lis
liblml error: failed to load driver: 1989
liblml error: failed to load driver: 1989

** (git1:18077): WARNING **: Set document metadata failed: Setting attribute metadata:(git:position not supported
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test.lis

** (git1:18077): WARNING **: Set document metadata failed: Setting attribute metadata:(git:position not supported
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & hspice testbench.sp -o test.lis
Using: /usr/cad/synopsys/Hspice/cour/Hspice/Ltwin44/hspice "testbench.sp" -o test.lis

>info: ***** hspice job aborted
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit testbench.sp
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test.lis test.sto
c:\std 1" Hand.pex.netlist Hand.pex.netlist Hand.pex Hand.pex.netlist.pex testbench.sp test.lis test.sto

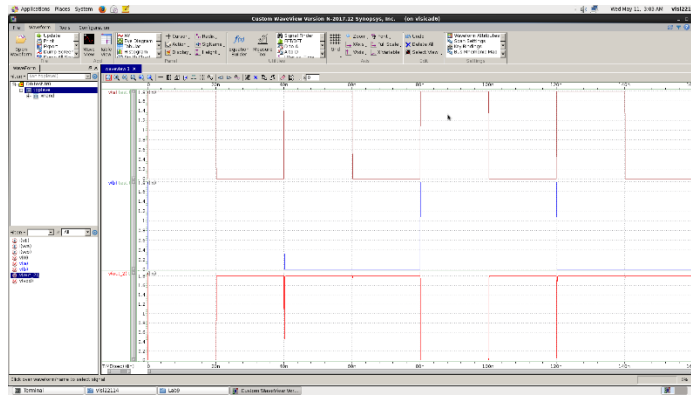
** (git1:18089): WARNING **: Set document metadata failed: Setting attribute metadata:(git:position not supported
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test
testbench.sp - testbench.sp test.lis test.sto
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit test
testbench.sp - testbench.sp
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & gedit testbench.sp

** (git1:18936): WARNING **: Set document metadata failed: Setting attribute metadata:(git:spell-language not supported
** (git1:18936): WARNING **: Set document metadata failed: Setting attribute metadata:(git:encoding not supported
** (git1:18936): WARNING **: Set document metadata failed: Setting attribute metadata:(git:position not supported
viscad6:/home/user2/vsi22/vsi22114/L089/MNO & hspice testbench.sp -o test.lis
Using: /usr/cad/synopsys/Hspice/cour/Hspice/Ltwin44/hspice "testbench.sp" -o test.lis

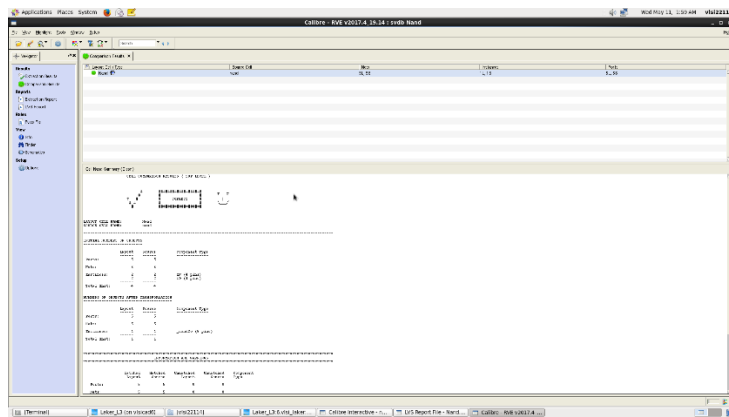
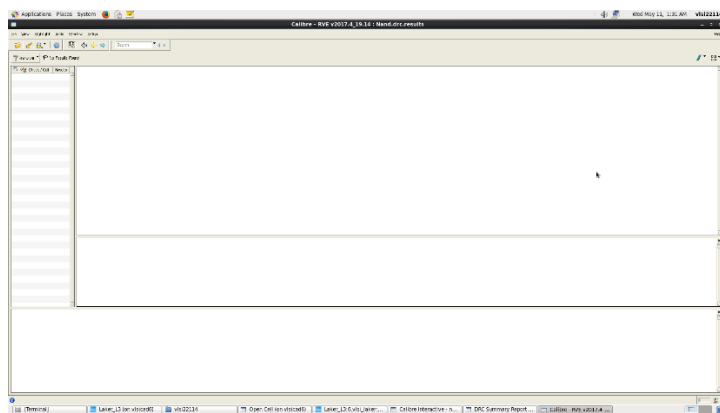
>info: ***** hspice job concluded
viscad6:/home/user2/vsi22/vsi22114/L089/MNO &

```

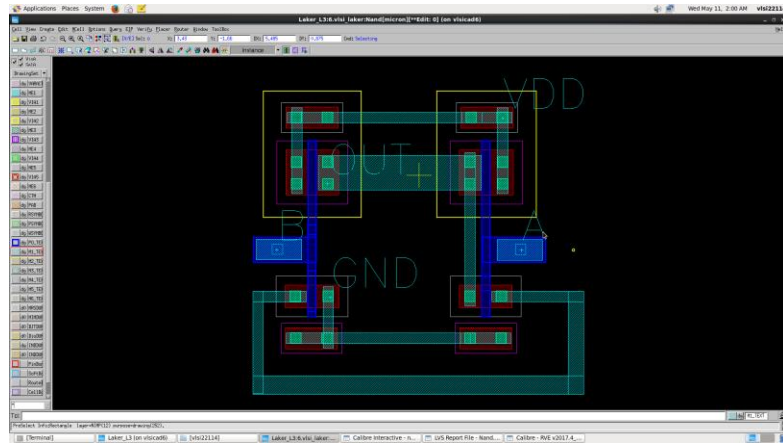
ii. 請截取 WaveView 中的波形



iii. DRC/LVS 結果



iv. Layout 截圖



B. NOR

1. Presim

- i. 請截取 terminal 顯示 job concluded 的圖

```

vlsicad9:/home/user2/vlsi22/vlsi22114 % hspice testbench.sp -o test.lis
Using: /usr/cad/synopsys/hspice/cur/hspice/linux64/hspice 'testbench.sp' -o test.lis

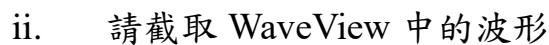
>info:          ***** hspice job concluded
vlsicad9:/home/user2/vlsi22/vlsi22114 % wv &
[1] 15379
  
```

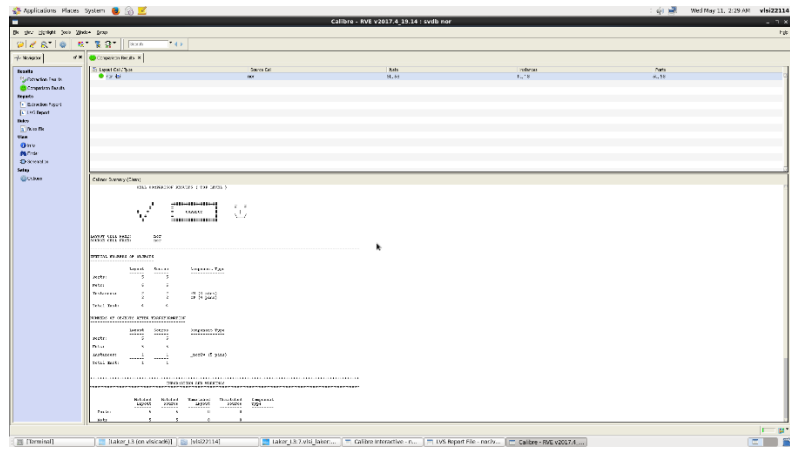
- ii. 請截取 WaveView 中的波形



2. Post-sim

- i. 請截取 terminal 顯示 job concluded 的圖





iv. Layout 截圖

