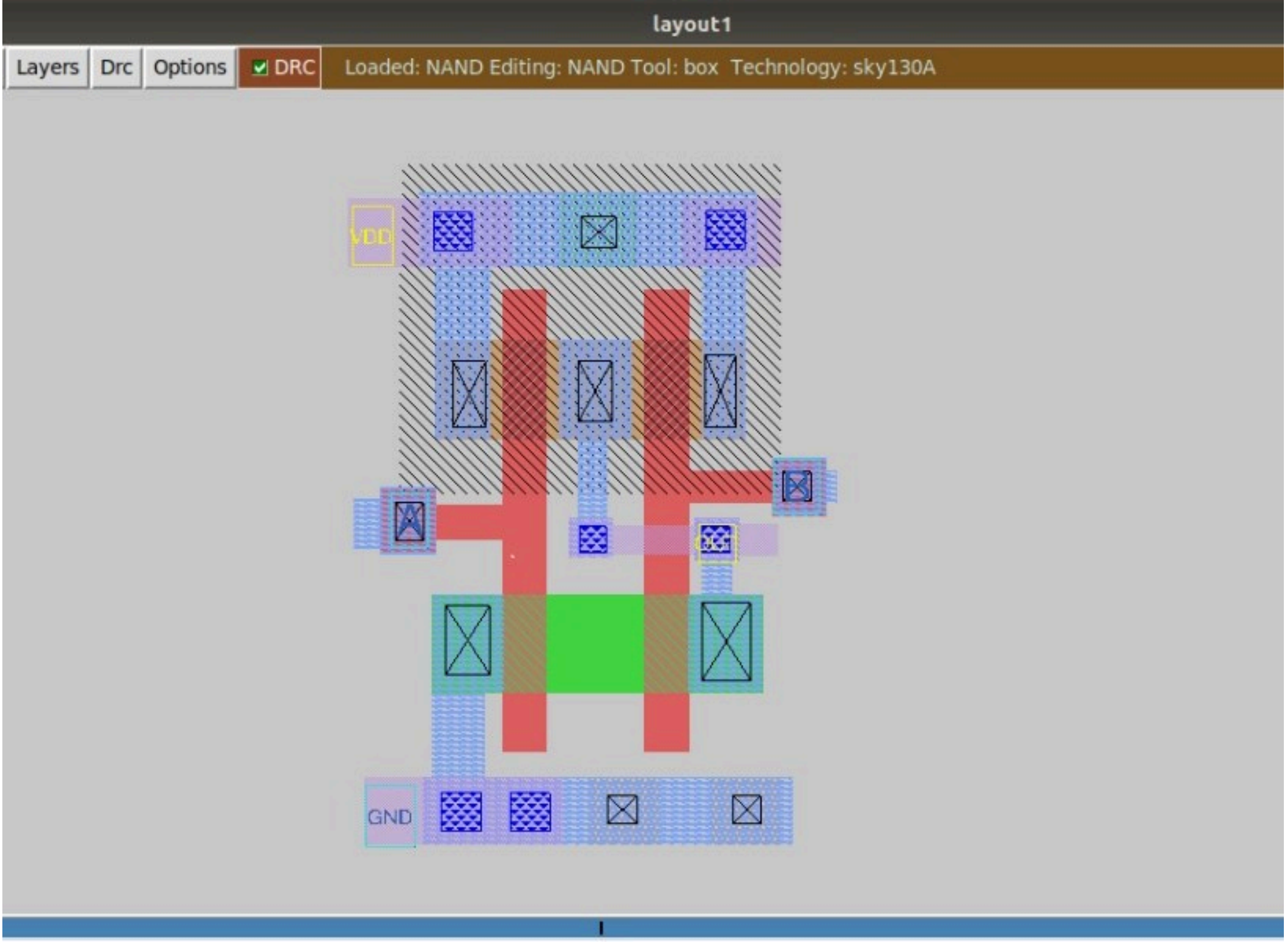
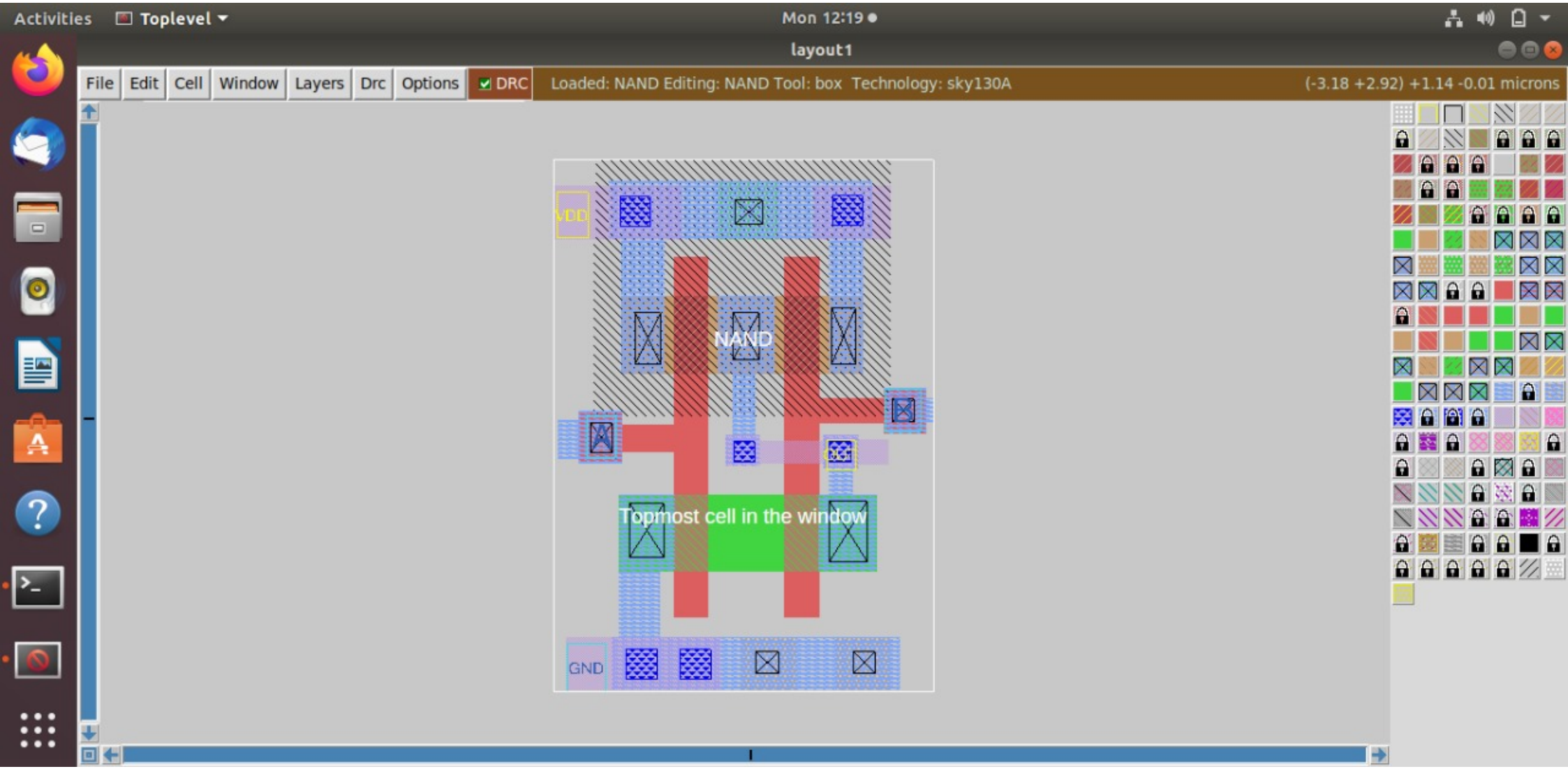
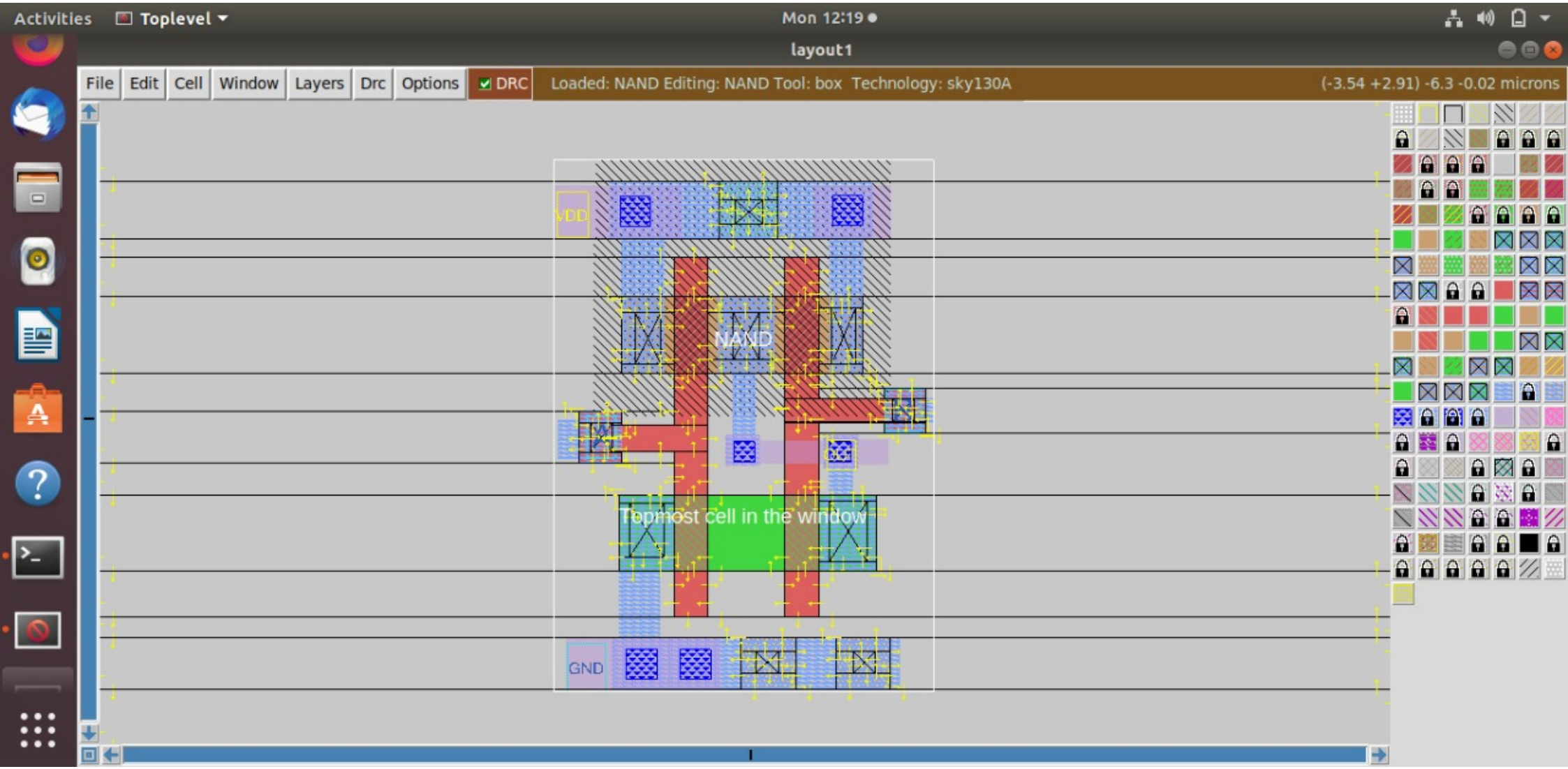

layout1
Layers
Drc
Options
DRC
Loaded: NAND Editing: NAND Tool: box Technology: sky130A
VDD
GND

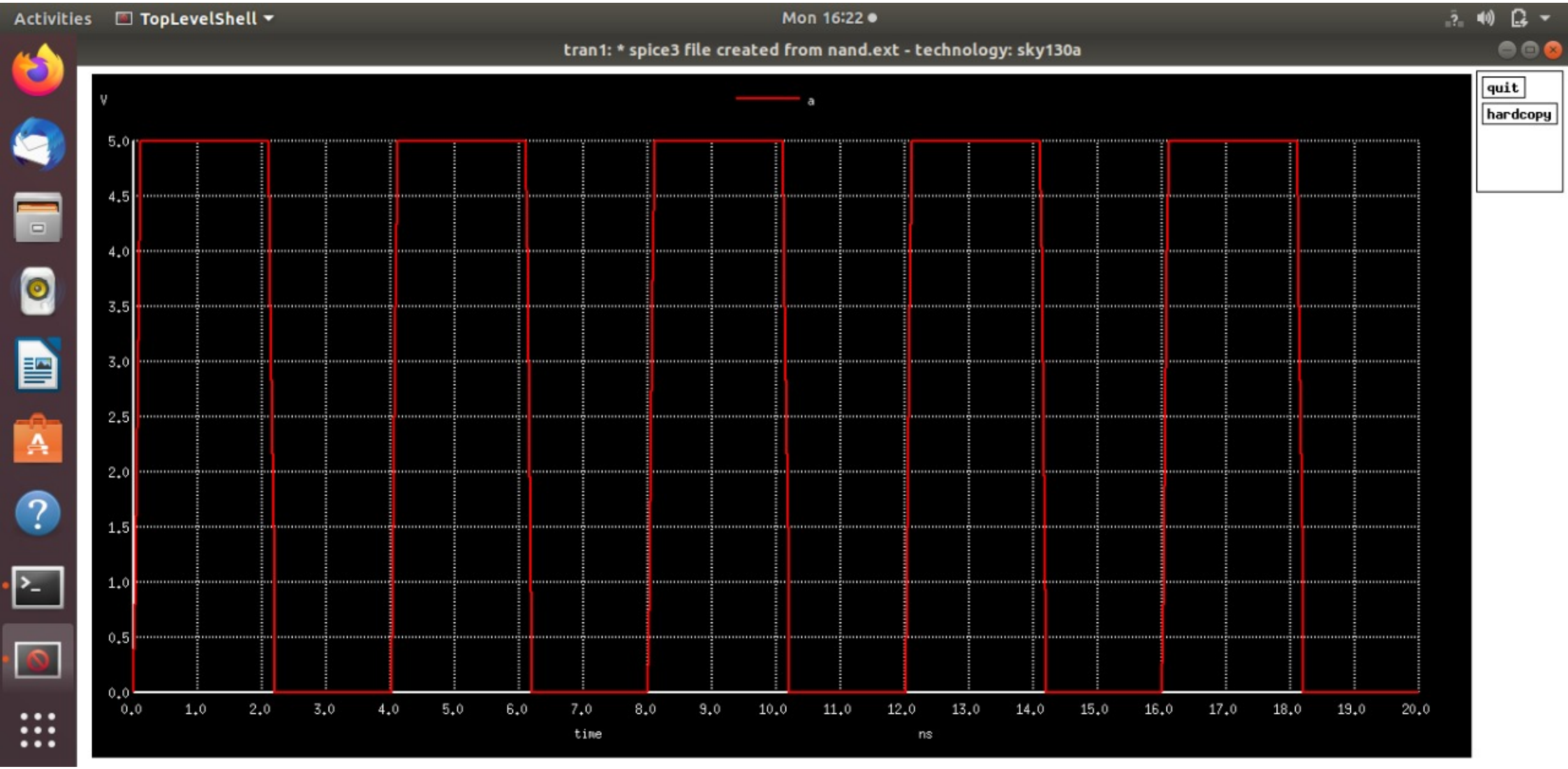

Activities
Toplevel
Mon 12:19
layout1
File
Edit
Cell
Window
Layers
Drc
Options
DRC
Loaded: NAND Editing: NAND Tool: box Technology: sky130A
(-3.18 +2.92) +1.14 -0.01 microns
VDD
NAND
Topmost cell in the window
GND

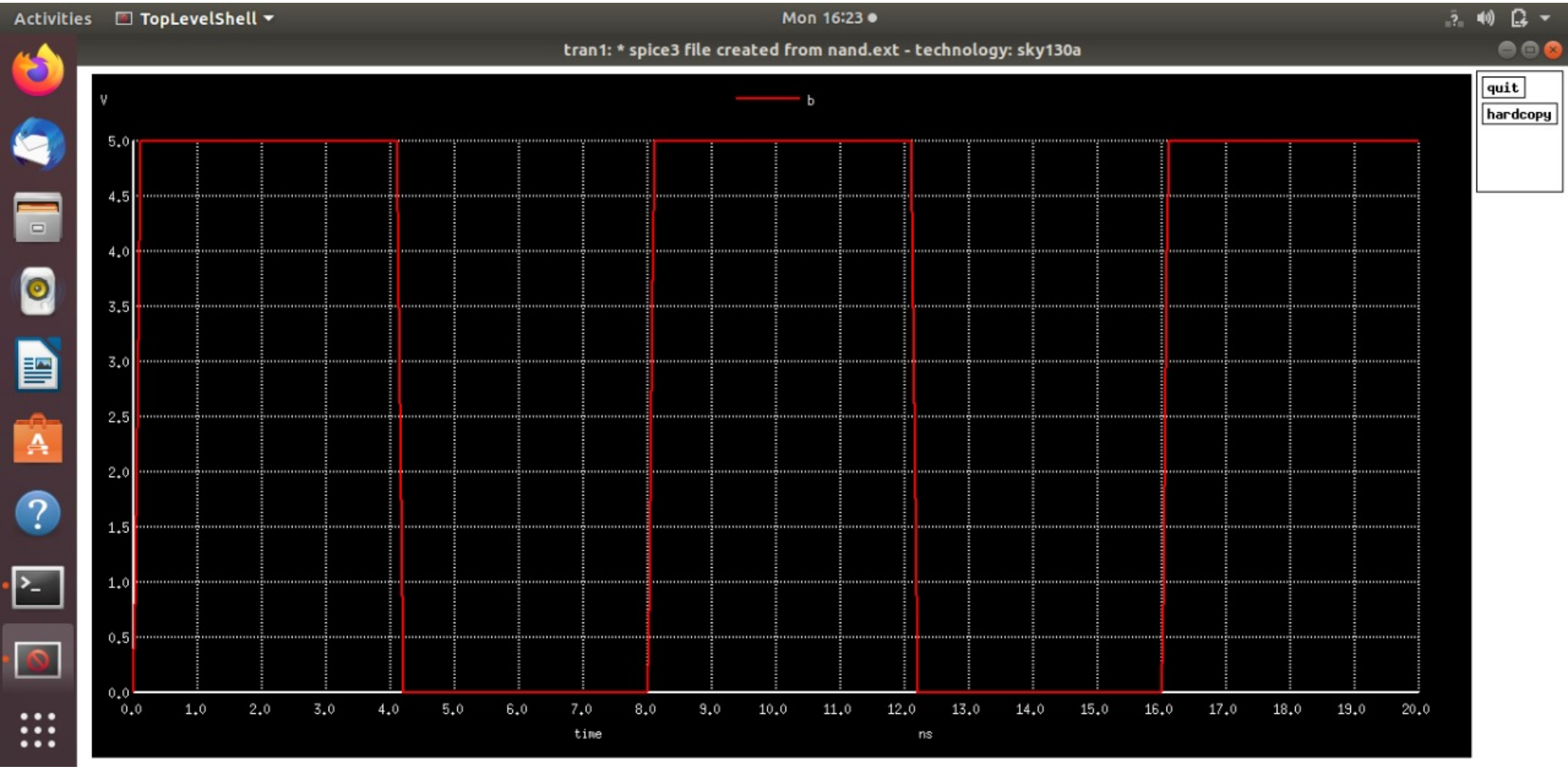

Activities
Toplevel
Mon 12:19
layout1
File
Edit
Cell
Window
Layers
Drc
Options
DRC
Loaded: NAND Editing: NAND Tool: box Technology: sky130A
(-3.54 +2.91) -6.3 -0.02 microns
VDD
NAND
Topmost cell in the window
GND

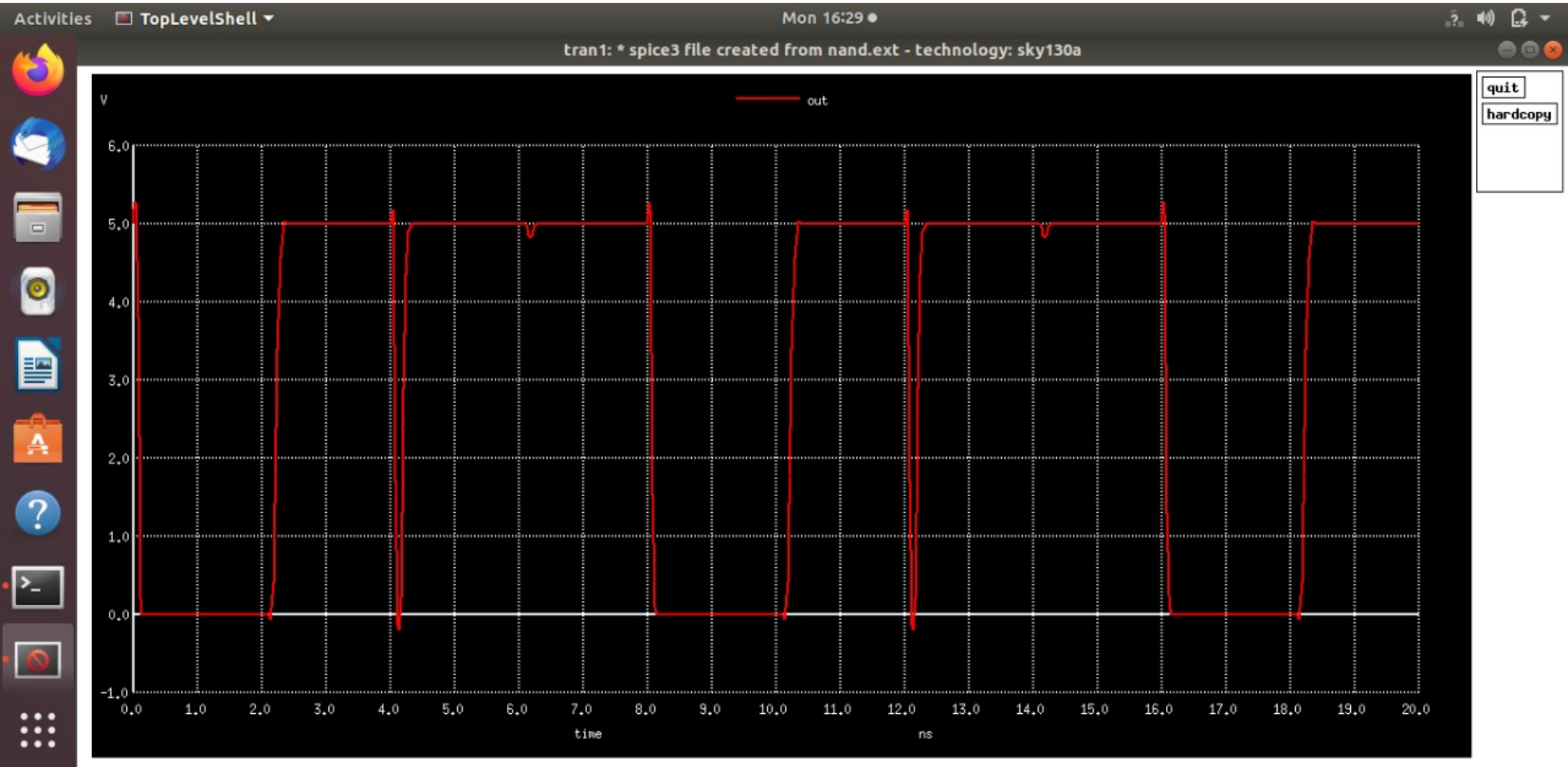
Open

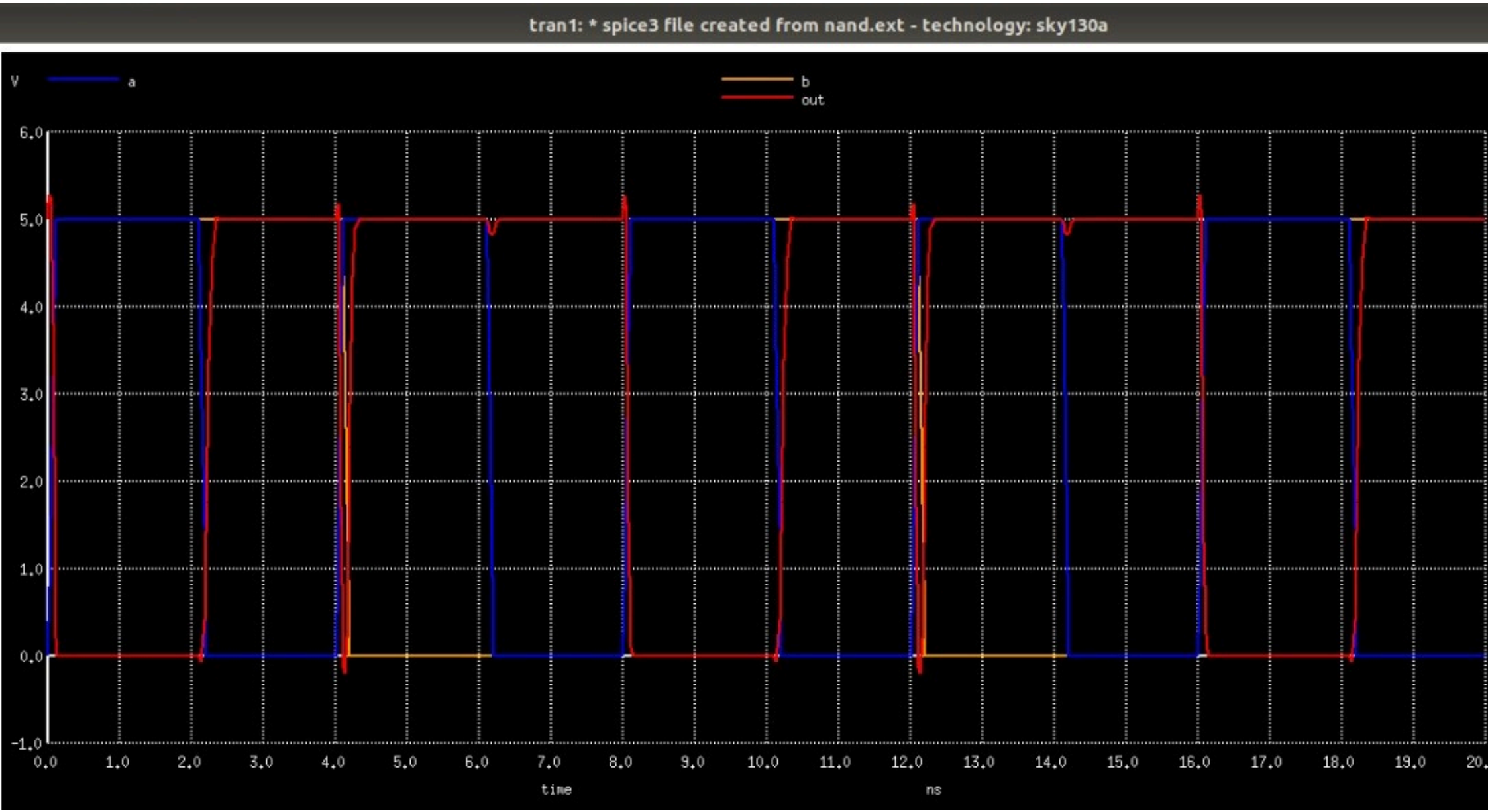
*NAND.spice
~/Desktop/Std_cell/NAND

```
1 * SPICE3 file created from NAND.ext - technology: sky130A
2 .option scale=0.01u
3 //.subckt NAND B A GND
4 .include ./libs/pshort.lib
5 .include ./libs/nshort.lib
6 M1000 OUT A VDD VDD pshort_model.0 ad=1920 pd=124 as=2600 ps=208 w=62 l=27
7 M1001 VDD B OUT VDD pshort_model.0 ad=2170 pd=194 as=1920 ps=124 w=62 l=28
8 M1002 OUT B a_21_n85# GND nshort_model.0 ad=2180 pd=214 as=1890 ps=123 w=61 l=28
9 M1003 a_21_n85# A GND GND nshort_model.0 ad=1890 pd=123 as=2680 ps=210 w=61 l=27
10 VDD VDD 0 5V
11 VSS VSS 0 0
12 Va A VSS PULSE(0 5V 0 0.1ns 0.1ns 2ns 4ns)
13 Vb B VSS PULSE(0 5V 0 0.1ns 0.1ns 4ns 8ns)
14 C0 OUT a_21_n85# 0.017f
15 C1 A B 0.0616f
16 C2 OUT B 0.0867f
17 C3 B VDD 0.0386f
18 C4 OUT A 0.0474f
19 C5 A VDD 0.0418f
20 C6 OUT VDD 0.178f
21 C7 B GND 0.496f
22 C8 A GND 0.53f
23 C9 a_21_n85# GND 0.016f **FLOATING
24 C10 OUT GND 0.279f **FLOATING
25 C11 VDD GND 1.08f **FLOATING
26 //.ends
27 .tran 1n 20ns
28 .control
29 run
30 .endc
31 .end
```


Activities
TopLevelShell
Mon 16:22
tran1: * spice3 file created from nand.ext - technology: sky130a
quit
hardcopy
V
a
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0
time
ns


Activities
TopLevelShell
Mon 16:23
tran1: * spice3 file created from nand.ext - technology: sky130a
quit
hardcopy
V
b
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0
time
ns


Activities
TopLevelShell
Mon 16:29
tran1: * spice3 file created from nand.ext - technology: sky130a
quit
hardcopy
V
out
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
20.0
time
ns


tran1: * spice3 file created from nand.ext - technology: sky130a
V
a
b
out
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
time
ns