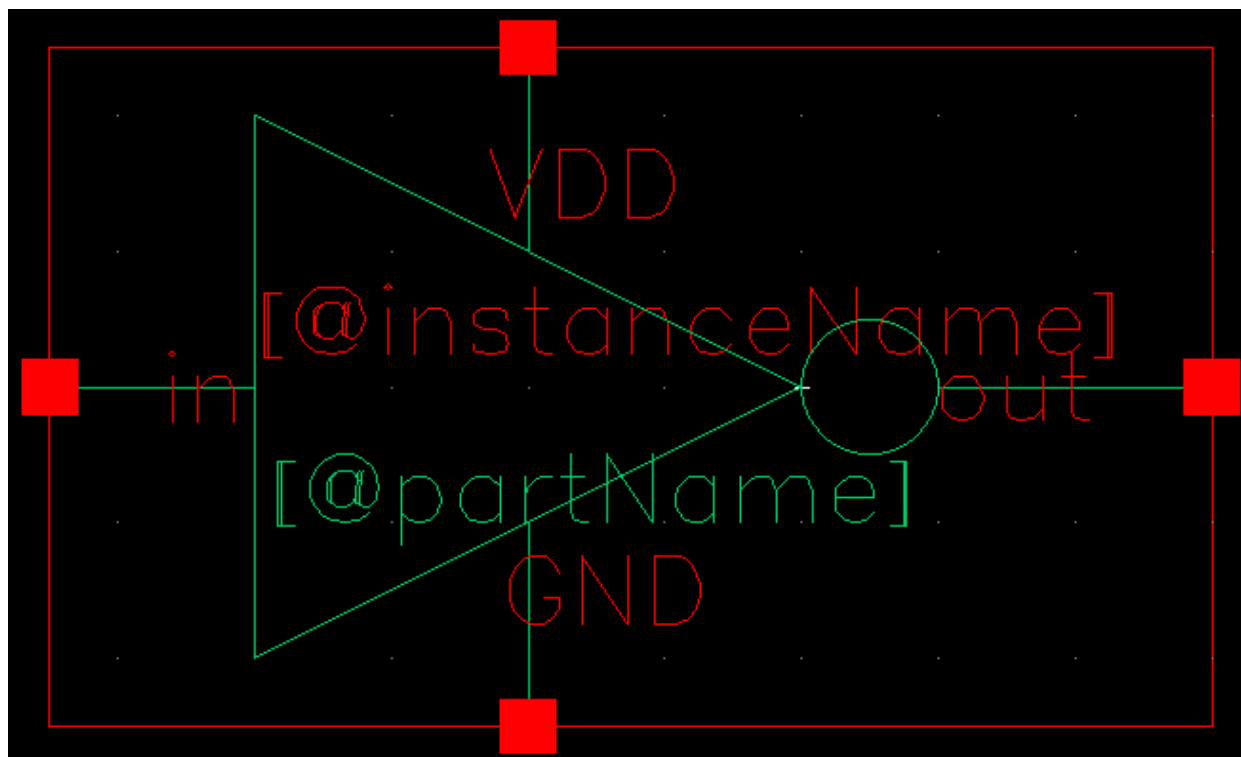
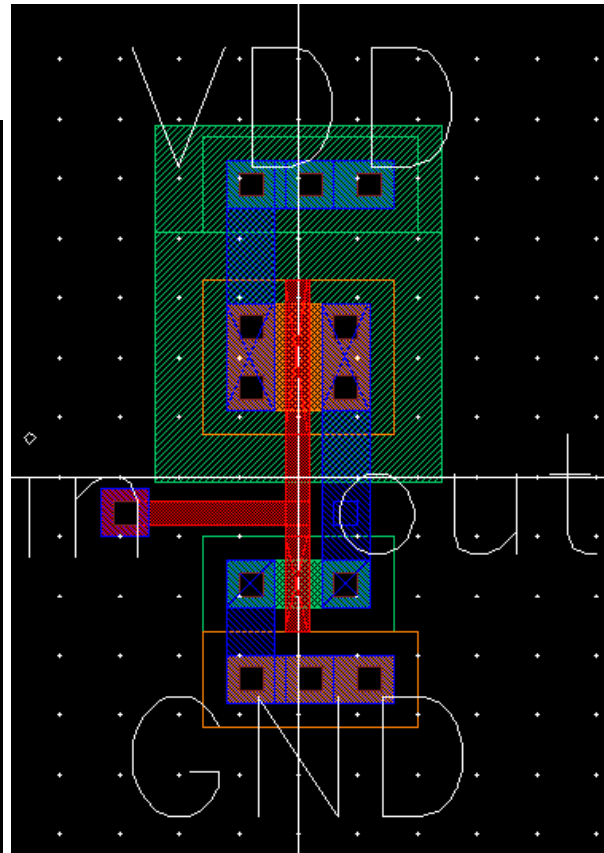
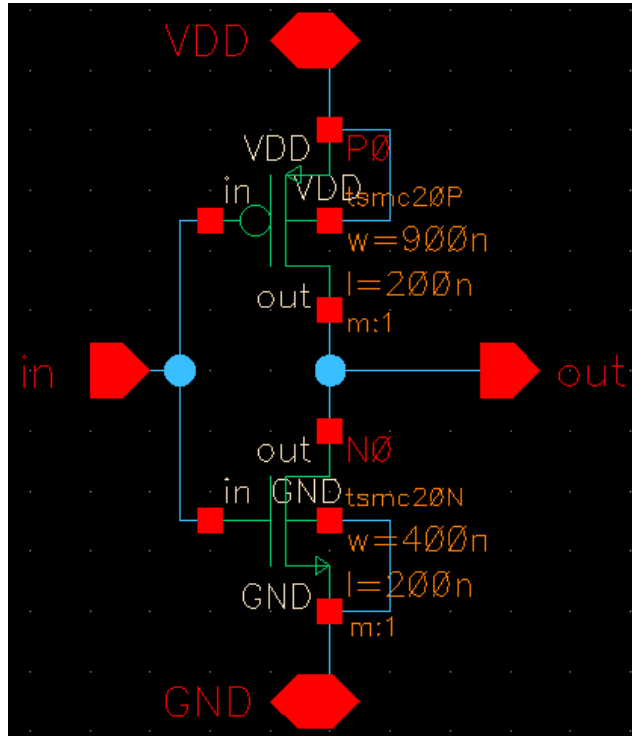


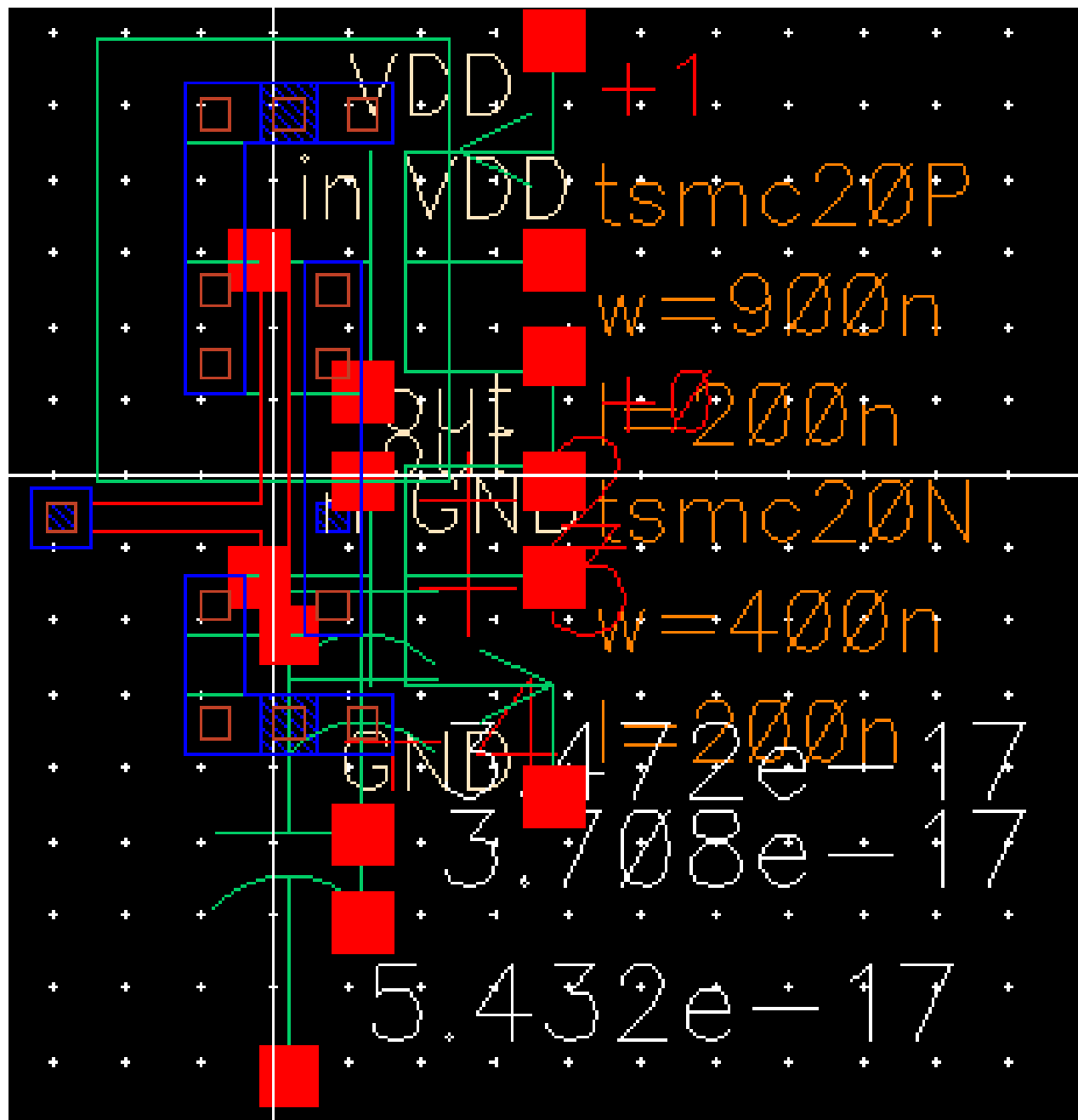
Name: Ahmet Coskuner

TA: Neha Gupta

ECEN 714 Lab X

1. Inverter screenshots





2. Inverter LVS Output

@(#)SCDS: LVS version 6.1.8-64b 08/04/2020 19:19 (cpgsrv11) \$

Command line: /opt/coe/cadence/IC618/tools.lnx86/dfII/bin/64bit/LVS -dir
/home/grads/a/acoskuner500/ecen714/LVS -l -s -t
/home/grads/a/acoskuner500/ecen714/LVS/layout
/home/grads/a/acoskuner500/ecen714/LVS/schematic
Like matching is enabled.
Net swapping is enabled.
Using terminal names as correspondence points.
Compiling Diva LVS rules...

Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/layout/netlist

count	
4	nets
4	terminals
1	pmos
1	nmos

Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/schematic/netlist

count	
4	nets
4	terminals
1	pmos
1	nmos

Terminal correspondence points

N0	N3	GND
N3	N1	VDD
N2	N2	in
N1	N0	out

Devices in the netlist but not in the rules:
pcapacitor

Devices in the rules but not in the netlist:
cap nfet pfet nmos4 pmos4

The net-lists match.

	layout	schematic
	instances	
un-matched	0	0
rewired	0	0
size errors	0	0
pruned	0	0
active	2	2
total	2	2

	nets	
un-matched	0	0
merged	0	0
pruned	0	0
active	4	4
total	4	4

	terminals	
un-matched	0	0
matched but		
different type	0	0
total	4	4

Probe files from /home/grads/a/acoskuner500/ecen714/LVS/schematic

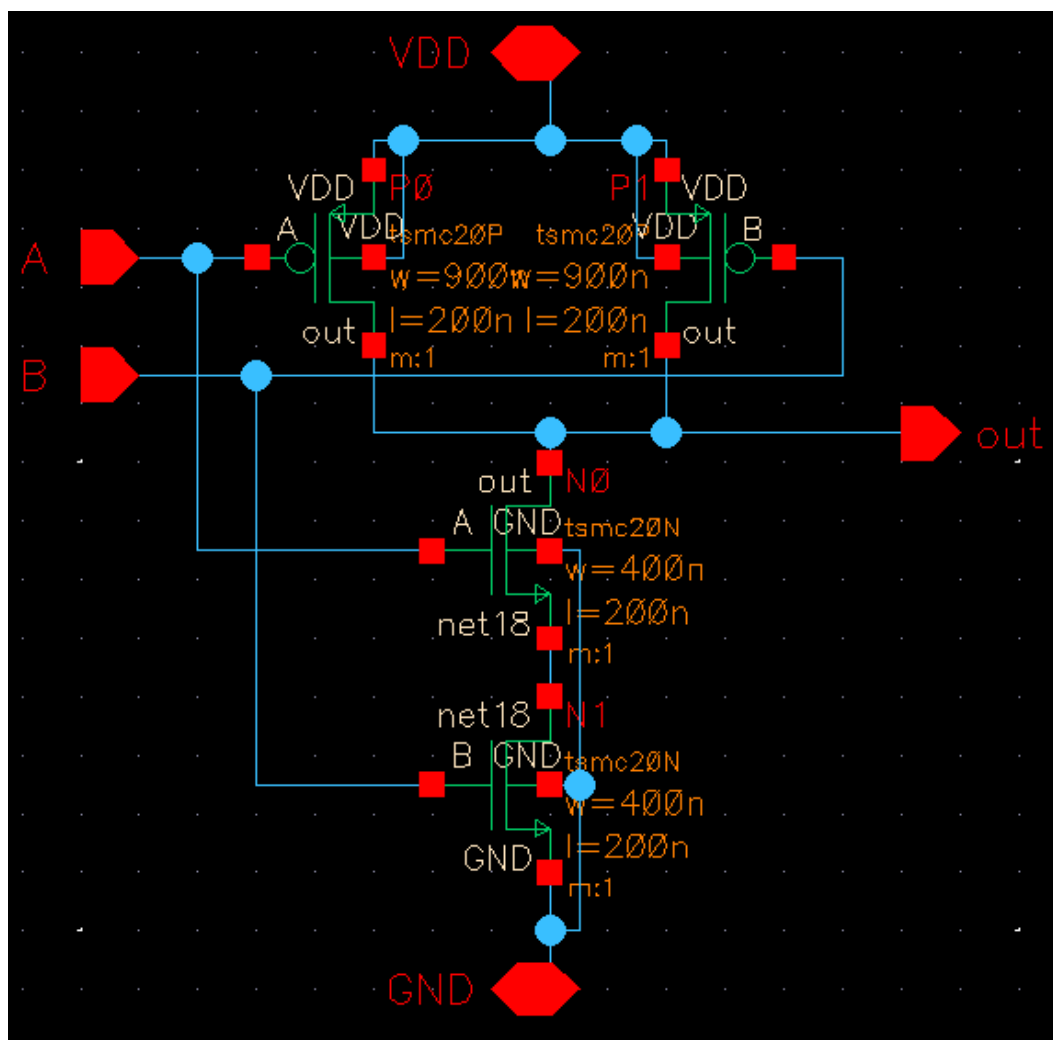
devbad.out:

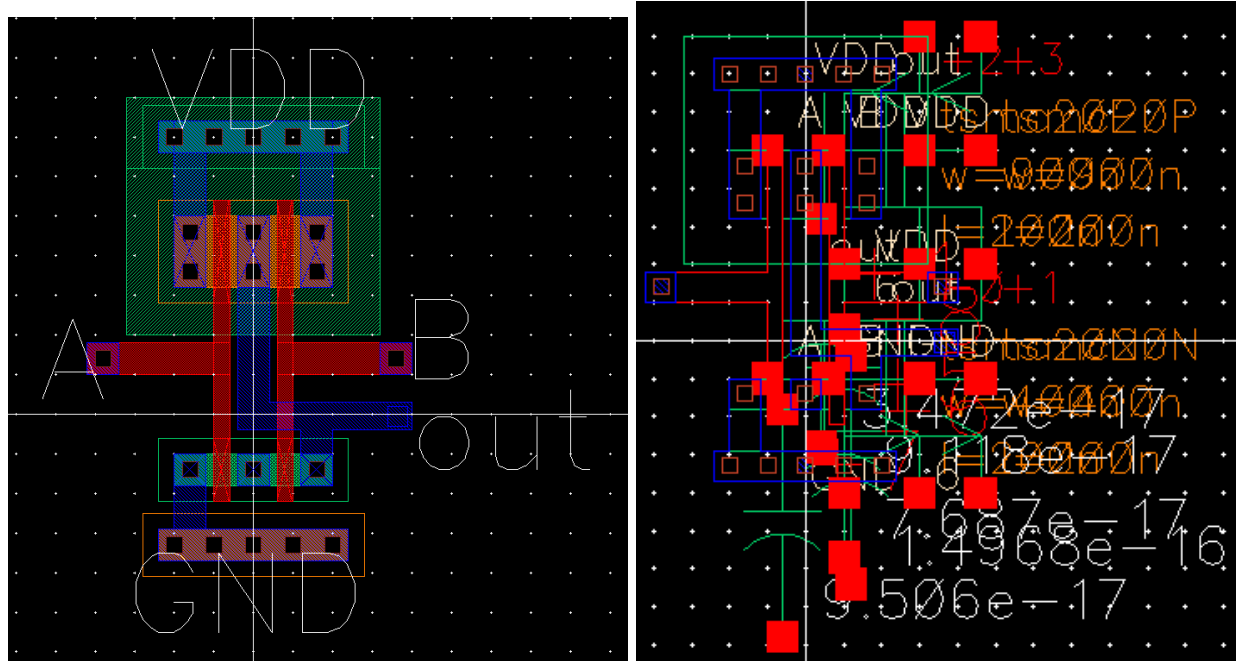
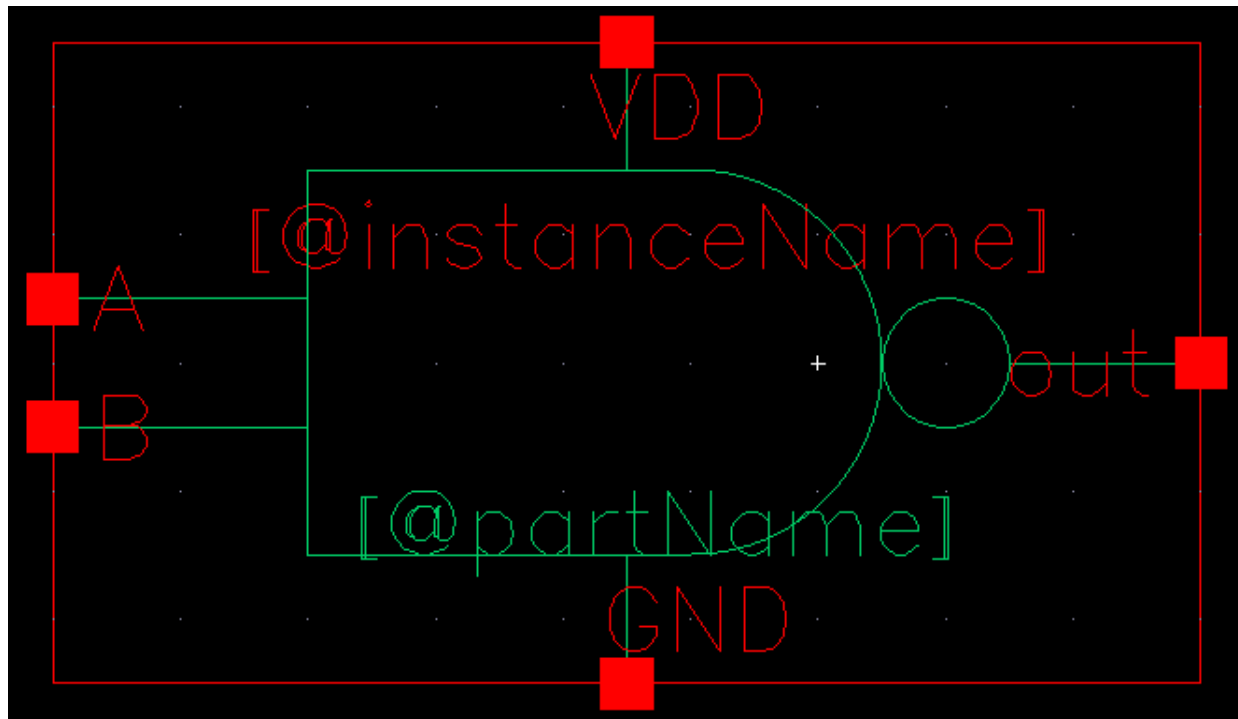
netbad.out:

mergenet.out:

```
termbad.out:  
prunenet.out:  
prunedev.out:  
audit.out:  
  
Probe files from /home/grads/a/acoskuner500/ecen714/LVS/layout  
devbad.out:  
netbad.out:  
mergenet.out:  
termbad.out:  
prunenet.out:  
prunedev.out:  
audit.out:
```

3. NAND2 screenshots





4. NAND2 LVS Output

```
@(#)SCDS: LVS version 6.1.8-64b 08/04/2020 19:19 (cpgsrv11) $
```

```
Command line: /opt/coe/cadence/IC618/tools.lnx86/dfII/bin/64bit/LVS -dir
/home/grads/a/acoskuner500/ecen714/LVS -l -s -t
/home/grads/a/acoskuner500/ecen714/LVS/layout
/home/grads/a/acoskuner500/ecen714/LVS/schematic
Like matching is enabled.
Net swapping is enabled.
Using terminal names as correspondence points.
Compiling Diva LVS rules...
```

```
Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/layout/netlist
count
  6          nets
  5          terminals
  2          pmos
  2          nmos
```

```
Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/schematic/netlist
count
  6          nets
  5          terminals
  2          pmos
  2          nmos
```

Terminal correspondence points

N3	N1	A
N2	N0	B
N1	N3	GND
N5	N2	VDD
N4	N4	out

Devices in the netlist but not in the rules:

pcapacitor

Devices in the rules but not in the netlist:

cap nfet pfet nmos4 pmos4

The net-lists match.

	layout	schematic
	instances	
un-matched	0	0
rewired	0	0
size errors	0	0
pruned	0	0
active	4	4
total	4	4
	nets	
un-matched	0	0
merged	0	0
pruned	0	0
active	6	6
total	6	6
	terminals	
un-matched	0	0
matched but		
different type	0	0
total	5	5

Probe files from /home/grads/a/acoskuner500/ecen714/LVS/schematic

devbad.out:

netbad.out:

mergenet.out:

termbad.out:

prunenet.out:

prunedev.out:

audit.out:

Probe files from /home/grads/a/acoskuner500/ecen714/LVS/layout

devbad.out:

netbad.out:

mergenet.out:

termbad.out:

prunenet.out:

prunedev.out:

audit.out:

@(#) \$CDS: LVS version 6.1.8-64b 08/04/2020 19:19 (cpgsrv11) \$

Command line: /opt/coe/cadence/IC618/tools.lnx86/dfII/bin/64bit/LVS -dir
/home/grads/a/acoskuner500/ecen714/LVS -l -s -t
/home/grads/a/acoskuner500/ecen714/LVS/layout
/home/grads/a/acoskuner500/ecen714/LVS/schematic

Like matching is enabled.

Net swapping is enabled.

Using terminal names as correspondence points.

Compiling Diva LVS rules...

Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/layout/netlist

count	
6	nets
5	terminals
2	pmos
2	nmos

Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/schematic/netlist

count	
6	nets
5	terminals
2	pmos
2	nmos

Terminal correspondence points

N3	N1	A
N2	N0	B
N1	N3	GND
N5	N2	VDD
N4	N4	out

Devices in the netlist but not in the rules:

pcapacitor

Devices in the rules but not in the netlist:

cap nfet pfet nmos4 pmos4

The net-lists match.

	layout	schematic
	instances	
un-matched	0	0
rewired	0	0

size errors	0	0
pruned	0	0
active	4	4
total	4	4

	nets	
un-matched	0	0
merged	0	0
pruned	0	0
active	6	6
total	6	6

	terminals	
un-matched	0	0
matched but		
different type	0	0
total	5	5

Probe files from /home/grads/a/acoskuner500/ecen714/LVS/schematic

devbad.out:

netbad.out:

mergenet.out:

termbad.out:

prunenet.out:

prunedev.out:

audit.out:

Probe files from /home/grads/a/acoskuner500/ecen714/LVS/layout

devbad.out:

netbad.out:

mergenet.out:

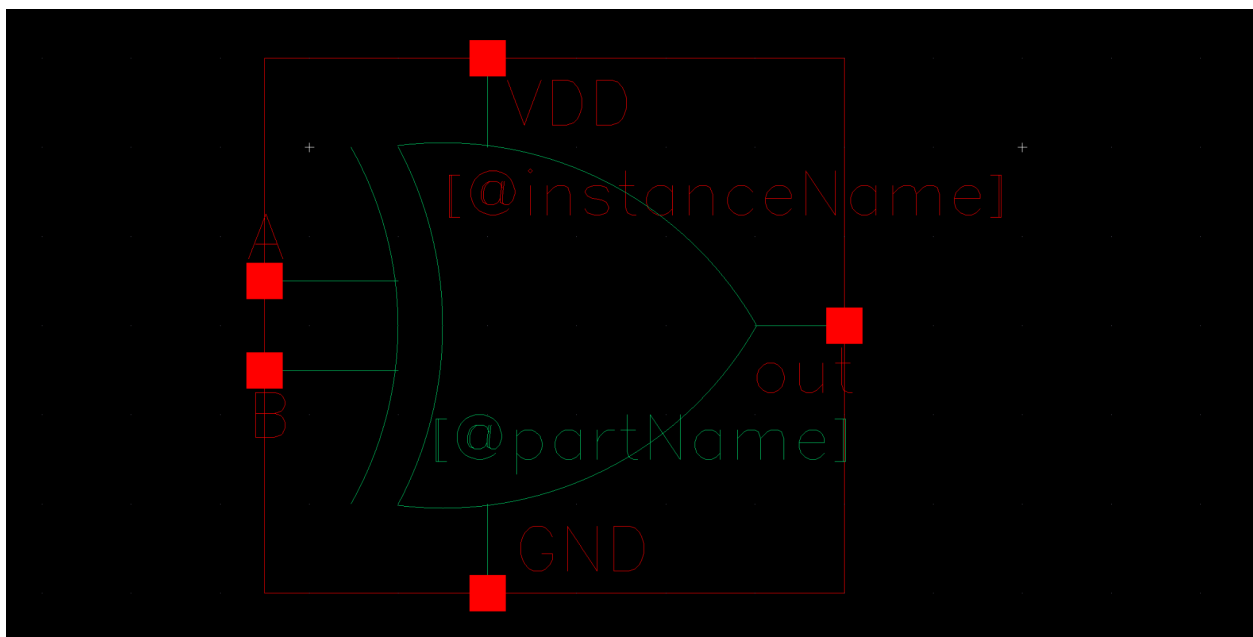
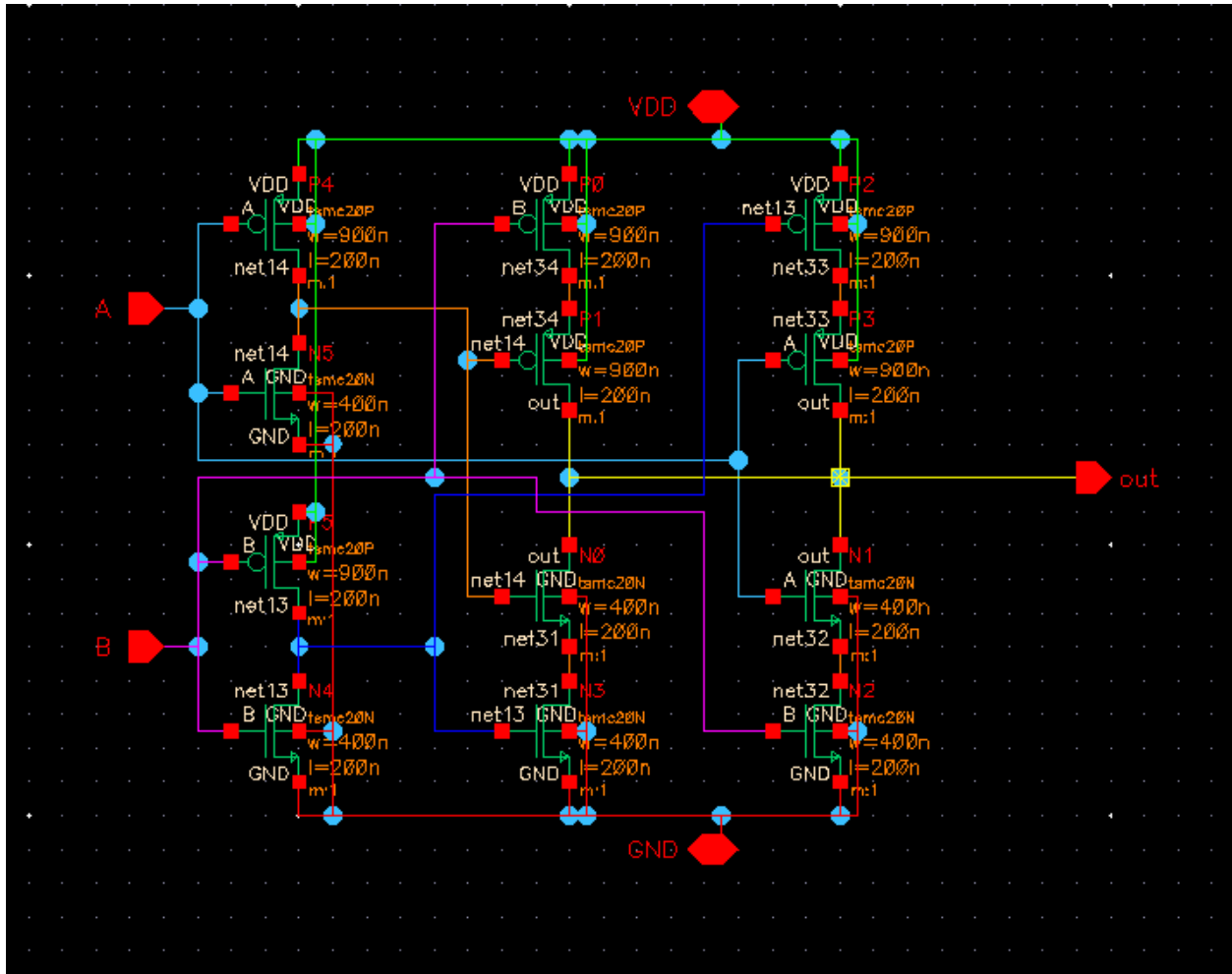
termbad.out:

prunenet.out:

prunedev.out:

audit.out:

5. XOR2 Screenshots




```
@(#) $CDS: LVS version 6.1.8-64b 08/04/2020 19:19 (cpgsrv11) $
```

```
Command line: /opt/coe/cadence/IC618/tools.lnx86/dfII/bin/64bit/LVS -dir
/home/grads/a/acoskuner500/ecen714/LVS -l -s -t
/home/grads/a/acoskuner500/ecen714/LVS/layout
/home/grads/a/acoskuner500/ecen714/LVS/schematic
Like matching is enabled.
Net swapping is enabled.
Using terminal names as correspondence points.
Compiling Diva LVS rules...
```

```
Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/layout/netlist
count
11          nets
5           terminals
6           pmos
6           nmos
```

```
Net-list summary for /home/grads/a/acoskuner500/ecen714/LVS/schematic/netlist
count
11          nets
5           terminals
6           pmos
6           nmos
```

```
Terminal correspondence points
N8      N8      A
N7      N6      B
N6      N2      GND
N10     N0      VDD
N9      N1      out
```

```
Devices in the netlist but not in the rules:
pcapacitor
```

```
Devices in the rules but not in the netlist:
cap nfet pfet nmos4 pmos4
```

```
The net-lists match.
```

	layout	schematic
	instances	
un-matched	0	0
rewired	0	0
size errors	0	0
pruned	0	0
active	12	12
total	12	12

	nets	
un-matched	0	0
merged	0	0
pruned	0	0
active	11	11
total	11	11

	terminals	
un-matched	0	0
matched but		
different type	0	0
total	5	5

```
Probe files from /home/grads/a/acoskuner500/ecen714/LVS/schematic
```

```
devbad.out:
```

```
netbad.out:
```

```
mergenet.out:
```

termbad.out:

prunenet.out:

prunedev.out:

audit.out:

Probe files from /home/grads/a/acoskuner500/ecen714/LVS/layout

devbad.out:

netbad.out:

mergenet.out:

termbad.out:

prunenet.out:

prunedev.out:

audit.out: