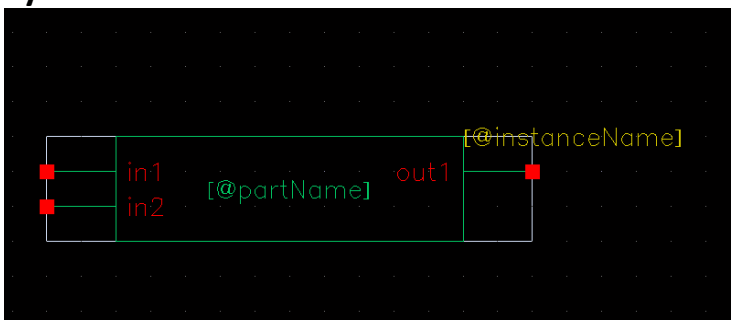
Name:_____

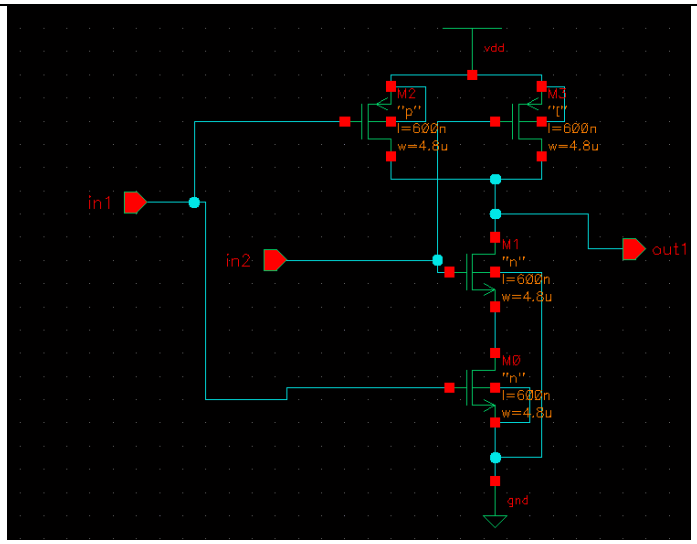
Library Name:	
Cell Name:	**Zxw_nand**
Function/Truth Table:	
0 0	**1**
0 1	**1**
1 0	**1**
1 1	**0**
Propagation Delay:	
Layout Area: 522.26um^2	

Name:_____

Symbol with Port Names:

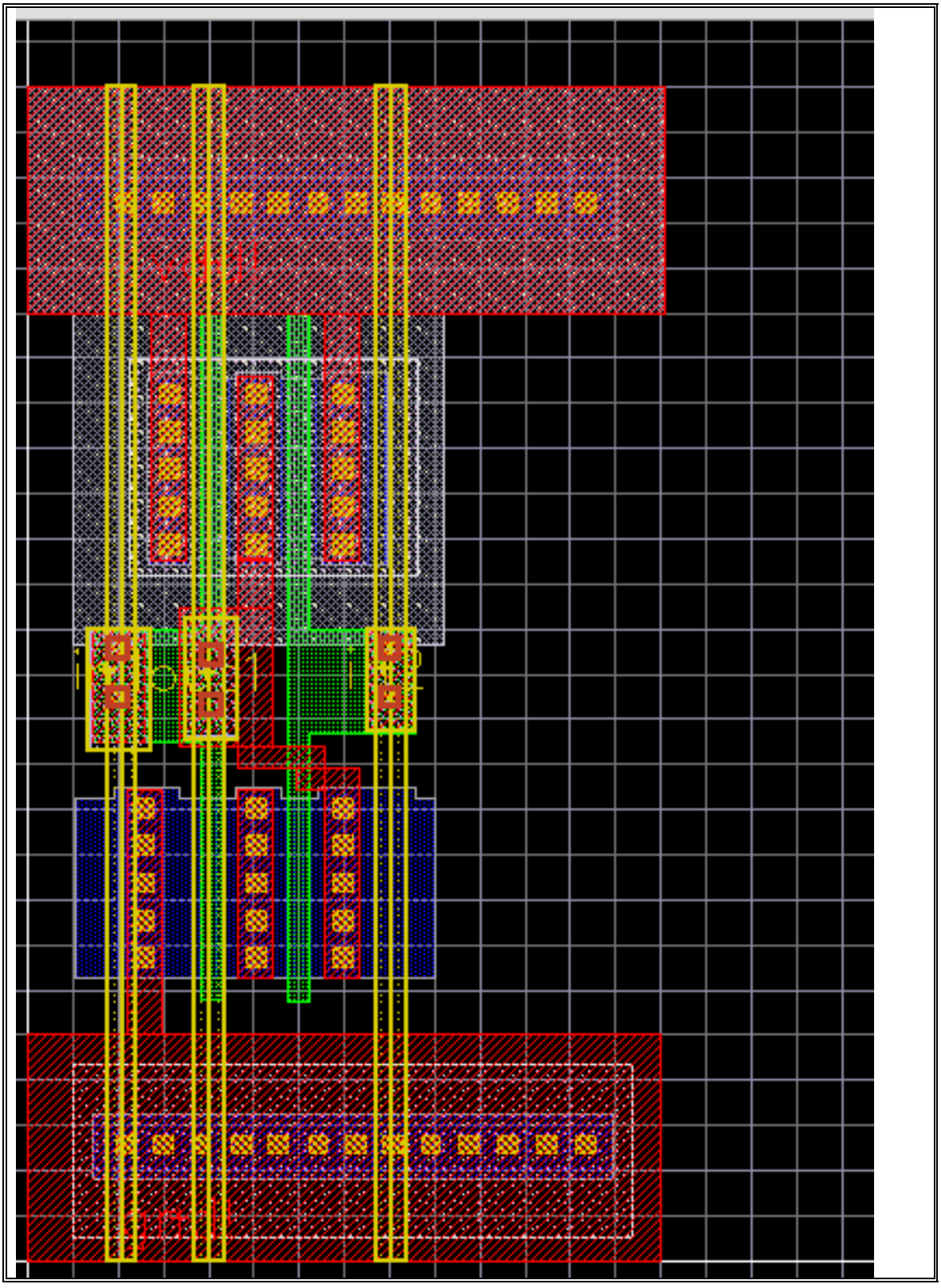


Schematic:



Layout:

Name:_____

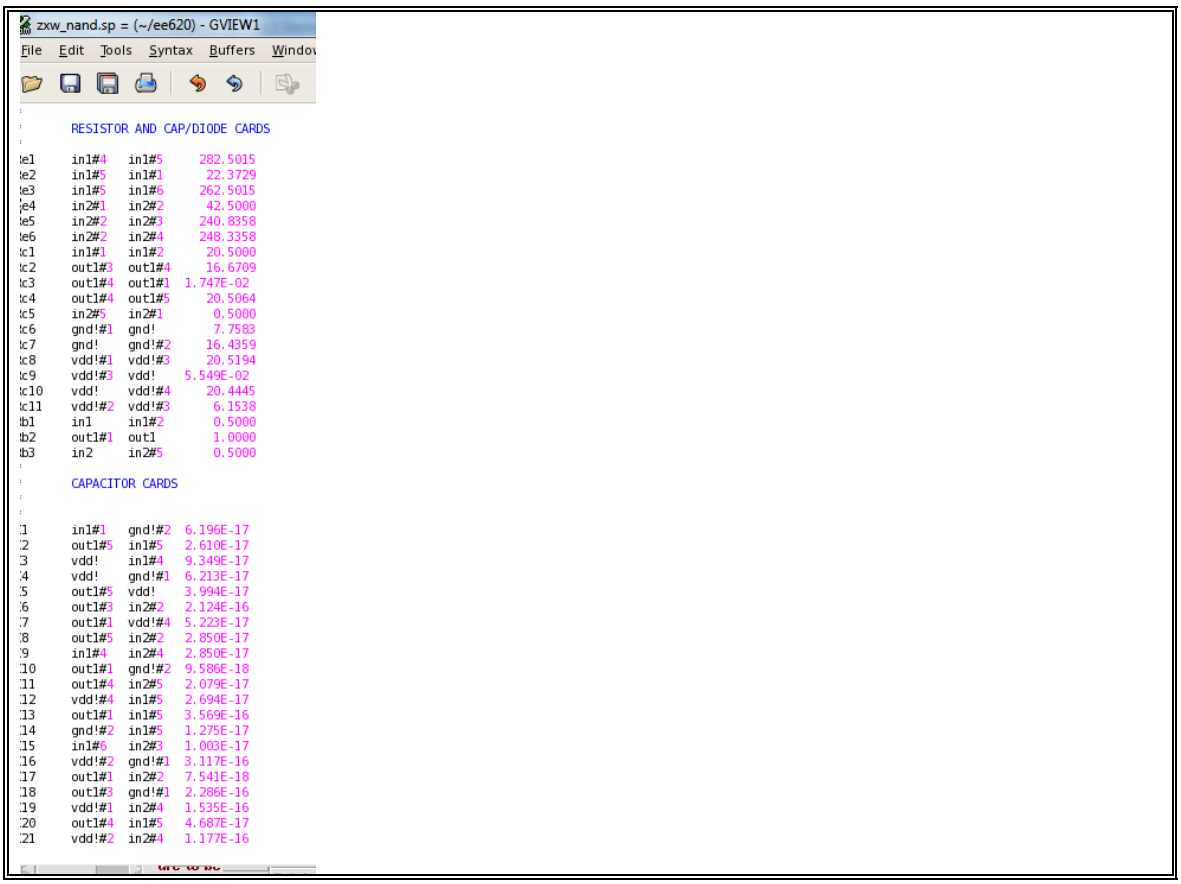


Verilog Model:

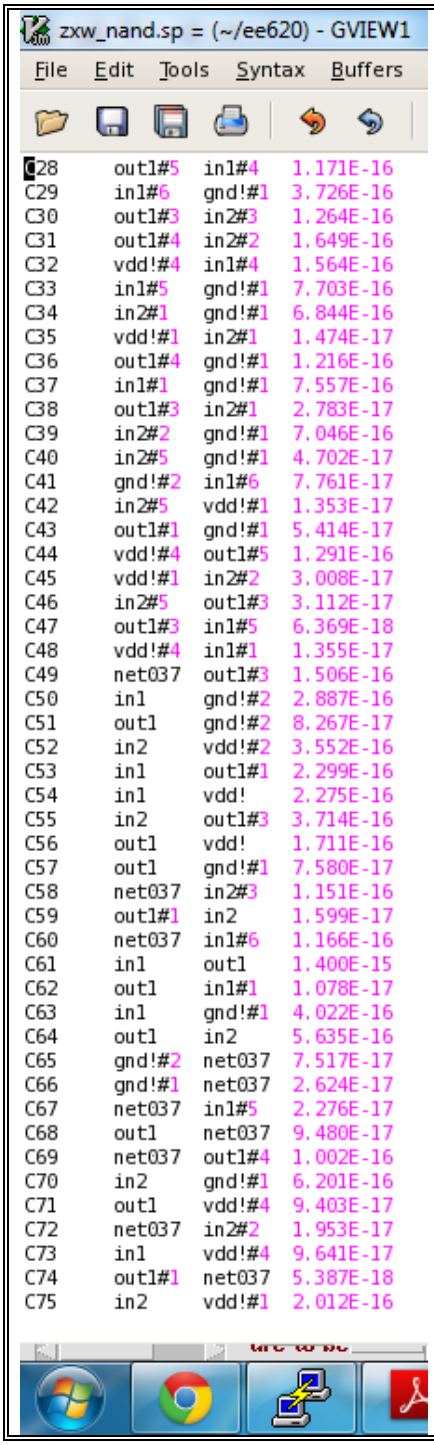
```
module zxw_nand (in1,in2,out1 );

        input in1;
        input in2;
        output out1;
        nand(out1,in1,in2);
endmodule
```

Comments/Notes:

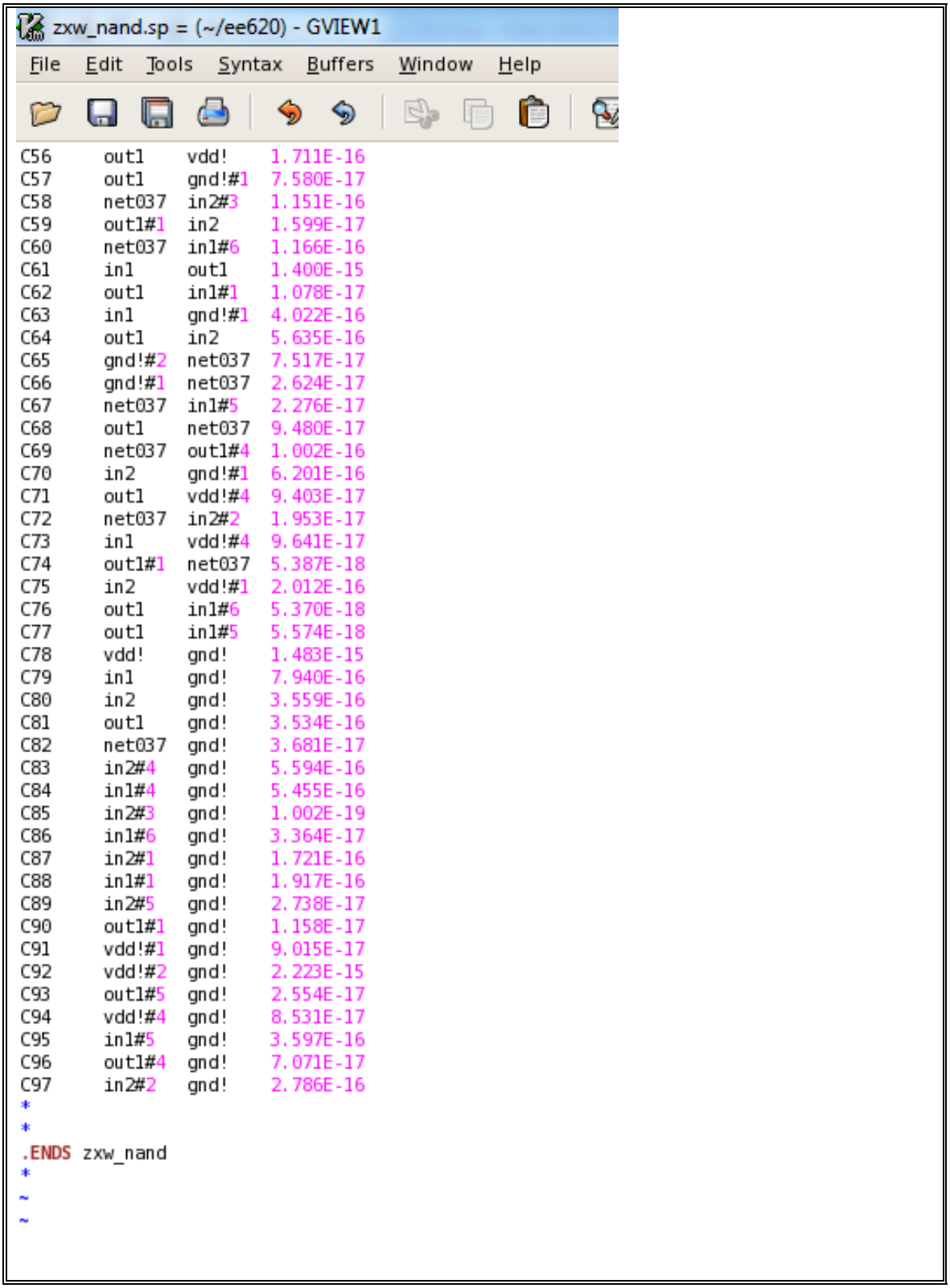

```
*
.SUBCKT zxw_nand vdd! gnd! in1 in2 out1
*
*
*  caps2d version: 7
*
*
*       TRANSISTOR CARDS
*
*
M1      out1#3   in2#3    net037  gnd!#1  nmos    L=0.6   W=4.8
+ AD=16.62      AS=4.26 PD=12   PS=2
M0      net037   in1#6    gnd!#2  gnd!#1  nmos    L=0.6   W=4.8
+ AD=4.26       AS=16.605       PD=2    PS=12.1
M2      out1#5   in1#4    vdd!#4  vdd!#2  pmos    L=0.6   W=4.8
+ AD=4.26       AS=7.305        PD=2    PS=8.3
M3      out1#5   in2#4    vdd!#1  vdd!#2  pmos    L=0.6   W=4.8
+ AD=4.26       AS=10.365       PD=2    PS=9.5
*
*
*       RESISTOR AND CAP/DIODE CARDS
*
Re1     in1#4   in1#5     282.5015
Re2     in1#5   in1#1      22.3729
Re3     in1#5   in1#6     262.5015
Re4     in2#1   in2#2      42.5000
Re5     in2#2   in2#3     240.8358
Re6     in2#2   in2#4     248.3358
Rc1     in1#1   in1#2      20.5000
Rc2     out1#3  out1#4     16.6709
Rc3     out1#4  out1#1   1.747E-02
Rc4     out1#4  out1#5     20.5064
Rc5     in2#5   in2#1       0.5000
Rc6     gnd!#1  gnd!        7.7583
Rc7     gnd!    gnd!#2     16.4359
Rc8     vdd!#1  vdd!#3     20.5194
Rc9     vdd!#3  vdd!    5.549E-02
Rc10    vdd!    vdd!#4     20.4445
Rc11    vdd!#2  vdd!#3      6.1538
Rb1     in1     in1#2       0.5000
Rb2     out1#1  out1        1.0000
Rb3     in2     in2#5       0.5000
*
*       CAPACITOR CARDS
*
*
```


zxw_nand.sp = (~/ee620) - GVIEW1
File Edit Tools Syntax Buffers Windo
RESISTOR AND CAP/DIODE CARDS
CAPACITOR CARDS

Name:_____



C28	out1#5	in1#4	1.171E-16
C29	in1#6	gnd!#1	3.726E-16
C30	out1#3	in2#3	1.264E-16
C31	out1#4	in2#2	1.649E-16
C32	vdd!#4	in1#4	1.564E-16
C33	in1#5	gnd!#1	7.703E-16
C34	in2#1	gnd!#1	6.844E-16
C35	vdd!#1	in2#1	1.474E-17
C36	out1#4	gnd!#1	1.216E-16
C37	in1#1	gnd!#1	7.557E-16
C38	out1#3	in2#1	2.783E-17
C39	in2#2	gnd!#1	7.046E-16
C40	in2#5	gnd!#1	4.702E-17
C41	gnd!#2	in1#6	7.761E-17
C42	in2#5	vdd!#1	1.353E-17
C43	out1#1	gnd!#1	5.414E-17
C44	vdd!#4	out1#5	1.291E-16
C45	vdd!#1	in2#2	3.008E-17
C46	in2#5	out1#3	3.112E-17
C47	out1#3	in1#5	6.369E-18
C48	vdd!#4	in1#1	1.355E-17
C49	net037	out1#3	1.506E-16
C50	in1	gnd!#2	2.887E-16
C51	out1	gnd!#2	8.267E-17
C52	in2	vdd!#2	3.552E-16
C53	in1	out1#1	2.299E-16
C54	in1	vdd!	2.275E-16
C55	in2	out1#3	3.714E-16
C56	out1	vdd!	1.711E-16
C57	out1	gnd!#1	7.580E-17
C58	net037	in2#3	1.151E-16
C59	out1#1	in2	1.599E-17
C60	net037	in1#6	1.166E-16
C61	in1	out1	1.400E-15
C62	out1	in1#1	1.078E-17
C63	in1	gnd!#1	4.022E-16
C64	out1	in2	5.635E-16
C65	gnd!#2	net037	7.517E-17
C66	gnd!#1	net037	2.624E-17
C67	net037	in1#5	2.276E-17
C68	out1	net037	9.480E-17
C69	net037	out1#4	1.002E-16
C70	in2	gnd!#1	6.201E-16
C71	out1	vdd!#4	9.403E-17
C72	net037	in2#2	1.953E-17
C73	in1	vdd!#4	9.641E-17
C74	out1#1	net037	5.387E-18
C75	in2	vdd!#1	2.012E-16




```
C56     out1    vdd!    1.711E-16
C57     out1    gnd!#1  7.580E-17
C58     net037  in2#3   1.151E-16
C59     out1#1  in2     1.599E-17
C60     net037  in1#6   1.166E-16
C61     in1     out1    1.400E-15
C62     out1    in1#1   1.078E-17
C63     in1     gnd!#1  4.022E-16
C64     out1    in2     5.635E-16
C65     gnd!#2  net037  7.517E-17
C66     gnd!#1  net037  2.624E-17
C67     net037  in1#5   2.276E-17
C68     out1    net037  9.480E-17
C69     net037  out1#4  1.002E-16
C70     in2     gnd!#1  6.201E-16
C71     out1    vdd!#4  9.403E-17
C72     net037  in2#2   1.953E-17
C73     in1     vdd!#4  9.641E-17
C74     out1#1  net037  5.387E-18
C75     in2     vdd!#1  2.012E-16
C76     out1    in1#6   5.370E-18
C77     out1    in1#5   5.574E-18
C78     vdd!    gnd!    1.483E-15
C79     in1     gnd!    7.940E-16
C80     in2     gnd!    3.559E-16
C81     out1    gnd!    3.534E-16
C82     net037  gnd!    3.681E-17
C83     in2#4   gnd!    5.594E-16
C84     in1#4   gnd!    5.455E-16
C85     in2#3   gnd!    1.002E-19
C86     in1#6   gnd!    3.364E-17
C87     in2#1   gnd!    1.721E-16
C88     in1#1   gnd!    1.917E-16
C89     in2#5   gnd!    2.738E-17
C90     out1#1  gnd!    1.158E-17
C91     vdd!#1  gnd!    9.015E-17
C92     vdd!#2  gnd!    2.223E-15
C93     out1#5  gnd!    2.554E-17
C94     vdd!#4  gnd!    8.531E-17
C95     in1#5   gnd!    3.597E-16
C96     out1#4  gnd!    7.071E-17
C97     in2#2   gnd!    2.786E-16
*
*
.ENDS zxw_nand
*
~
~
```