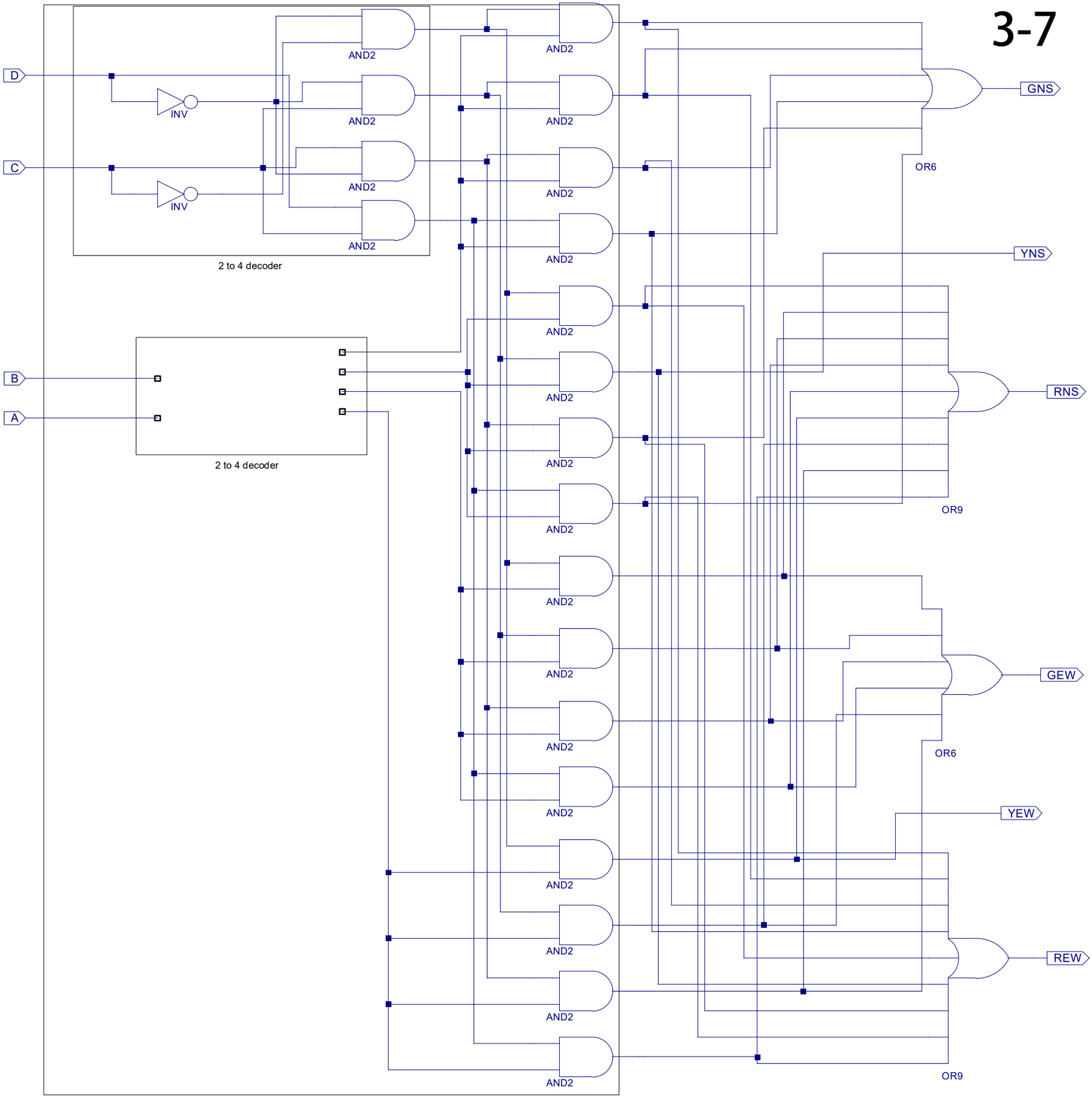
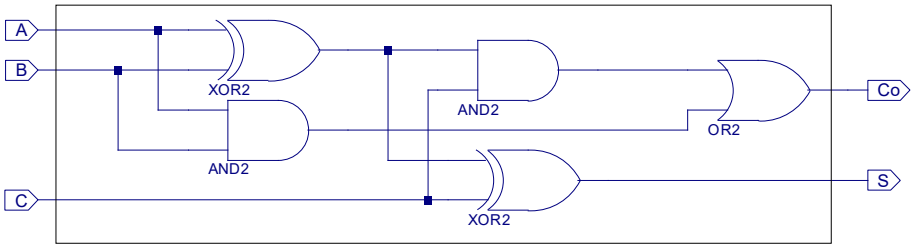
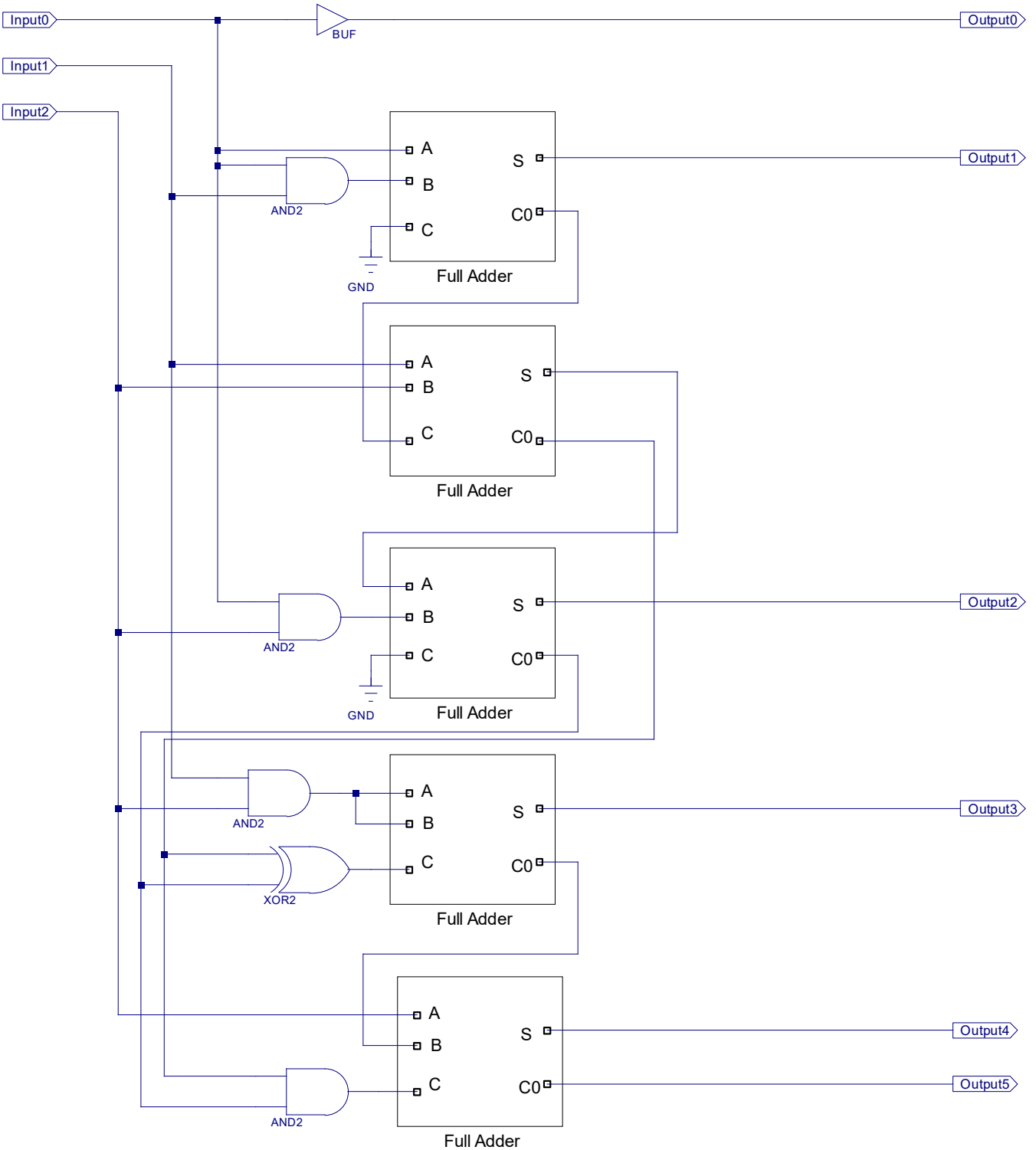
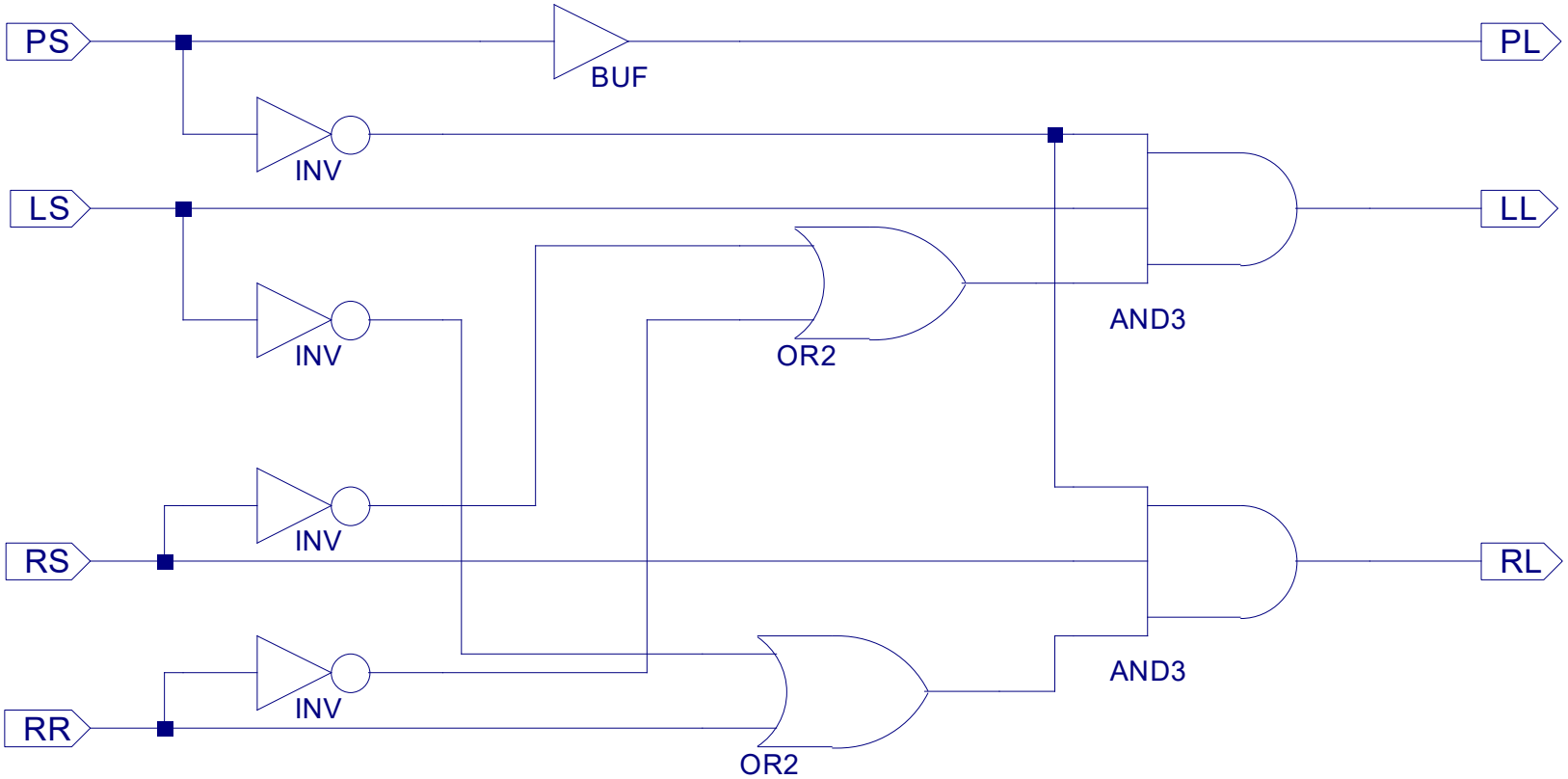
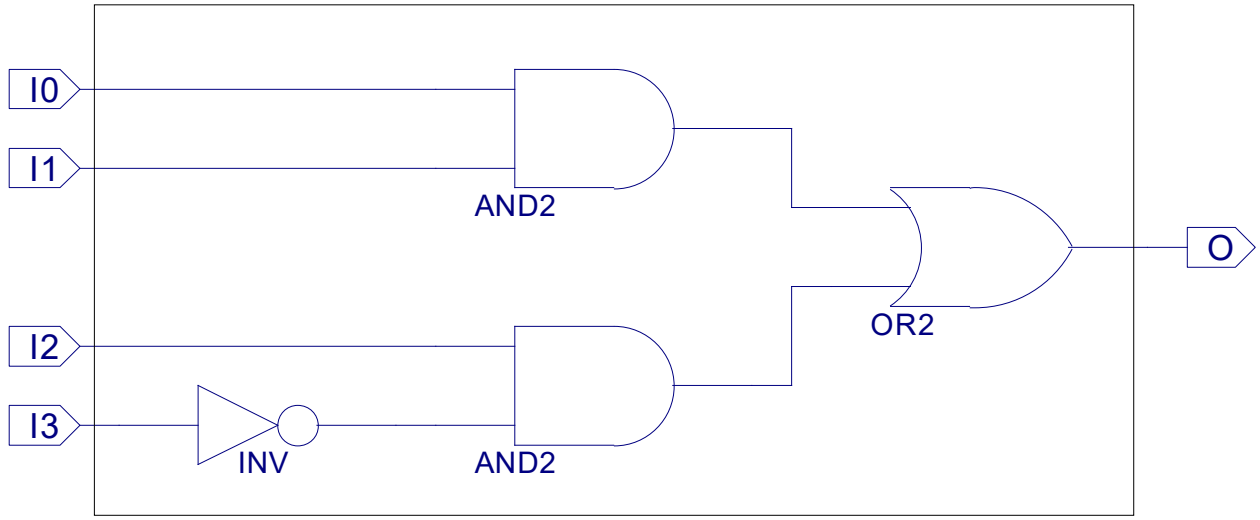

3-7
D
C
B
A
INV
INV
AND2
2 to 4 decoder
2 to 4 decoder
4 to 16 decoder
GNS
YNS
RNS
GEW
YEW
REW
OR6
OR9
OR6
OR9

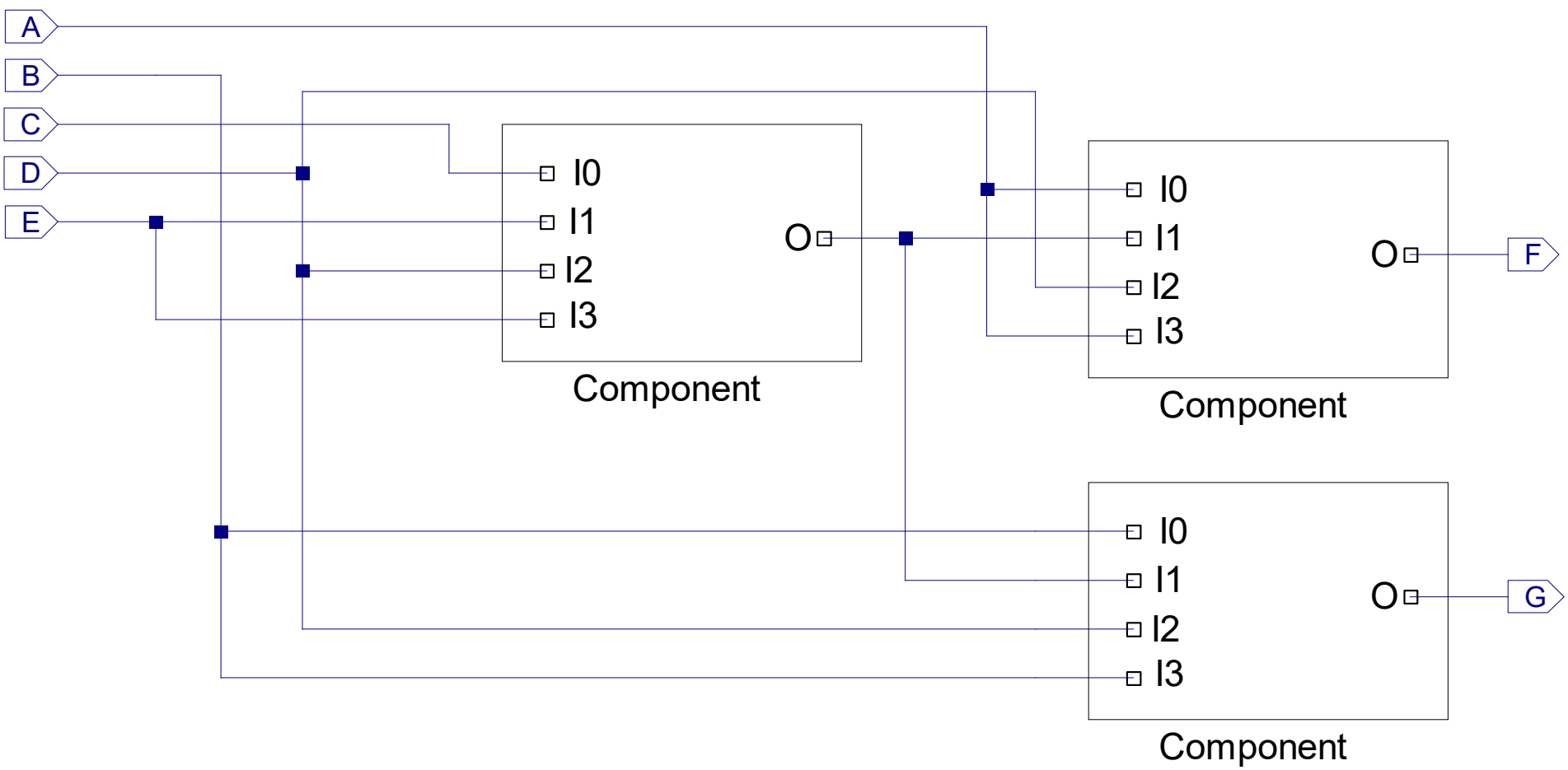

A
B
C
XOR2
AND2
AND2
XOR2
OR2
Co
S
Full Adder

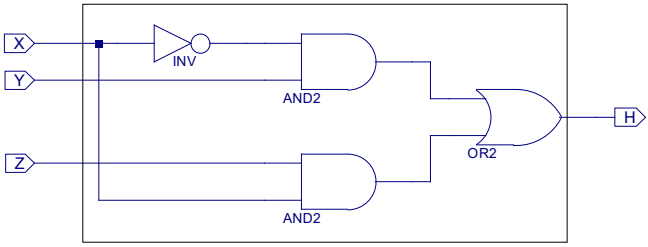

Input0
Input1
Input2
BUF
Output0
Output1
Output2
Output3
Output4
Output5
A
B
C
S
C0
AND2
GND
XOR2
Full Adder


PS
PL
BUF
INV
LS
LL
INV
OR2
AND3
RS
RL
INV
AND3
RR
INV
OR2

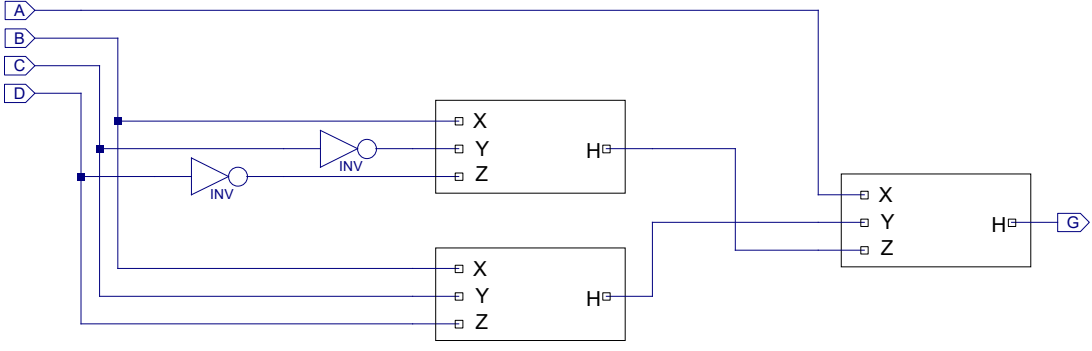

I0
I1
AND2
O
OR2
I2
I3
INV
AND2

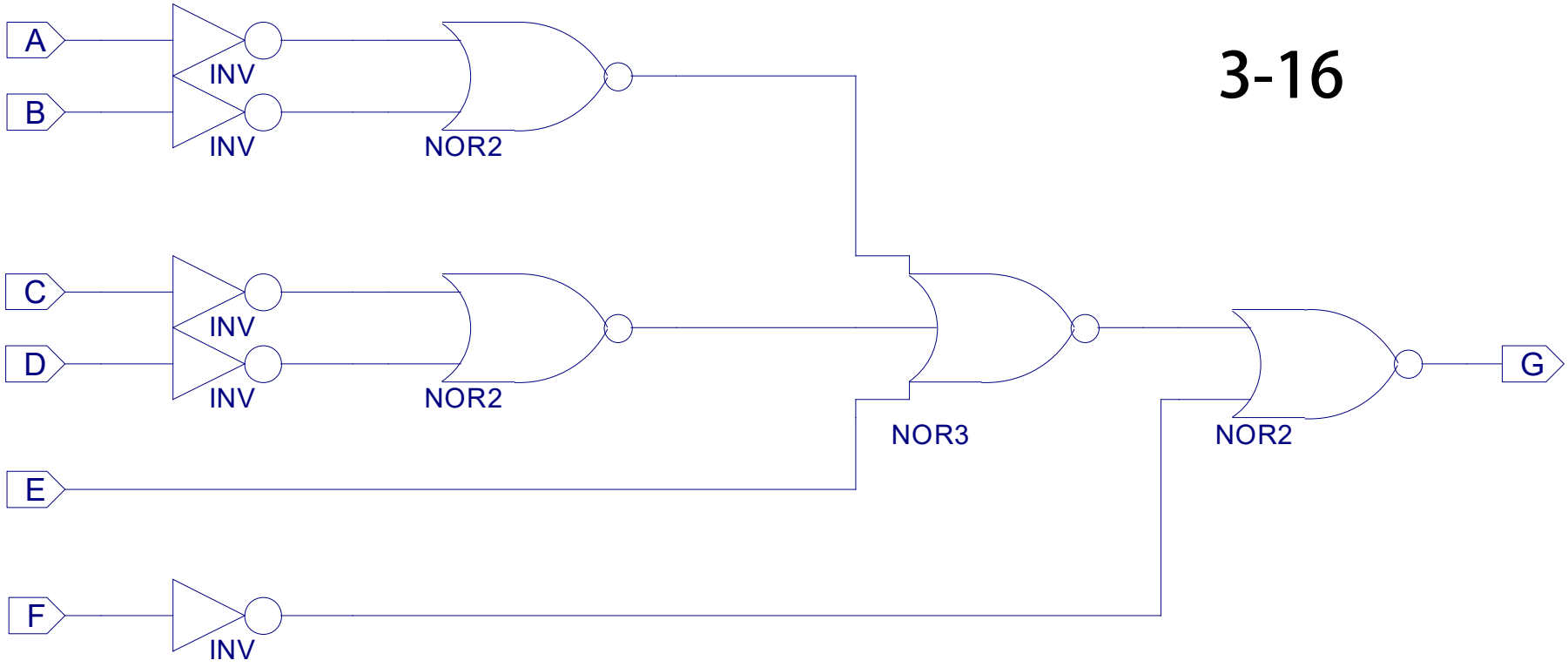
Component

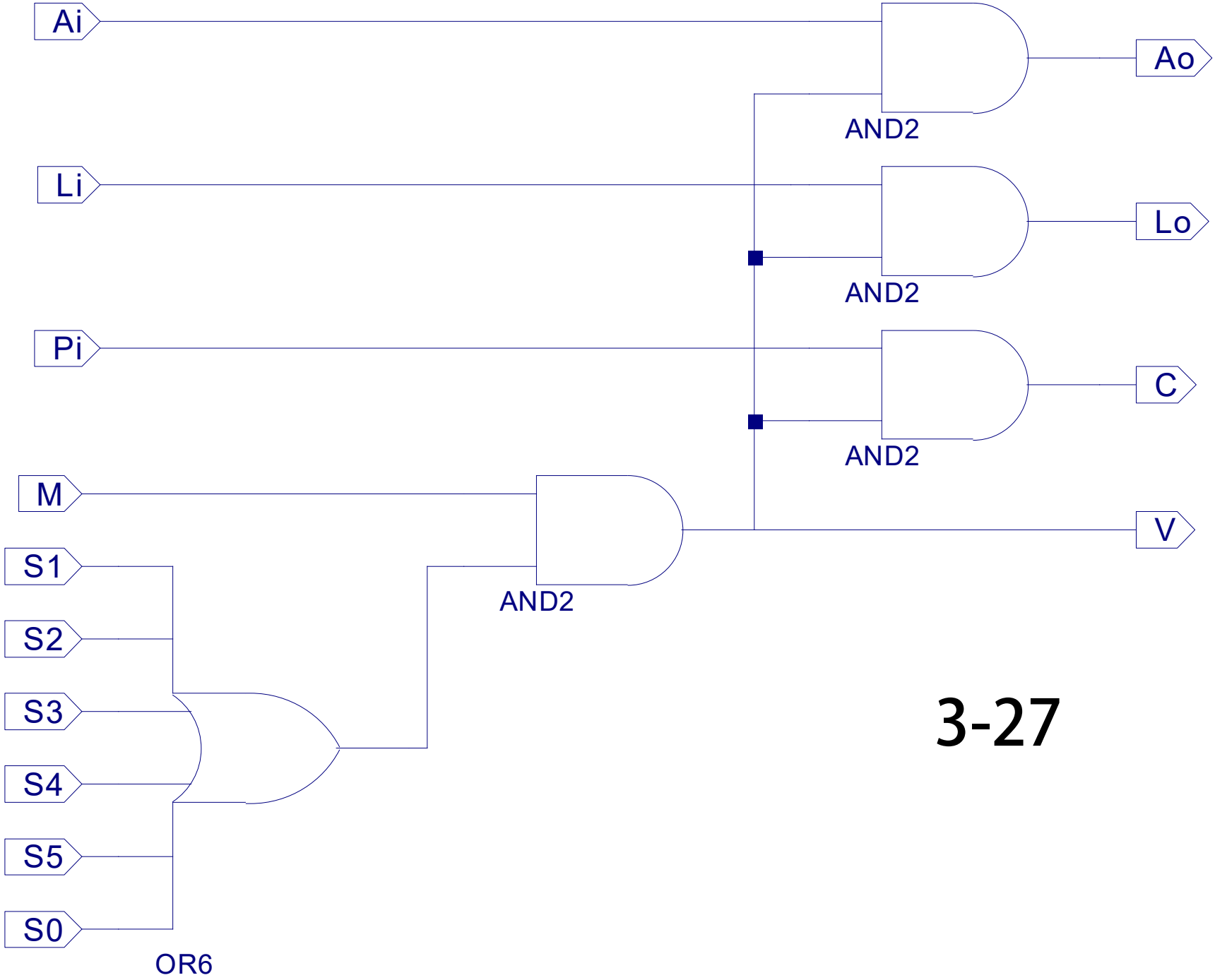

A
B
C
D
E
I0
I1
I2
I3
O
Component
I0
I1
I2
I3
O
F
Component
I0
I1
I2
I3
O
G
Component

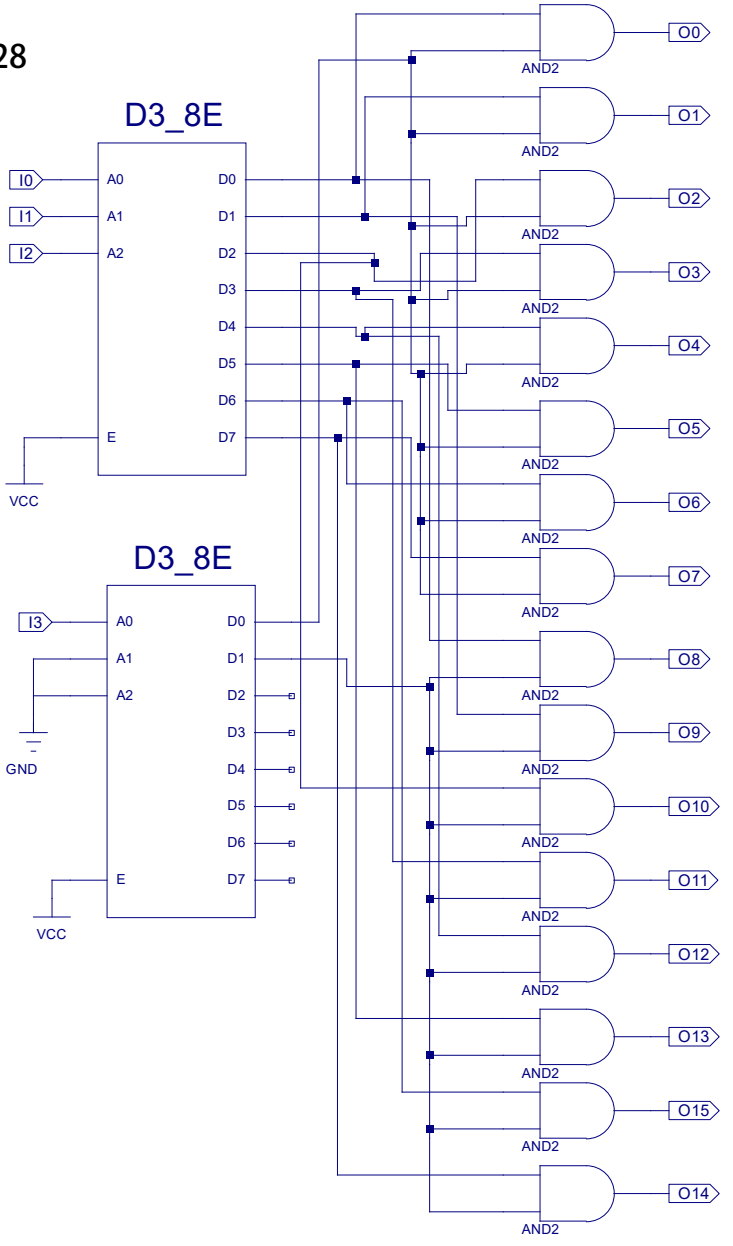


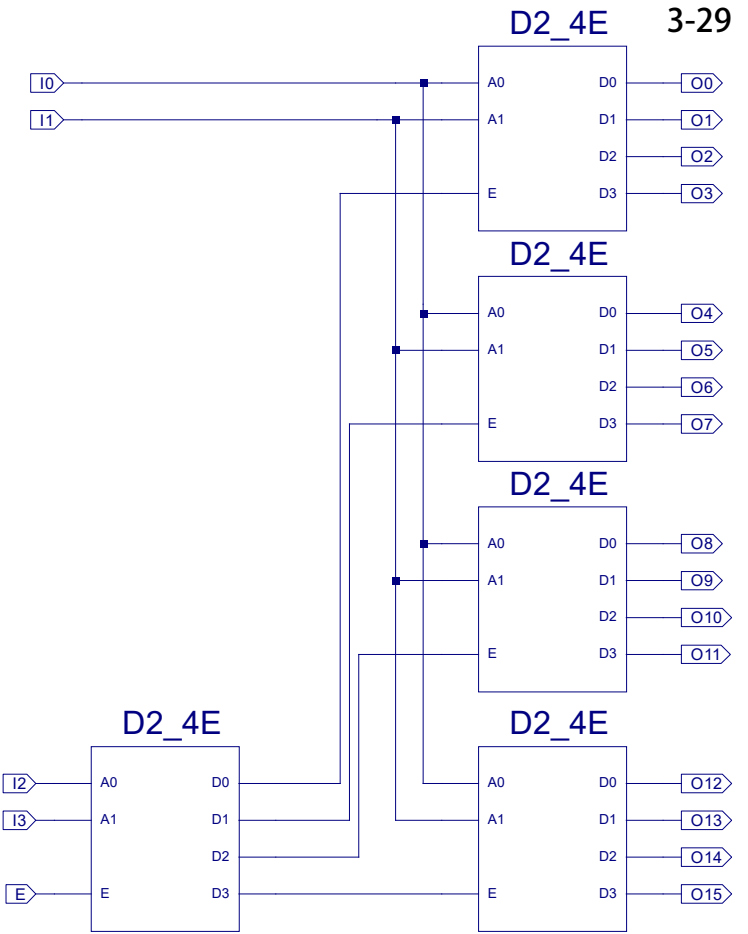
H(X,Y,Z)=(!X)Y+XZ

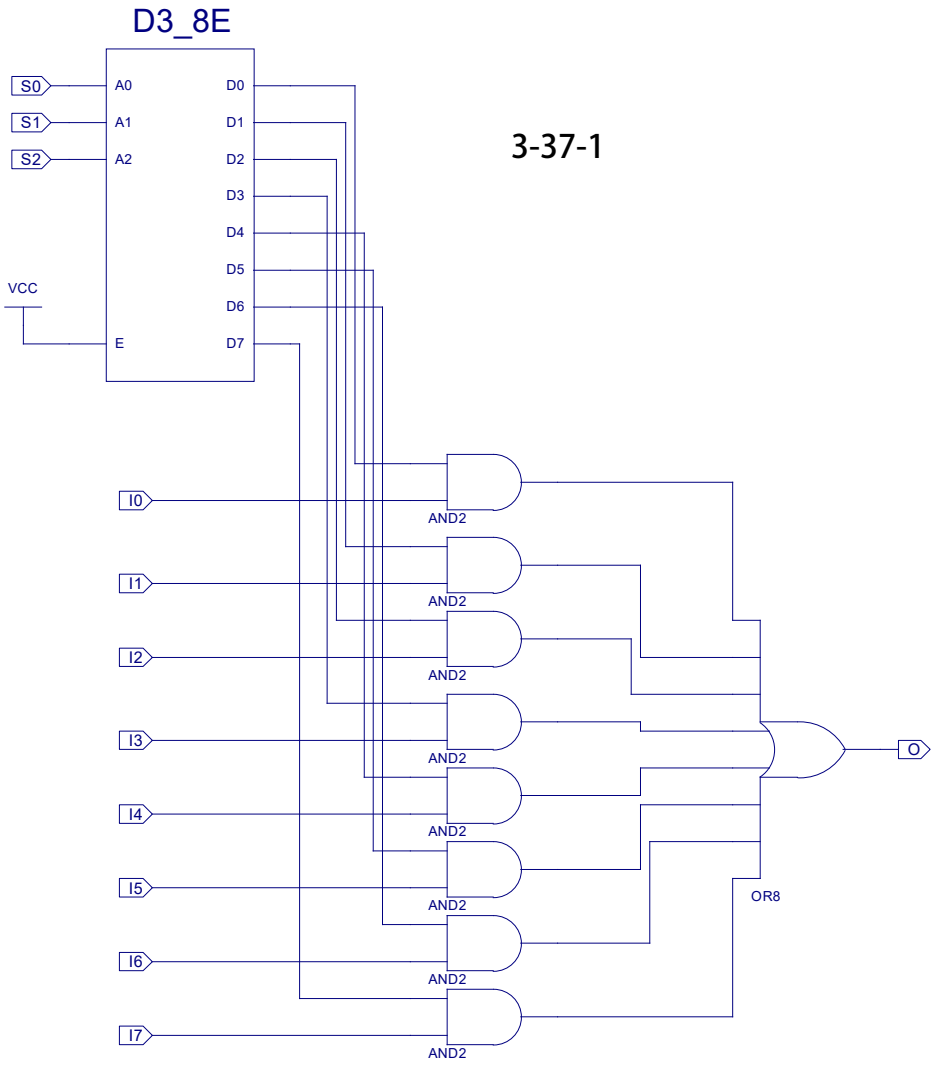



A
B
INV
INV
NOR2
C
D
INV
INV
NOR2
E
NOR3
NOR2
G
F
INV

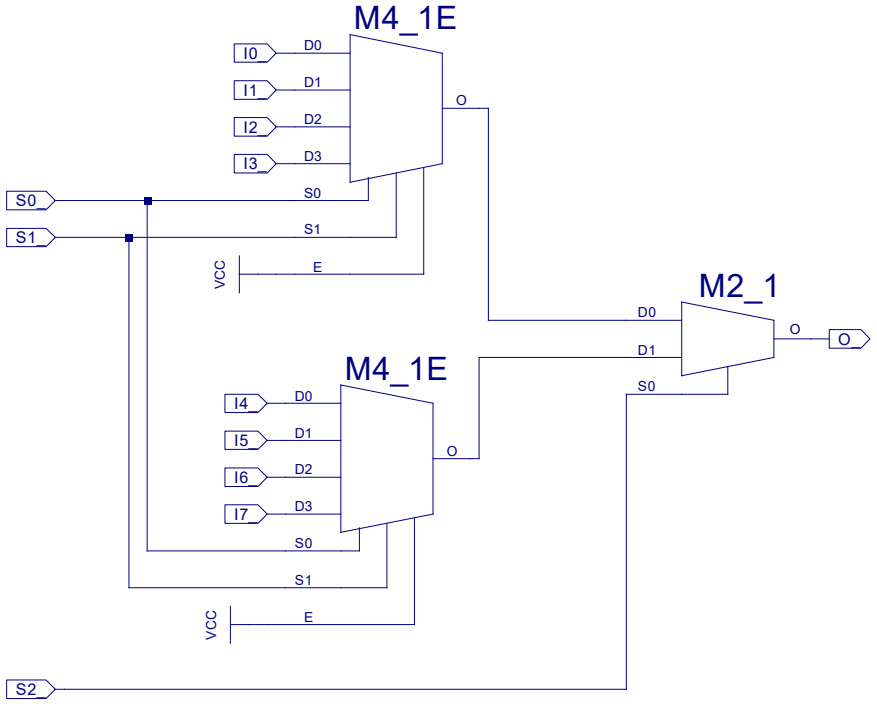

Ai
Ao
AND2
Li
Lo
AND2
Pi
C
AND2
M
V
S1
AND2
S2
S3
S4
S5
S0
OR6


D3_8E
I0
I1
I2
A0
A1
A2
E
D0
D1
D2
D3
D4
D5
D6
D7
VCC
D3_8E
I3
GND
VCC
AND2
O0
O1
O2
O3
O4
O5
O6
O7
O8
O9
O10
O11
O12
O13
O15
O14


D2_4E
I0
I1
A0
A1
E
D0
D1
D2
D3
O0
O1
O2
O3
D2_4E
A0
A1
E
D0
D1
D2
D3
O4
O5
O6
O7
D2_4E
A0
A1
E
D0
D1
D2
D3
O8
O9
O10
O11
D2_4E
I2
I3
E
A0
A1
E
D0
D1
D2
D3
D2_4E
A0
A1
E
D0
D1
D2
D3
O12
O13
O14
O15

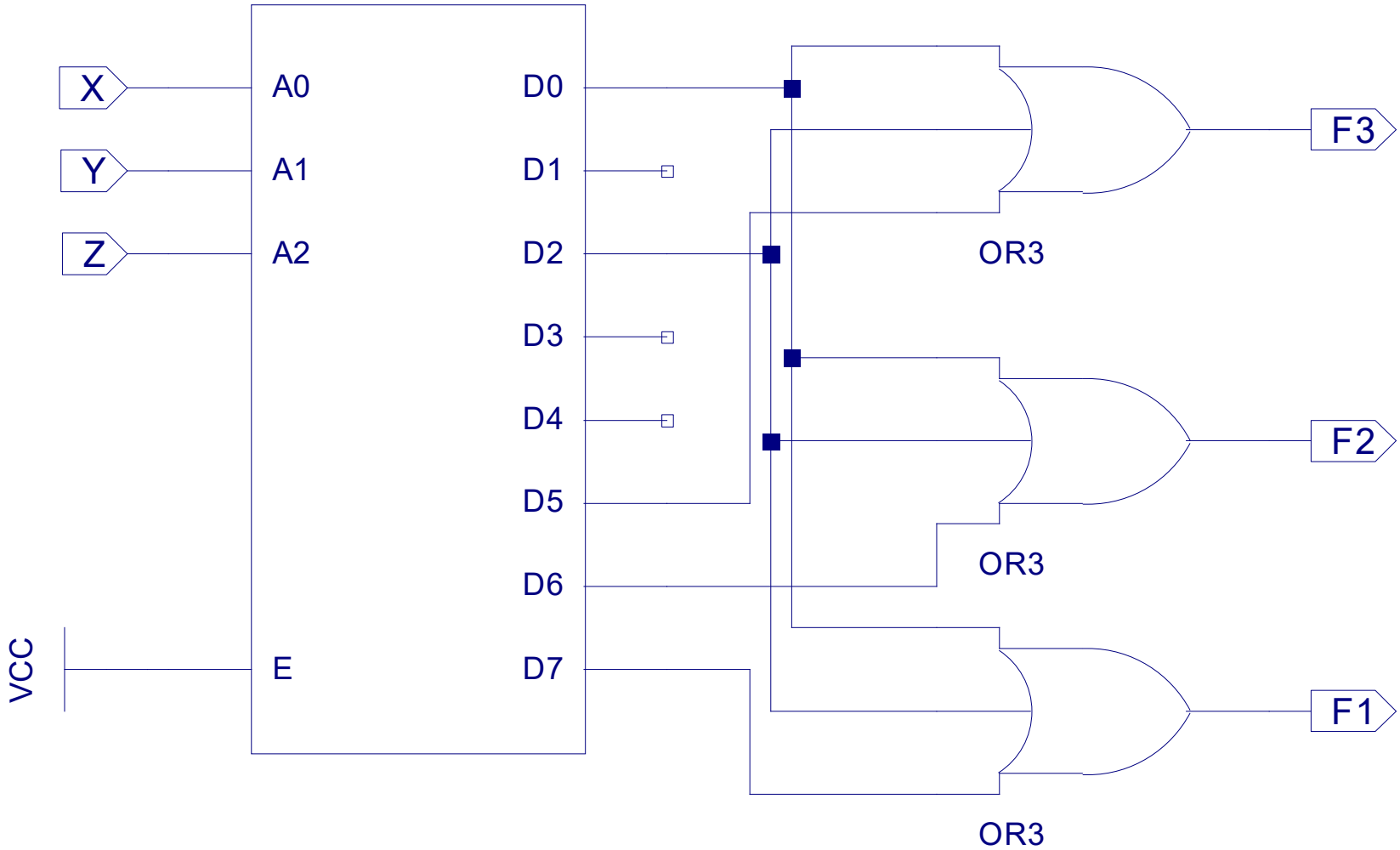

D3_8E
S0
S1
S2
A0
A1
A2
D0
D1
D2
D3
D4
D5
D6
D7
VCC
E
I0
I1
I2
I3
I4
I5
I6
I7
AND2
AND2
AND2
AND2
AND2
AND2
AND2
AND2
OR8
O

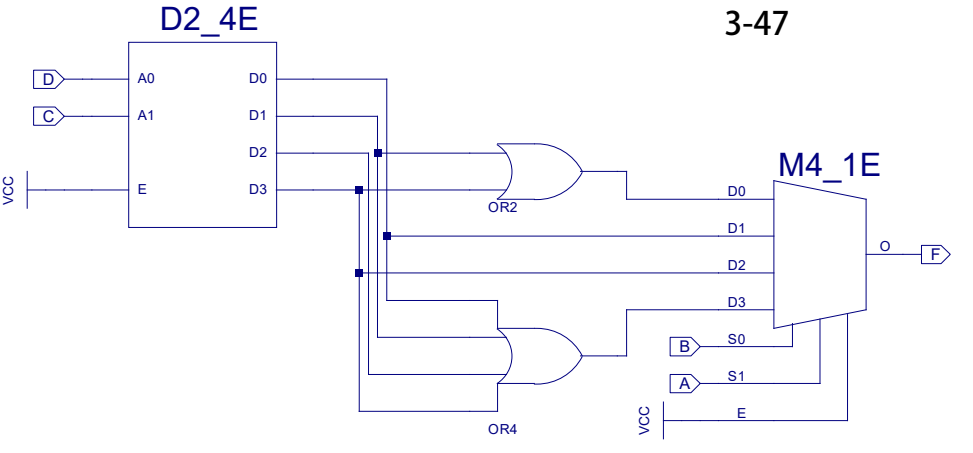
3-37-1


M4_1E
I0
I1
I2
I3
D0
D1
D2
D3
O
S0
S1
VCC
E
M4_1E
I4
I5
I6
I7
D0
D1
D2
D3
O
S0
S1
VCC
E
M2_1
D0
D1
S0
O
O
S0
S1
S2

3-37-2

D3_8E




D2_4E
D
C
VCC
A0
A1
E
D0
D1
D2
D3
OR2
OR4
M4_1E
D0
D1
D2
D3
B
A
VCC
S0
S1
E
O
F

3-50

A_0	B_0	C_0	S_0	C_1
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

可见其满足全加器功能.

3-51

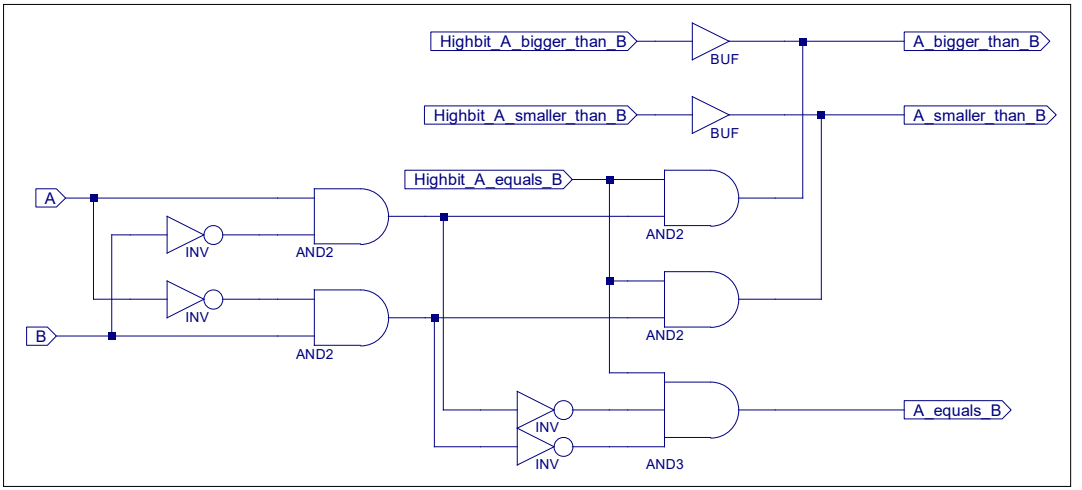
二进制数	反码	补码
1001 1100	1110 0011	1110 0100
1001 1101	1110 0010	1110 0011
1010 1000	1101 0111	1101 1000
0000 0000	0000 0000	0000 0000
1000 0000	1111 1111	0000 0000

3-52 (a) $11010 - 10001 = 1001$

(b) $11110 - 1110 = 10000$

(c) $111\ 1110 - 111\ 1110 = 0$

(d) $101001 - 101 = 100100$



1 bit comparation component