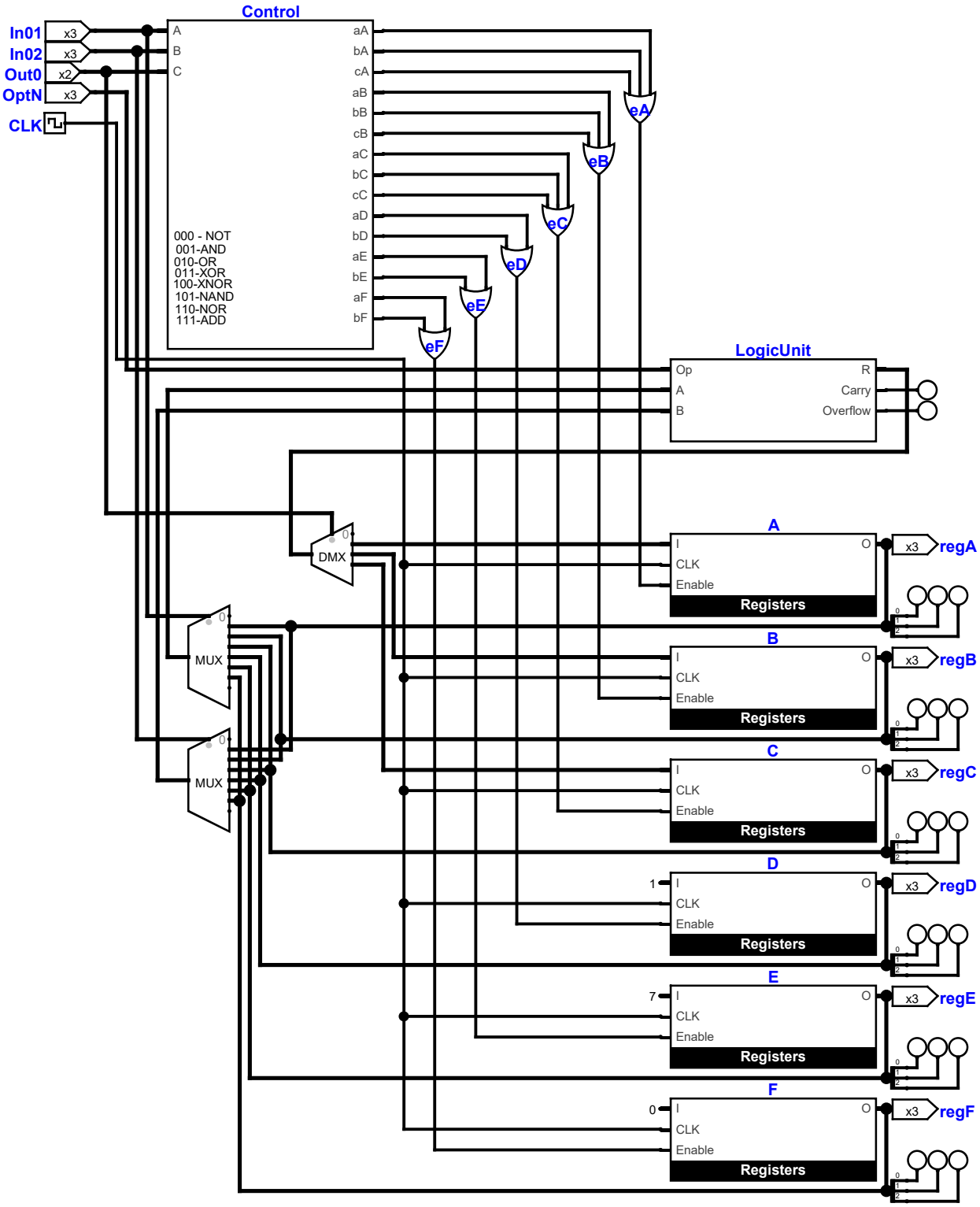
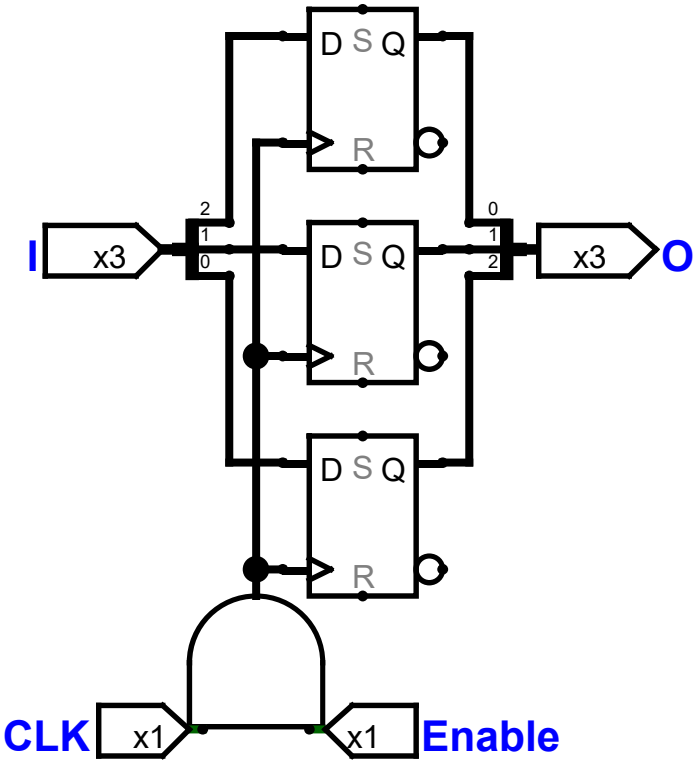
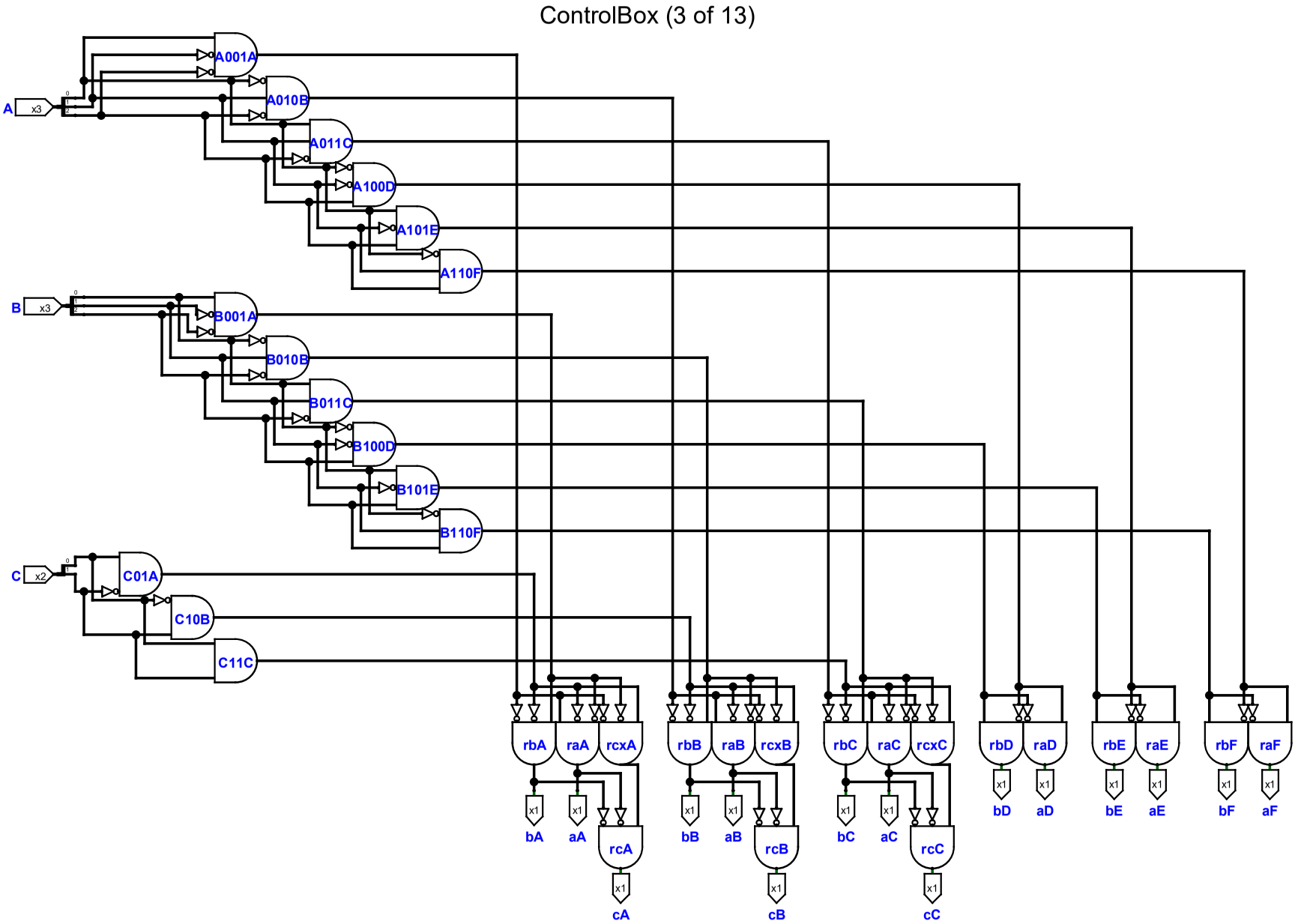
Computer (1 of 13)

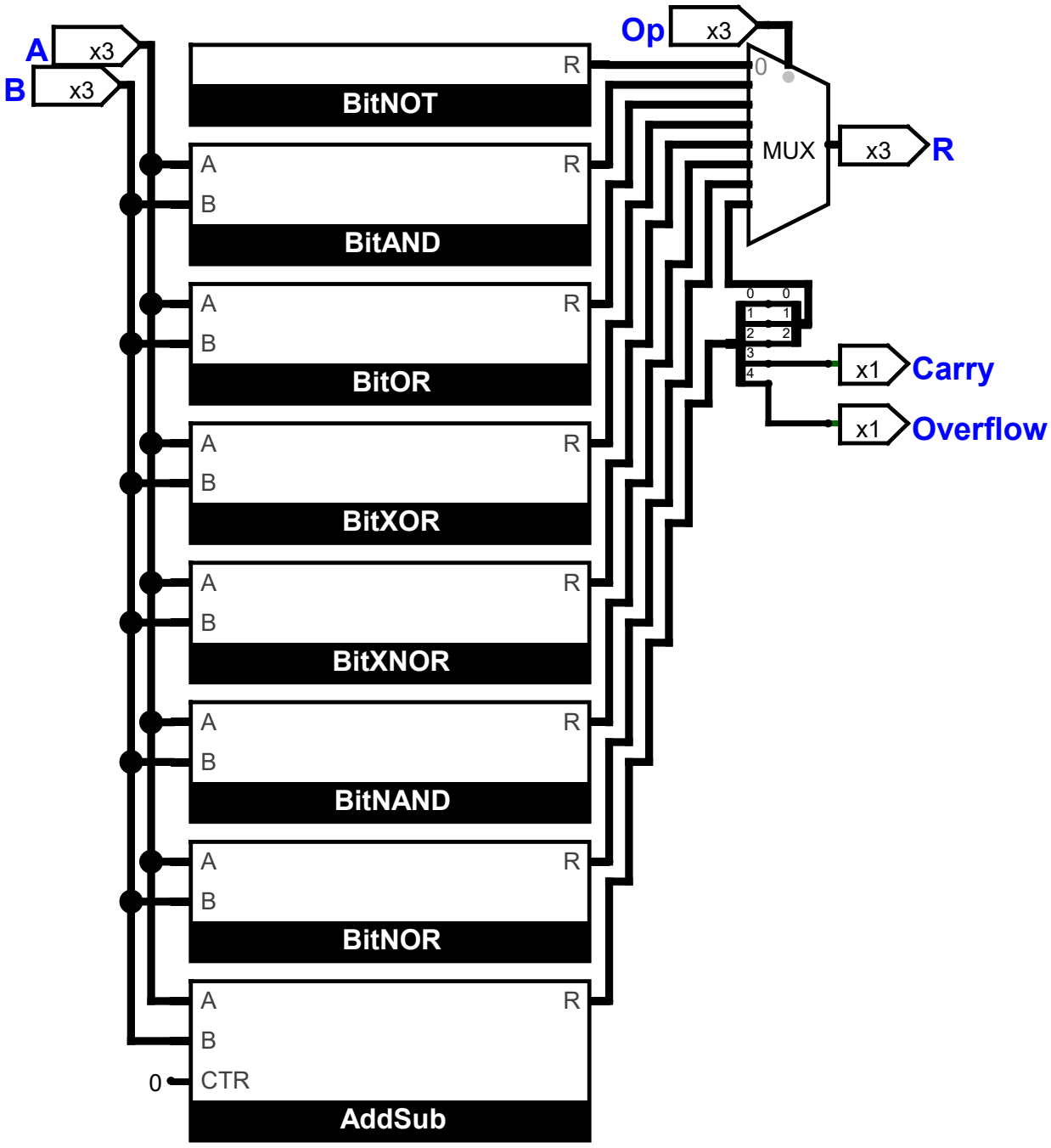


Registers (2 of 13)

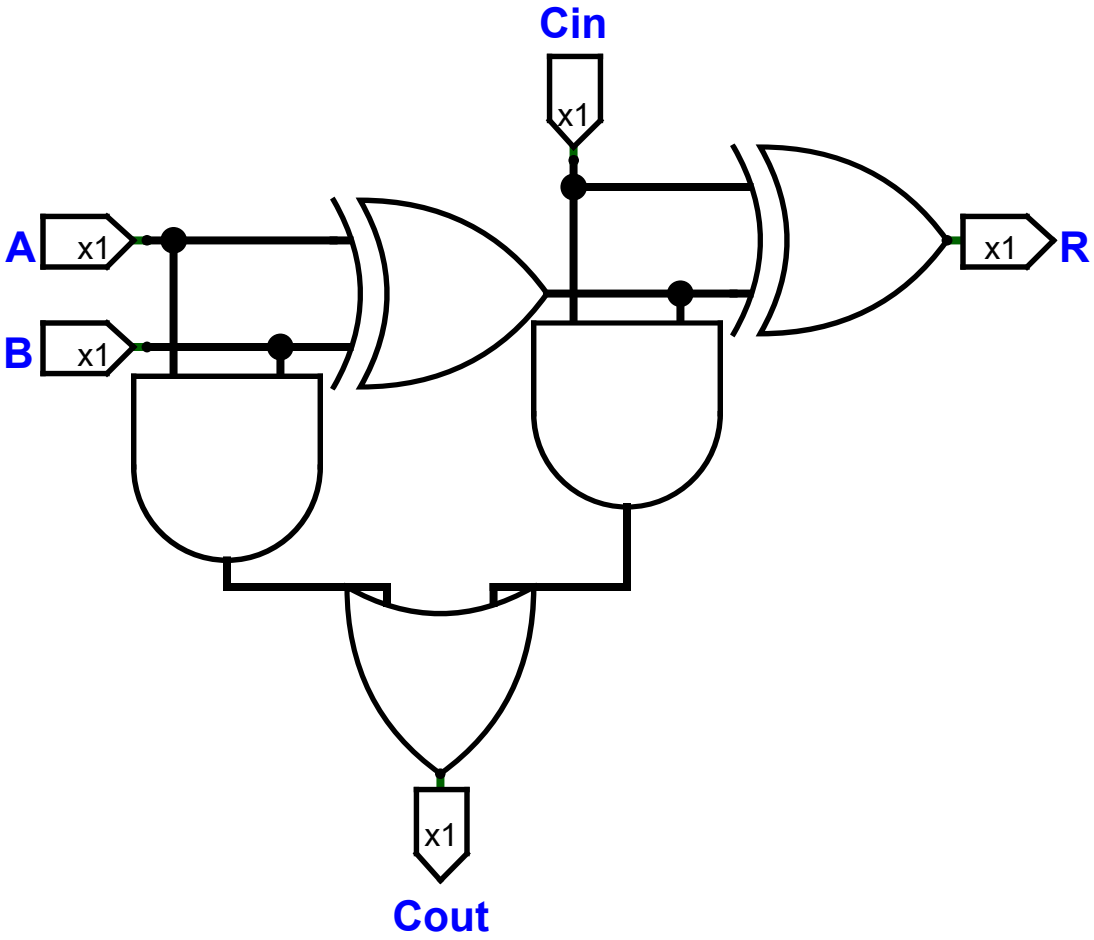



ControlBox (3 of 13)
A
x3
B
x3
C
x2
A001A
A010B
A011C
A100D
A101E
A110F
B001A
B010B
B011C
B100D
B101E
B110F
C01A
C10B
C11C
rbA
raA
rcxA
rbB
raB
rcxB
rbC
raC
rcxC
rbD
raD
rbE
raE
rbF
raF
x1
bA
aA
rcA
cA
bB
aB
rcB
cB
bC
aC
rcC
cC
bD
aD
bE
aE
bF
aF

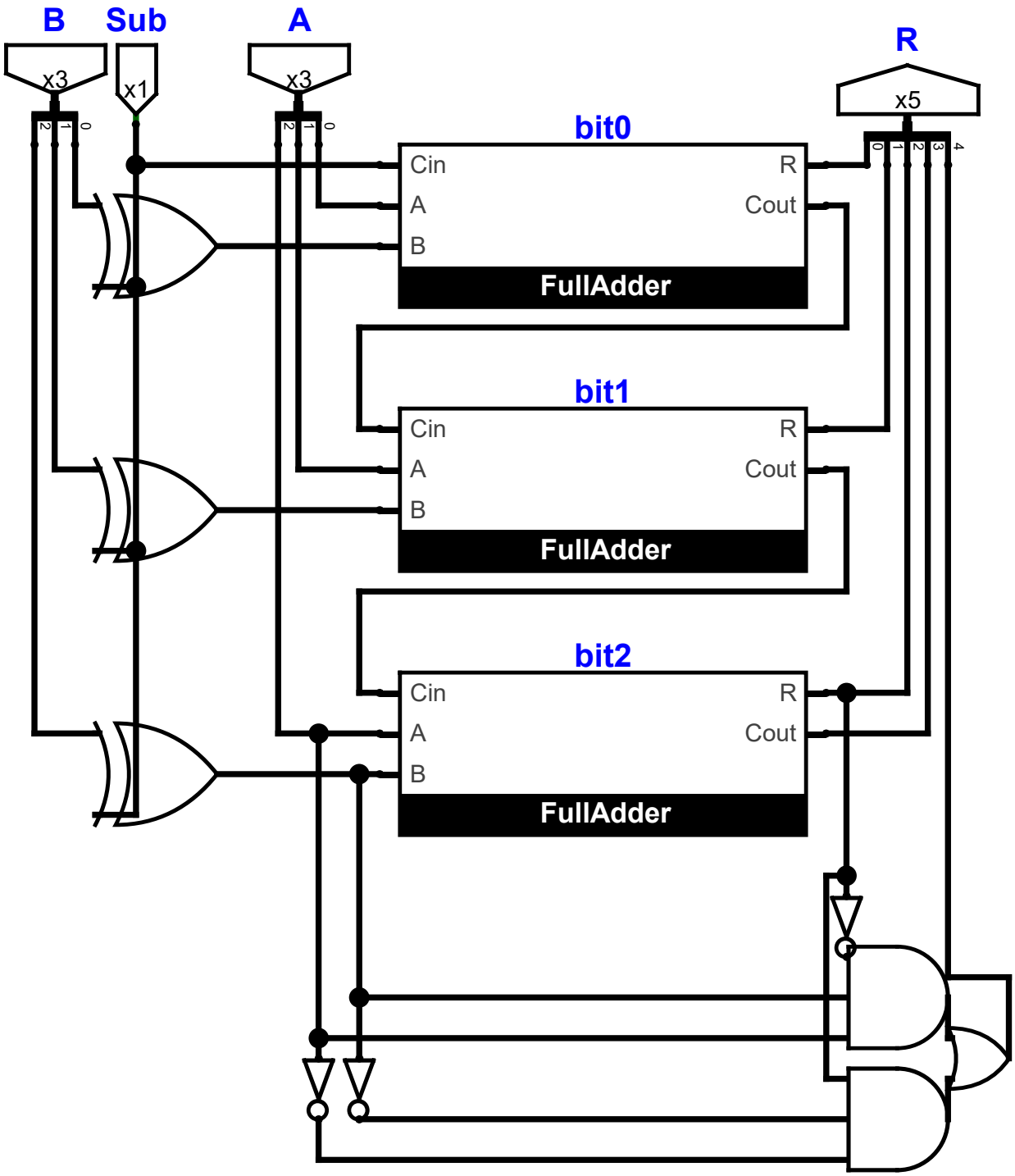
ALU (4 of 13)

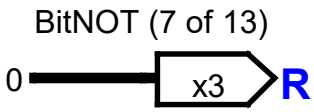

A
x3
B
x3
Op
x3
R
BitNOT
A
B
R
BitAND
A
B
R
BitOR
A
B
R
BitXOR
A
B
R
BitXNOR
A
B
R
BitNAND
A
B
R
BitNOR
A
B
CTR
R
AddSub
0
MUX
x3
R
x1
Carry
x1
Overflow

FullAdder (5 of 13)

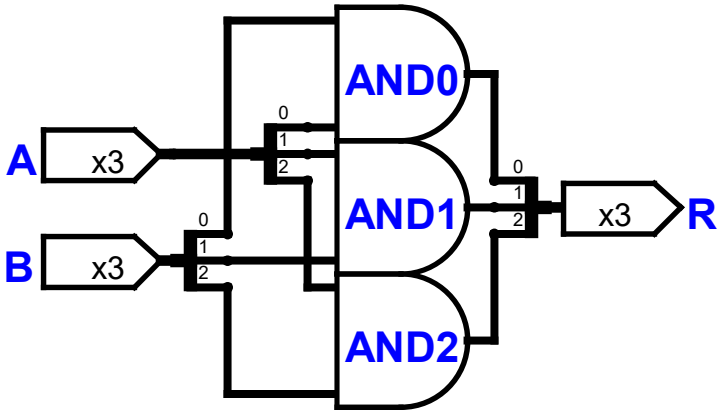


AddSub (6 of 13)

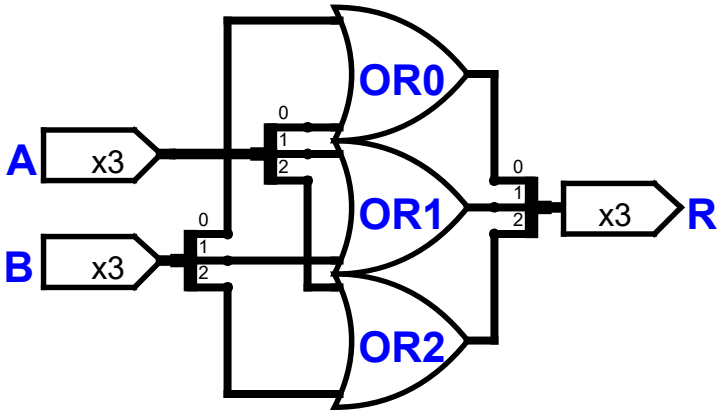


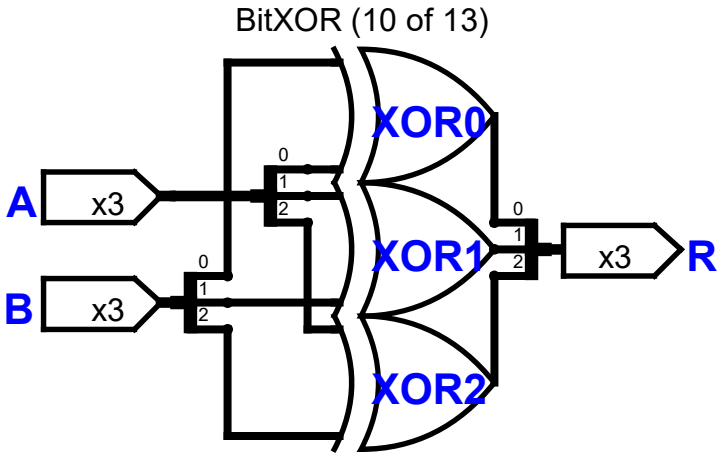

BitNOT (7 of 13)
0
x3
R

BitAND (8 of 13)

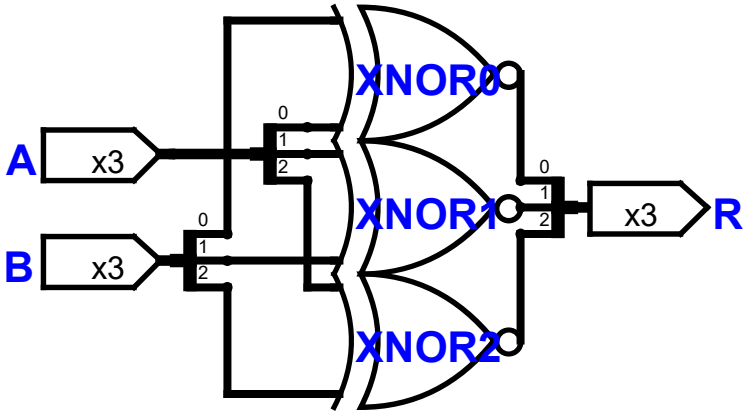


BitOR (9 of 13)

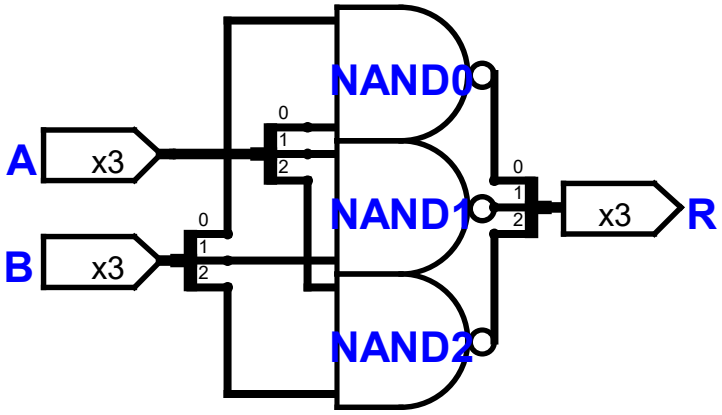
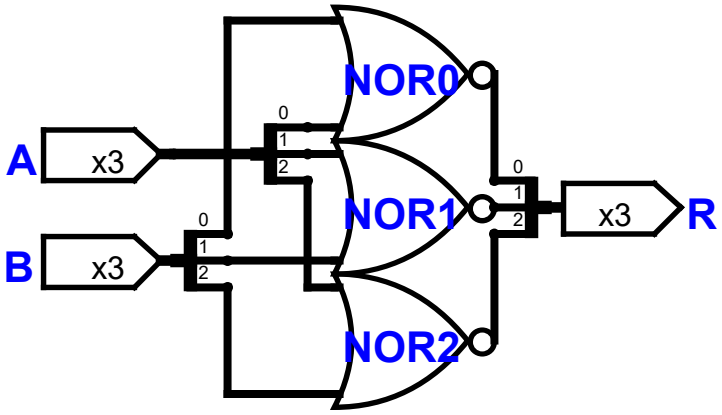



BitXOR (10 of 13)
A
x3
B
x3
0
1
2
0
1
2
XOR0
XOR1
XOR2
0
1
2
x3
R

BitXNOR (11 of 13)



BitNAND (12 of 13)



BitNOR (13 of 13)