

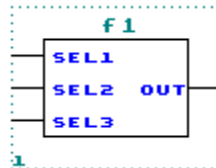
Aluno: Giordano Souza de Paula

Cartão: 00308054

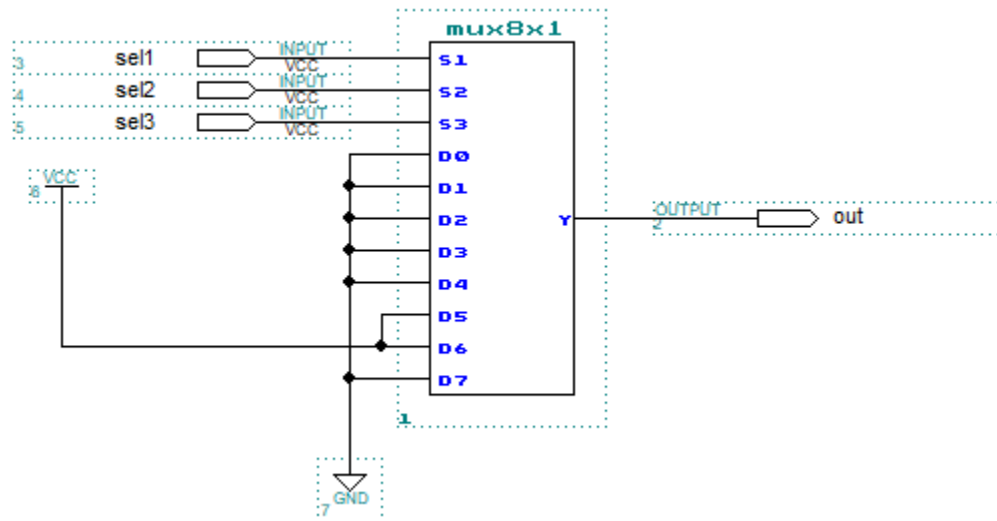
Nome do Projeto: f1

Descrição: Implementação de mux\_8x1 para F1

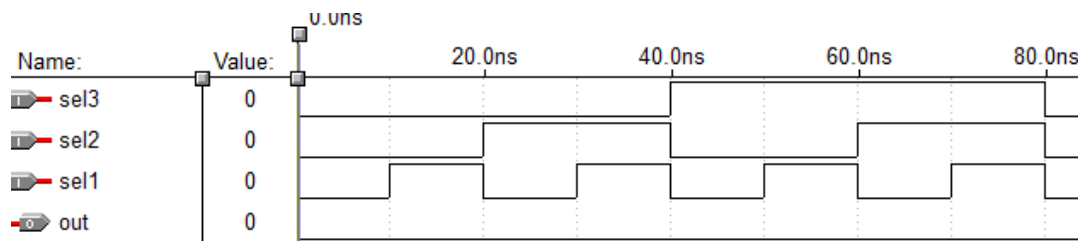
Símbolo:



Circuito:



Simulação:



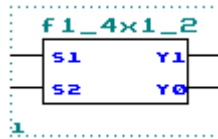
Aluno: Giordano Souza de Paula

Cartão: 00308054

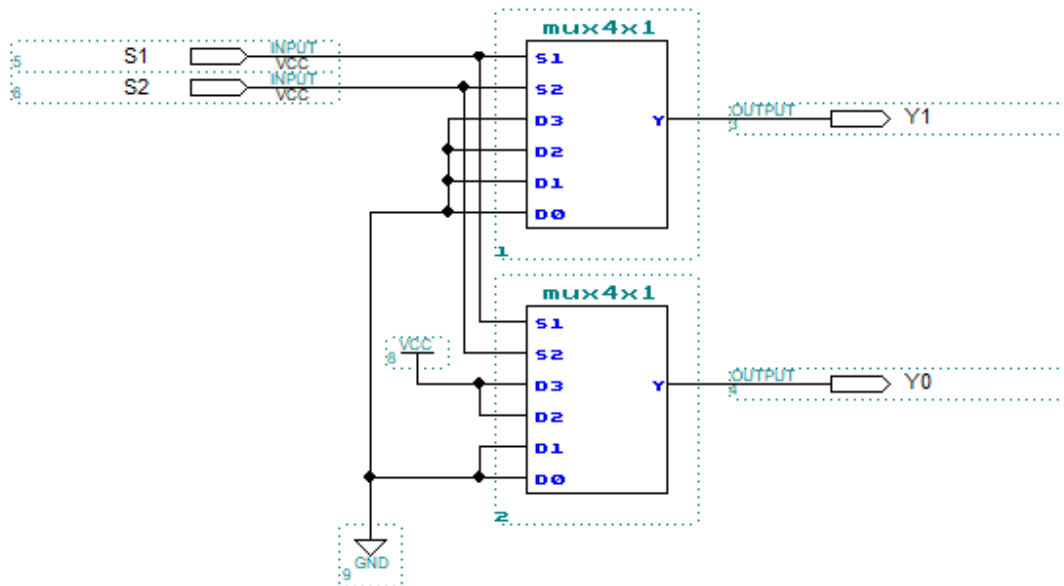
Nome do Projeto: f1\_4x1\_2

Descrição: Implementação de dois mux\_4x1 para F1

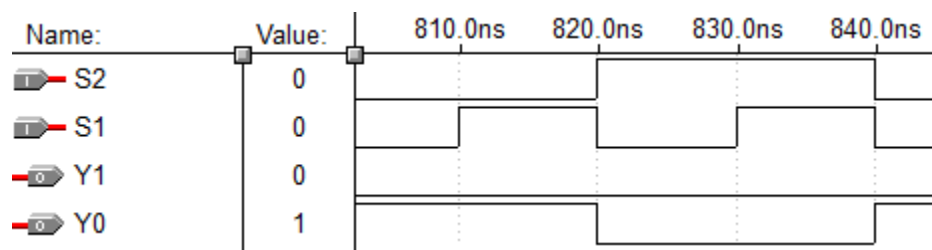
Símbolo:



Circuito:



Simulação:



Aluno: Giordano Souza de Paula

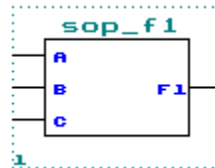
Cartão: 00308054

Nome do Projeto: sop\_f1

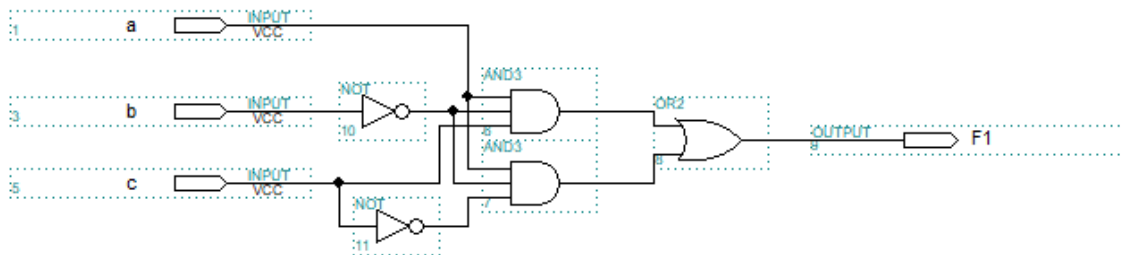
Descrição: Soma-de-produtos para F1

SOP:  $(a * !b * !c) + (a * !b * c)$

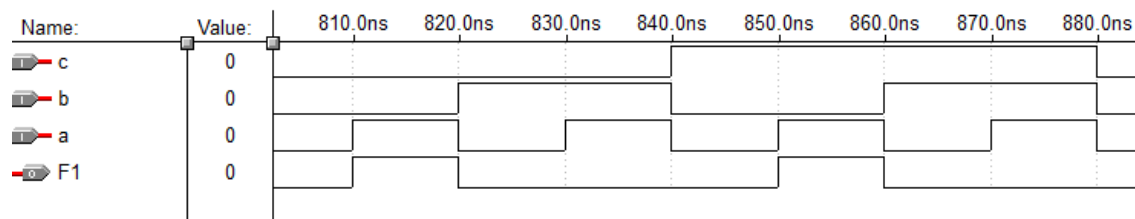
Símbolo:



Circuito:



Simulação:



Aluno: Giordano Souza de Paula

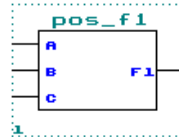
Cartão: 00308054

Nome do Projeto: pos\_f1

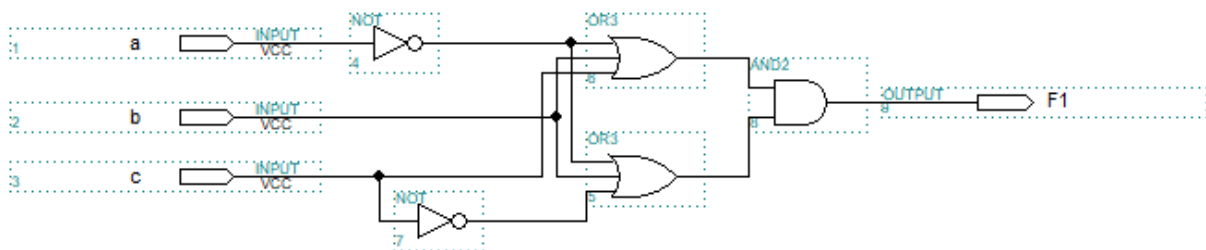
Descrição: Produto-de-somas para F1

POS:  $(!a + b + c) * (!a + b + !c)$

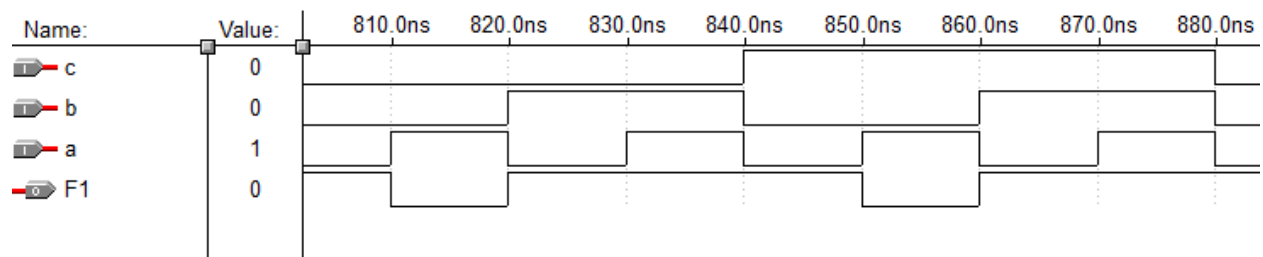
Símbolo:



Circuito:



Simulação:

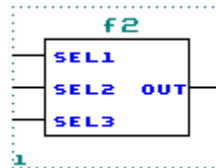


- Tabela verdade da função F1:

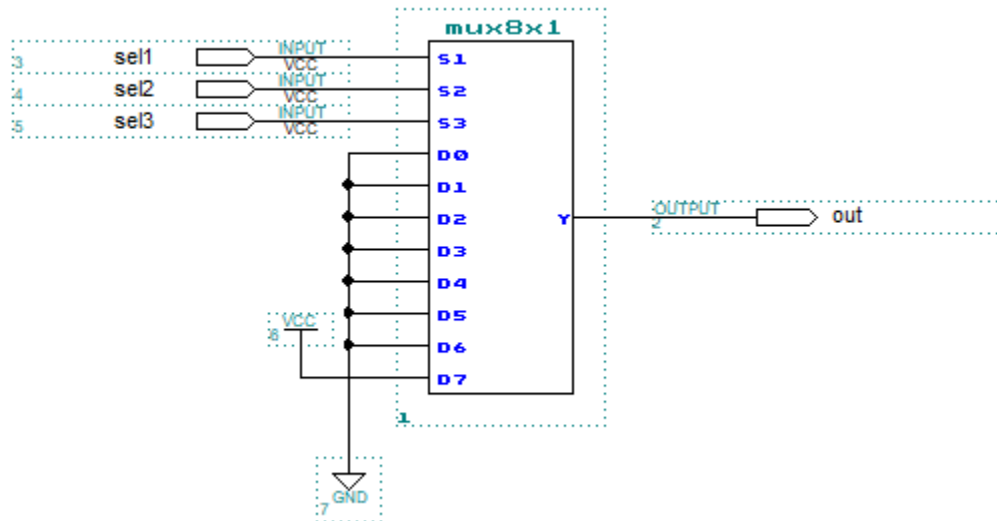
a	b	c	F1	mintermos	maxtermos
0	0	0	0	$!a * !b * !c$	$a + b + c$
0	0	1	0	$!a * !b * c$	$a + b + !c$
0	1	0	0	$!a * b * !c$	$a + !b + c$
0	1	1	0	$!a * b * c$	$a + !b + !c$
1	0	0	1	$a * !b * !c$	$!a + b + c$
1	0	1	1	$a * !b * c$	$!a + b + !c$
1	1	0	0	$a * b * !c$	$!a + !b + c$
1	1	1	0	$a * b * c$	$!a + !b + !c$

Table 1 -  $F1(a,b,c) = 30 \text{ hex} = 0011 \ 0000 \text{ bin}$

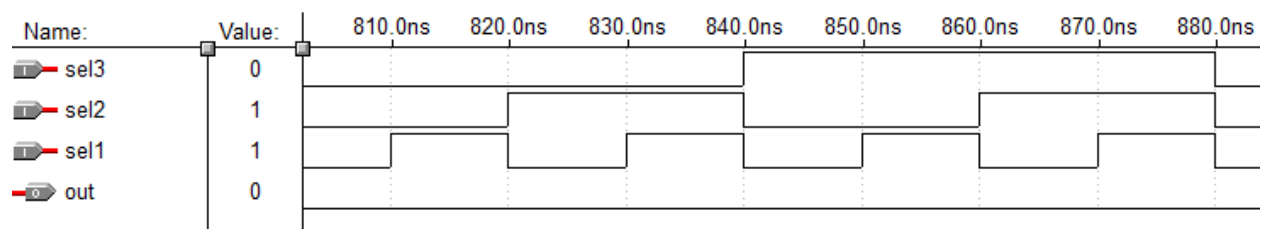
Símbolo:



Circuito:



Simulação:



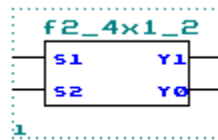
Aluno: Giordano Souza de Paula

Cartão: 00308054

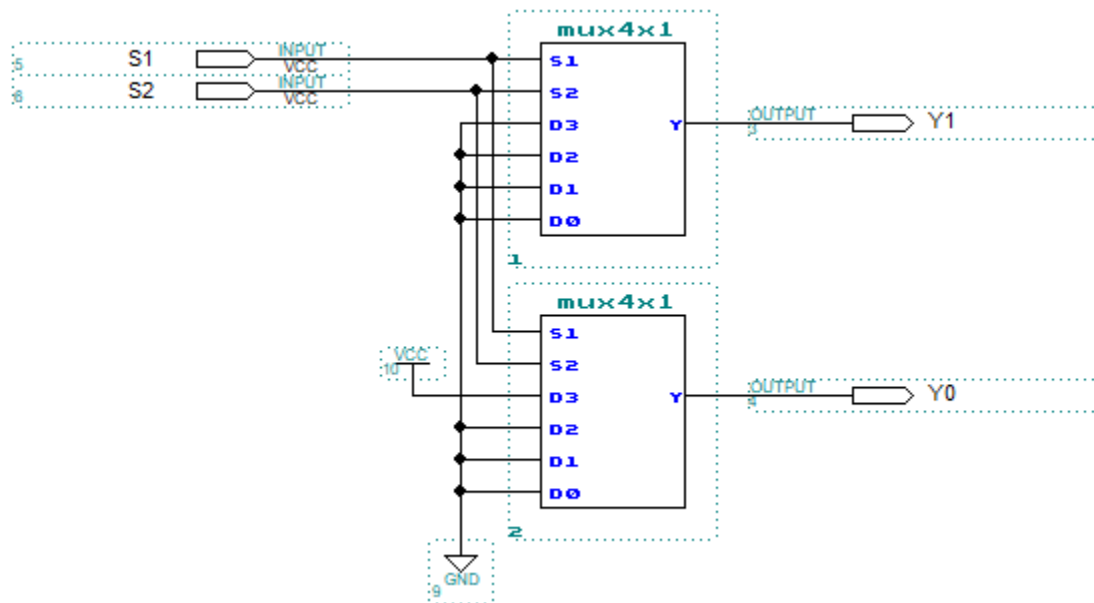
Nome do Projeto: f2\_4x1\_2

Descrição: Implementação de dois mux\_4x1 para F2

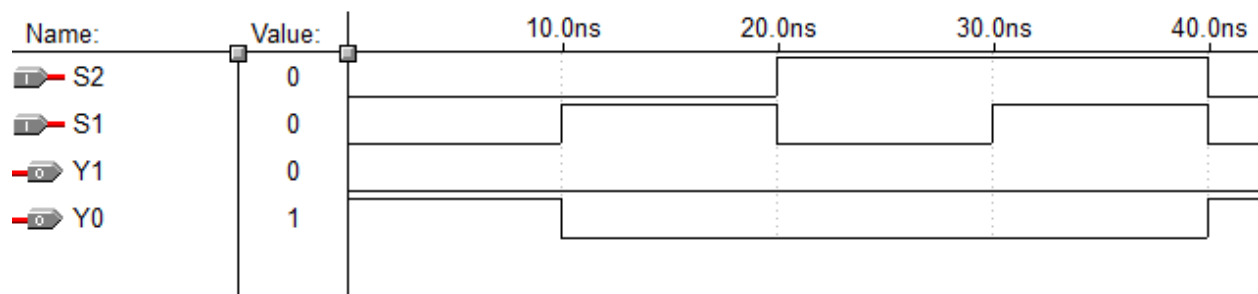
Símbolo:



Circuito:



Simulação:



Aluno: Giordano Souza de Paula

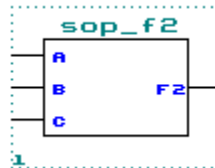
Cartão: 00308054

Nome do Projeto: sop\_f2

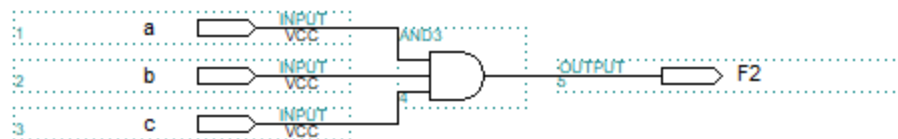
Descrição: Soma-de-produtos para F2

SOP:  $(a*b*c)$

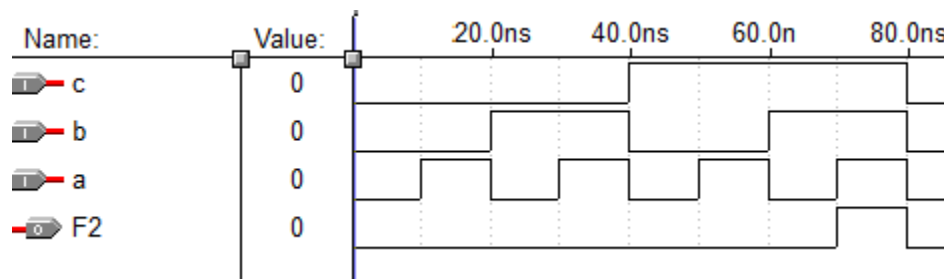
Símbolo:



Circuito:



Simulação:



Aluno: Giordano Souza de Paula

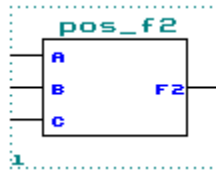
Cartão: 00308054

Nome do Projeto: pos\_f2

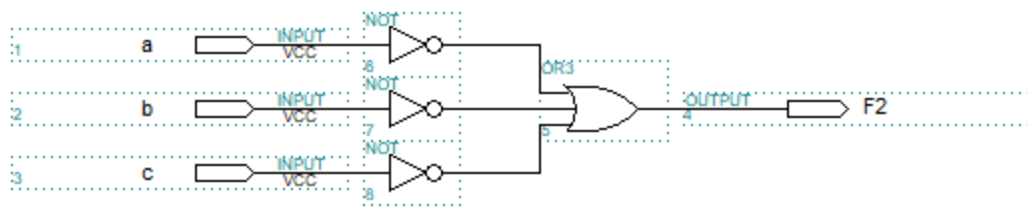
Descrição: Produto-de-somas para F2

POS:  $(!a + !b + !c)$

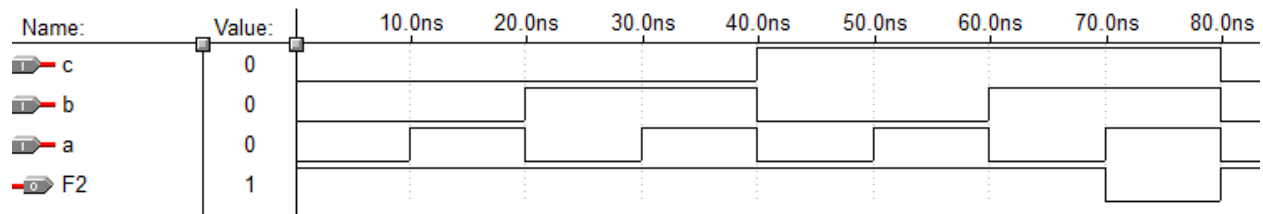
Símbolo:



Circuito:



Simulação:



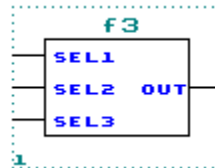
- Tabela verdade da função F2:

a	b	c	F2	mintermos	maxtermos
0	0	0	0	$!a * !b * !c$	$a + b + c$
0	0	1	0	$!a * !b * c$	$a + b + !c$
0	1	0	0	$!a * b * !c$	$a + !b + c$
0	1	1	0	$!a * b * c$	$a + !b + !c$
1	0	0	0	$a * !b * !c$	$!a + b + c$
1	0	1	0	$a * !b * c$	$!a + b + !c$
1	1	0	0	$a * b * !c$	$!a + !b + c$
1	1	1	1	$a * b * c$	$!a + !b + !c$

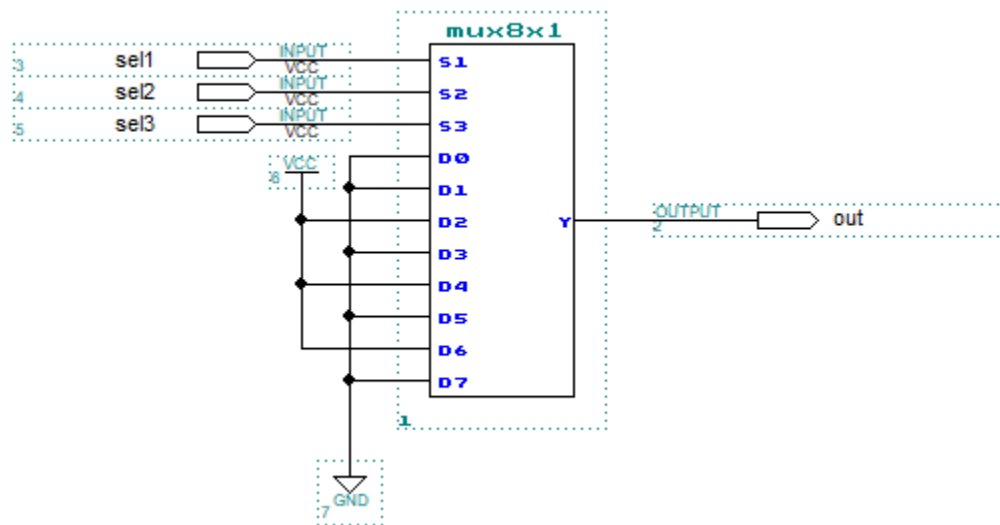
Table 2 –  $F2(a,b,c) = 80 \text{ hex} = 1000 \ 0000 \text{ bin}$



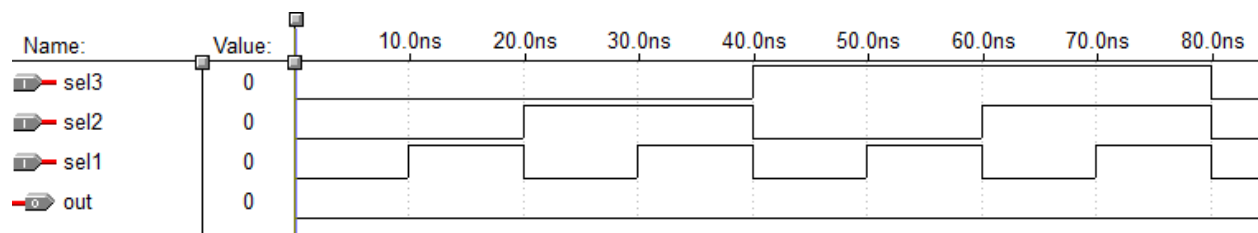
Símbolo:



Circuito:



Simulação:



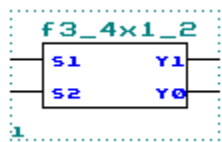
Aluno: Giordano Souza de Paula

Cartão: 00308054

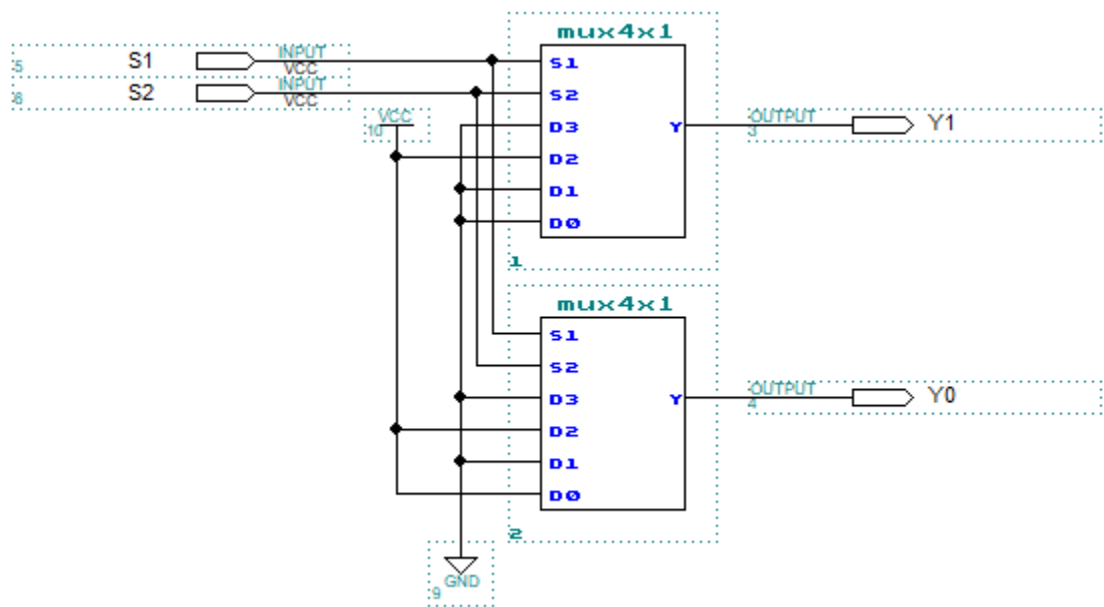
Nome do Projeto: f3\_4x1\_2

Descrição: Implementação de dois mux\_4x1 para F3

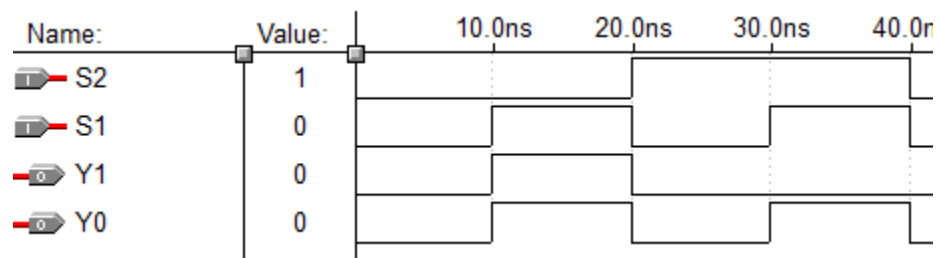
Símbolo:



Circuito:



Simulação:





Aluno: Giordano Souza de Paula

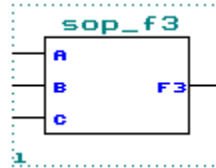
Cartão: 00308054

Nome do Projeto: pos\_f3

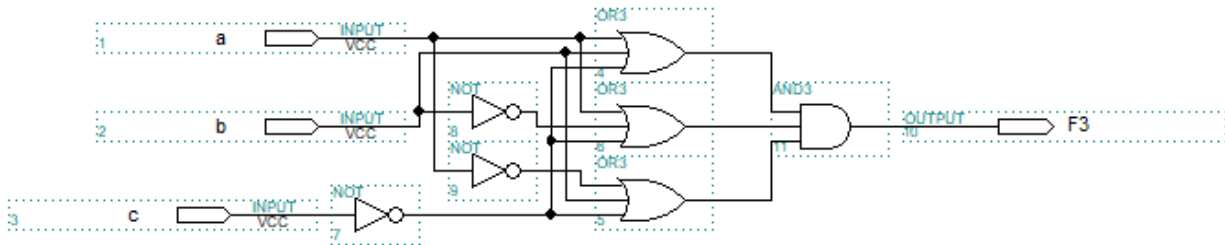
Descrição: Produto-de-somas para F3

POS:  $(a + b + !c) * (a + !b + !c) * (!a + b + !c)$

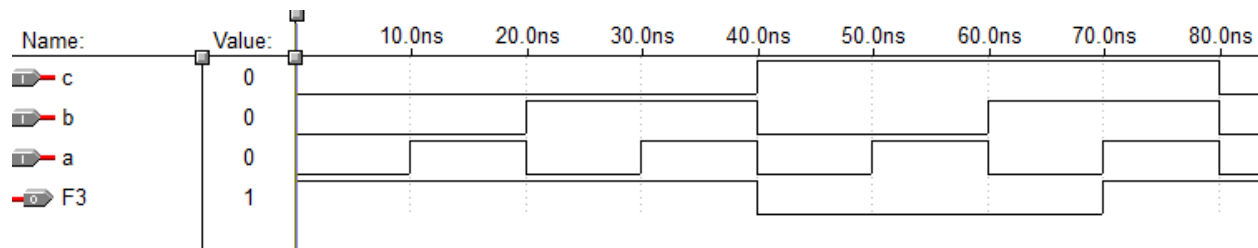
Símbolo:



Circuito:



Simulação:



- Tabela verdade da função F3:

a	b	c	F2	mintermos	maxtermos
0	0	0	0	$!a * !b * !c$	$a + b + c$
0	0	1	1	$!a * !b * c$	$a + b + !c$
0	1	0	0	$!a * b * !c$	$a + !b + c$
0	1	1	1	$!a * b * c$	$a + !b + !c$
1	0	0	0	$a * !b * !c$	$!a + b + c$
1	0	1	1	$a * !b * c$	$!a + b + !c$
1	1	0	0	$a * b * !c$	$!a + !b + c$
1	1	1	0	$a * b * c$	$!a + !b + !c$

Table 3 –  $F3(a,b,c) = 54 \text{ hex} = 0101 \ 0100 \text{ bin}$