



# Laboratoire 03 - CSN

**Exercices Addititions vhdl** 

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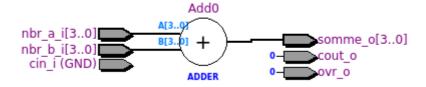
Ingénieur:

Sébastien Masle

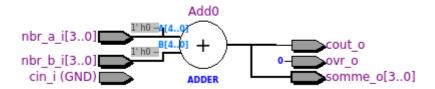
Salle:

A07

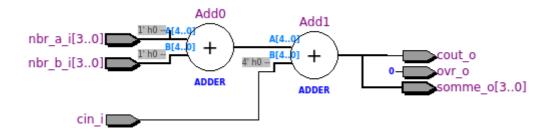
### **Etape 1 d'Addition 4 bits**

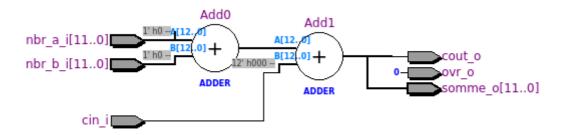


### **Avec Carry out**

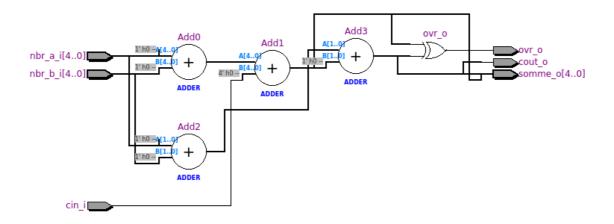


## Avec la constante générique





#### **Overflow**



#### Resultat du TB pour full

```
# vcom -reportprogress 300 -work work ../src_tb/add4_full_tb.vhd
# -- Loading package STANDARD
# -- Loading package TEXTIO
# -- Loading package std_logic_1164
# -- Loading package NUMERIC_STD
# -- Compiling entity add4_tb
# -- Compiling architecture test_bench_full of add4_tb
# -- Loading entity add4full
# ** Warning: ../src_tb/add4_full_tb.vhd(59): (vcom-1236) Shared variables must
be of a protected type.
# End time: 17:44:00 on Oct 16,2020, Elapsed time: 0:00:00
# Errors: 0, Warnings: 1
# End time: 17:44:01 on Oct 16,2020, Elapsed time: 0:00:16
# Errors: 0, Warnings: 0
# vsim -voptargs=""+acc"" work.add4_tb
# Start time: 17:44:01 on Oct 16,2020
# ** Note: (vsim-8009) Loading existing optimized design _opt2
# Loading std.standard
# Loading std.textio(body)
# Loading ieee.std_logic_1164(body)
# Loading ieee.numeric_std(body)
# Loading work.add4_tb(test_bench_full)#1
# Loading work.add4full(flot_don)#1
run -all
# ** Note: D�but de la simulation
    Time: 0 ns Iteration: 0 Instance: /add4_tb
# ** Note: Nombre d'erreurs d�tect�es = 0
   Time: 51200 ns Iteration: 0 Instance: /add4_tb
# ** Note: Fin de la simulation
# Time: 51200 ns Iteration: 0 Instance: /add4_tb
```