



Síntese – Cadence Genus:

- Acessando via SSH à paxos, você deverá carregar o módulo do Genus no Terminal aberto.

```
source /soft64/source_gaph
module load genus
genus
```

- Definição da biblioteca que será utilizada neste projeto.

```
set_db library /soft64/design-kits/stm/65nm-cmos065_536/CORE65GPSVT_5.1/libs/CORE65GPSVT_nom_1.00V_25C.lib
```

- Leitura do(s) arquivo(s) VHDL que compõe o projeto. Neste exemplo o código fonte foi nomeado como “fifo_sync.vhd”

```
read_hdl -vhdl fifo_sync.vhd
```

```

C.lib
@genus:root: 5> read_hdl -vhdl fifo_sync.vhd
Warning : Initial values are ignored for synthesis. [VHDL-639]
: in file 'fifo_sync.vhd' on line 28.
: The specified construct has no effect on synthesis. In some cases (such as 'af
ter' clauses in signal assignments) may cause a mismatch between and simulation.
Warning : Initial values are ignored for synthesis. [VHDL-639]
: in file 'fifo_sync.vhd' on line 29.
Warning : Initial values are ignored for synthesis. [VHDL-639]
: in file 'fifo_sync.vhd' on line 30.
Warning : Initial values are ignored for synthesis. [VHDL-639]
: in file 'fifo_sync.vhd' on line 30.
Warning : Initial values are ignored for synthesis. [VHDL-639]
: in file 'fifo_sync.vhd' on line 31.
Warning : Initial values are ignored for synthesis. [VHDL-639]
: in file 'fifo_sync.vhd' on line 31.
Warning : Concurrent assertion statements are ignored for synthesis. [VHDL-645]
: in file 'fifo_sync.vhd' on line 36.
: The specified construct has no effect on synthesis. In some cases (such as 'af
ter' clauses in signal assignments) may cause a mismatch between and simulation.
Warning : Assertion statements are ignored for synthesis. [VHDL-644]
: in file 'fifo_sync.vhd' on line 63.
: The specified construct has no effect on synthesis. Some constructs (such as '
after' clauses in signal assignments) may cause a mismatch between simulation and synthe
sis.
Warning : Assertion statements are ignored for synthesis. [VHDL-644]
: in file 'fifo_sync.vhd' on line 88.
@genus:root: 6> █

```

- Elaboração do projeto. Neste exemplo a entidade do projeto foi nomeada como "fifo_sync".

elaborate fifo_sync

```

: file 'fifo_sync.vhd' on line 88.
@genus:root: 6> elaborate fifo_sync
Info      : Elaborating Design. [ELAB-1]
           : Elaborating top-level block 'fifo_sync' from file 'fifo_sync.vhd'.
Info      : Binding to architecture. [ELAB-5]
           : Elaborating architecture 'rtl' for entity 'fifo_sync'.
Warning   : Using default parameter value for module elaboration. [CDFG-818]
           : Elaborating block 'fifo_sync' with default parameters value.
Warning   : Undriven signal detected. [ELABUTL-125]
           : Undriven bits of signal 'in_2' in module 'fifo_sync'.
           : The undriven signal handling can be controlled by setting the attribute 'hdl_u
nconnected_value' before syn_generic command.
Info      : Done Elaborating Design. [ELAB-3]
           : Done elaborating 'fifo_sync'.
Checking for analog nets...
Check completed for analog nets.
Checking for source RTL...
Check completed for source RTL.
Running Unified Mux Engine Tricks...
Completed Unified Mux Engine Tricks
-----
| Trick           | Accepts | Rejects | Runtime (ms) |
-----
| ume_constant_bmux |        0 |        0 |         0.00 |
-----
Starting clip mux common data inputs [v1.0] (stage: post_elab, startdef: fifo_sync, recu
r: true)
Completed clip mux common data inputs (accepts: 0, rejects: 0, runtime: 0.000s)
Starting clip the non-user hierarchies [v2.0] (stage: post_elab, startdef: fifo_sync, re
cur: true)
Completed clip the non-user hierarchies (accepts: 0, rejects: 0, runtime: 0.000s)
Info      : To insure proper verification, preserved netlist point(s) because they are inv
olved in combinational loop(s). To disable this, set the 'cb_preserve_ports_nets' root a
ttribute to 'false'. [ELABUTL-133]
           : Preserved 4 user net(s) Set the 'print_ports_nets_preserved_for_cb' root attr
ibute to 'true' to print out the affected nets and hierarchical instances.

UM:  flow.cputime  flow.realtime  timing.setup.tns  timing.setup.wns  snapshot
UM:*                                     elaborate
design: fifo_sync
@genus:root: 7>

```

- Síntese Lógica para Células Genéricas:

```
syn_generic
```

- Síntese Lógica para células da biblioteca alvo do projeto:

```
syn_map
```