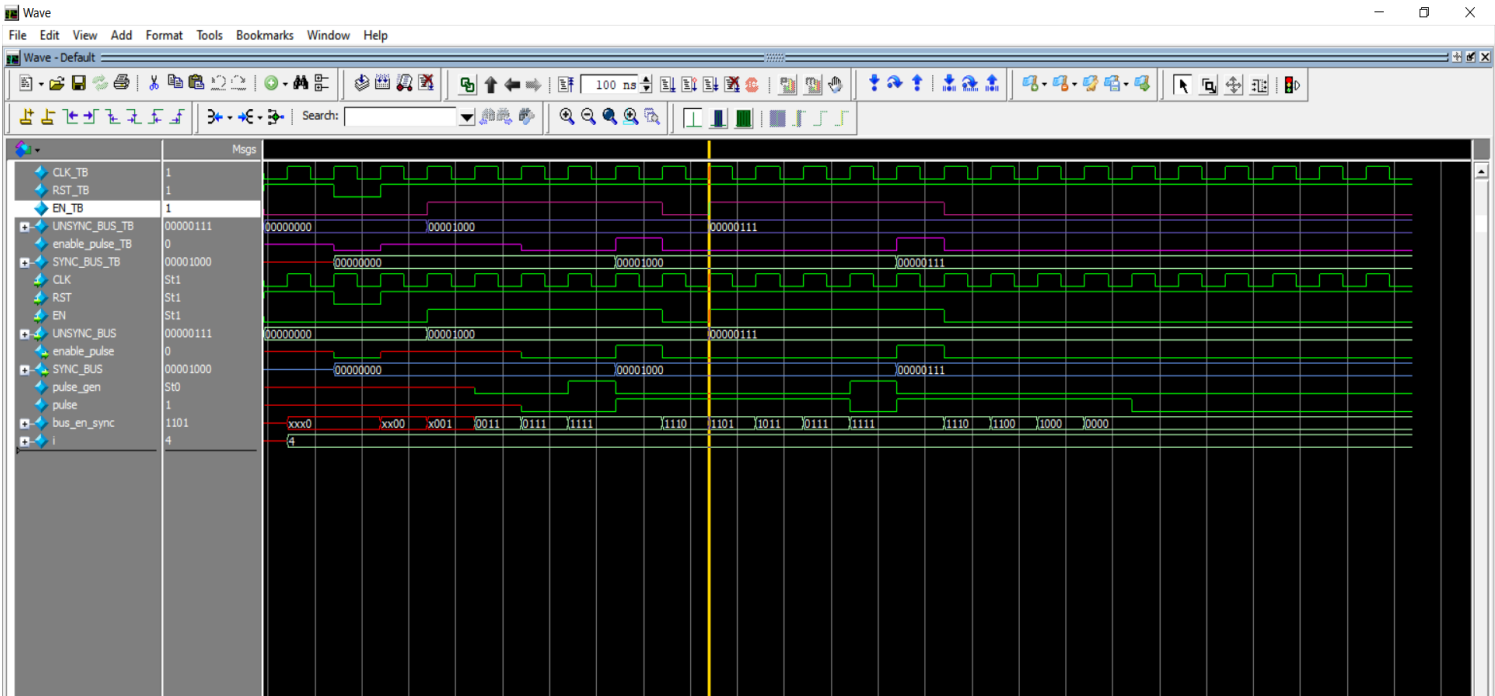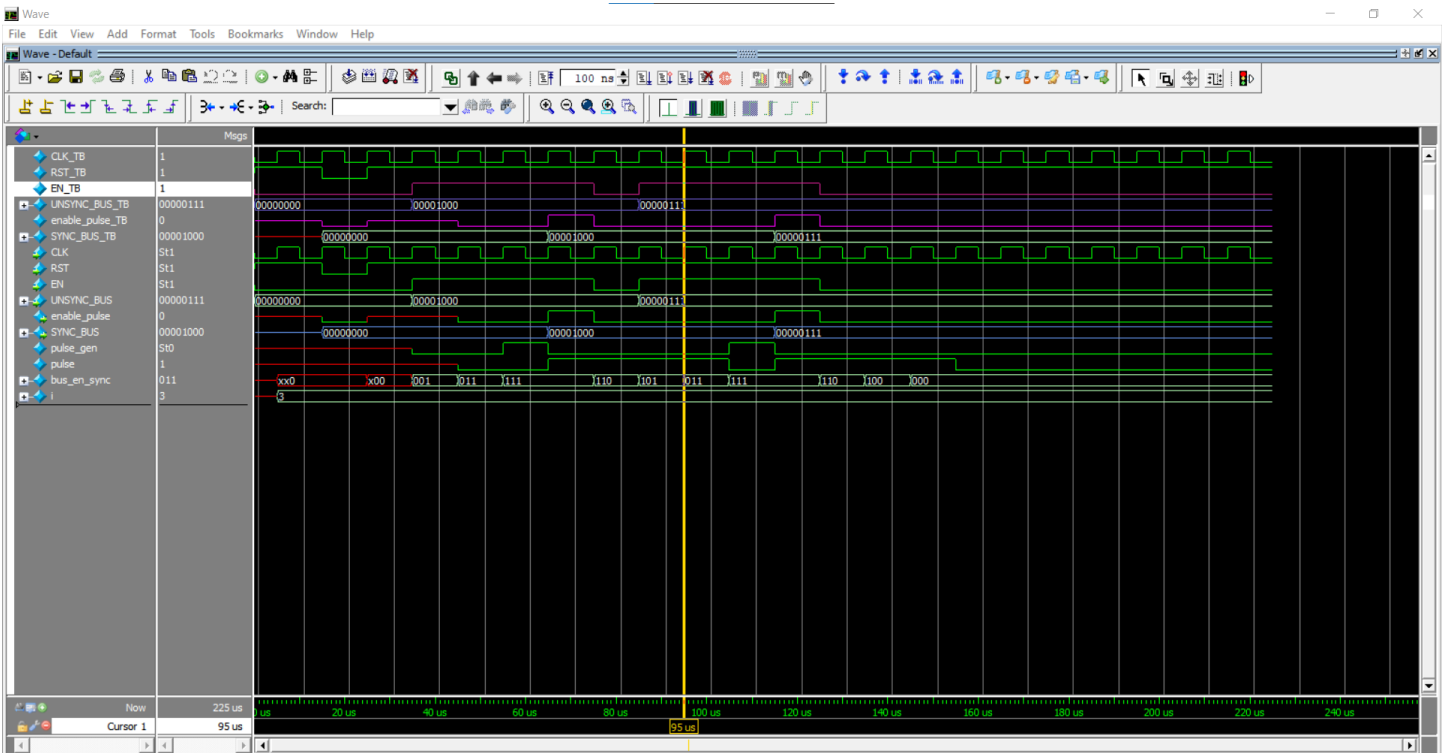# DATA SYNCRONIZER

8//6//2024

Ziad Ahmed
ENG: Ali_Eltemsah

Wave form for DATA_SYNC_BUS at BUS_WIDTH = 4

Wave form for DATA_SYNC_BUS at BUS_WIDTH = 3

Log window snip shot

```
ModelSim> do run.txt
# ** Warning: (vlib-34) Library already exists at "work".
#
# Model Technology ModelSim ALTERA vlog 10.1b Compiler 2012.04 Apr 27 2012
# -- Compiling module DATA_SYNC
# -- Compiling module DATA_SYNC_TB
#
# Top level modules:
#       DATA_SYNC_TB
# vsim -voptargs=+accs work.DATA_SYNC_TB
# Loading work.DATA_SYNC_TB
# Loading work.DATA_SYNC
# TEST CASE 1
# Test_Case  is succeeded with SYNC_BUS_DATA =   8 AND equal UNSYNC_BUS_DATA =   8 and enable_pulse = 1  at Time                 75
# TEST CASE 2
# Test_Case  is succeeded with SYNC_BUS_DATA =   7 AND equal UNSYNC_BUS_DATA =   7 and enable_pulse = 1  at Time                125
# Break in Module DATA_SYNC_TB at DATA_SYNC_TB.v line 33
# Simulation Breakpoint: Break in Module DATA_SYNC_TB at DATA_SYNC_TB.v line 33
# MACRO ./run.txt PAUSED at line 8

VSIM(paused)>
```