Integrated Systems Architectures

General suggestions

1 Scripting

Almost all the EDA tools used in this course supporte scripting. The use of the GUI is helpful as a first step to understand the flow, but then to repeat the flow (or part of the flow) scripts help in speeding up. The main language used in EDA tools scripting is TCL. However, for our purpose it becomes almost a sequence of commands. You can find the commands with all the details about paramenters in the documentation of each tool. However, it is possible to derive the commands by checking the console or the log file of the command-line shell, which is available in the GUI of the tool.

Example:

```
analyze -f vhdl -lib WORK ../src/file1.vhd
analyze -f vhdl -lib WORK ../src/file2.vhd
analyze -f vhdl -lib WORK ../src/top.vhd
elaborate top -lib WORK
create_clock -name MY_CLK -period 5.0 CLK
compile
report_area >> ./report_area.txt
report_timing >> ./report_timing.txt
```

2 Homework report preparation

On "Portale della didattica" you have a template for the homework report. Please remeber that the report should be self-contained and should show tables to summarize the achieved results comparing different implementations. Diagrams, graphs and figures which could be useful to better understand your design have to be included in the report. Code, scripts and tool's reports are not required in the final report.

Note: Please be ready to present your work during the oral discussion. You have to explain your work, the results you obtained and compare the different solutions.