

TSTE12 Design of digital systems

Project report and presentation

Project report

Base the document on the general template file

`/courses/TSTE12/material/project/LIPS-templates/16General_templ_en_c.ott`

The document should describe the function and the structure of the design. Start with an overview of the system function and structure and then describe the submodules. Try to use block diagrams, state graphs and equations to explain how the design work.

Assume the reader have access to the source code, so there is no need to go into detailed descriptions of exact datatypes etc. The documentation should be clear and detailed enough so a user can understand how to add som new functionality.

Presentation and demonstration

The presentation and demonstration is given in english. The presentation plus demonstration should take 20 minutes.

The scenario is a presentation given for someone with a technical background (like yourself) that is thinking of buying and/or extending the functionality of the design. Your goal is to show how your design works and point out the nice features of the design.

The presentation should give a short overview of how your design works with a focus on what is unique for your design.

Try to avoid describing details everyone already have seen in the lab tasks. E.g., collecting the scan code bits from the keyboard should not be described, but if you use the arrow keys then a short description of how you manage the multiple scan codes can be presented.

Additional information that is of interest includes the amount of hardware resources used in the FPGA (# flipflops, #lut, #multipliers, #memory blocks).

There will be a computer (stand-alone) for programming the board, keyboard, speakers, audio source (if you do not want to use your own), and a screen.

Please remember to bring the .sof file (and any other necessary file) on a USB stick.