**Tic Tac Toe Game In Verilog And LogiSim**

*INFINITY*

*18-05-2-2022*

***Important Notes:***

* ***The descriptions in italics in this document (except for some section headings) are exemplary and explanatory and must be removed from the completed report.***
* ***Identify which section of this report was created by which team member***
* ***Your documentation should have ca. 8 pages (content! Without cover sheet, references, appendix etc.).***

# Team members

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# Introduction

Introduction into your project

Tic Tac Toe is a two-player, 3x3 grid, paper and pencil game. The winner is decided by the person who makes his or her first three marks in a diagonal, vertical, or horizontal row.

Why are FPGAs and VHDL important for your project domain?

FPGAs are ideal for prototyping ASICs and processors. An FPGA can be reprogrammed until the ASIC or processor design is finalized and bug-free, at which point the final ASIC can be manufactured. FPGAs are used by Intel to prototype new chips. VHDL enables complicated electronic circuit behavior to be captured in a design system for automatic circuit synthesis or system simulation.

# Concept description

*Block diagram of your target application.*

*What is the main application for your prototype?*

# Project/Team management

*Which project methods you used in your project?*

*Breakdown: How you managed your tasks?*

*What are the different tasks/roles of the team members in the project?*

*Describe which team member did which tasks.*

# Technologies

# *Describe the technological approaches you will use to implement your project.*

* *VHDL*
* *Eagle*
* *FPGA*
* *If necesseray other technologies*

# VHDL Implementation

*Describe the implementation of your digital design in VHDL/FPGA*

*Provide a detailed block diagram for this purpose and briefly explain the used modules.*

*Describe how you verified your solution. Testbench!!*

*Provide the results for your FPGA Implementation (Results summary + Hardware results if necessary)*

# PCB Design

*Describe the implementation of your schematic and PCB design*

*Give a summary about your PCB design results (BOM, Costs, Size usw.)*

# Sources/References

*Provide the sources on the technologies and algorithms you used in your project (Github).*