

Vivado Folder

This directory contains one or more Vivado projects created by the Vivado project management tool. The main project should have the same name as the top level VHDL file in the *Vhdl* directory.

```
|─ /Vhdl
|   |─ MyOwnToplevel_Top.vhd           -- Top level of the design.
|   |─ MyOwnToplevel_Top_Testbench.vhd -- Testbench = ...Top.vhd &
|   |..top_Tester.vhd
|   |─ MyOwnToplevel_Top_Tester.vhd    -- Stimulus for functional
simulation.
|─ /Vivado
|   |─ /MyOwnToplevel_Top              -- Project created by
Vivado
|   |─ MyOwnToplevel_Top.xpr           -- Vivado project
organisation file
|   |─ MyOwnToplevel_Top.runs          -- Folder for synthesis and
place and route output.
|   |.....
|   |....
```

In the above given example the VHDL top level file is: *MyOwnToplevel_Top.vhd*.

The two other top level VHDL files show the simulation test file and the simulation test bench file combining design and tester so that they can be handled by a VHDL simulator.

The Xilinx Vivado tool is started in the */Vivado* directory and a project *MyOwnToplevel_Top* is created.

The Vivado tool then creates a implementation directory */MyOwnToplevel_Top* a project organisation file and other run and log files.

To create a project follow this guide:

- Open a terminal (Linux) or command window (Windows).
- Change directory, `cd`, to this Vivado directory.
- Type: Vivado (Windows) or Vivado & (Linux - to get the terminal back).
- Wait till Vivado has started and shows the main GUI screen.
- In the "Quick Start" box, select [Create Project]
- Click [Next]
- Give the project a name and by default use the name of the top level VHDL file.
- Define a project location - situation 1 or 2 can happen - :
 1. The entry space will already contain the path to the Vivado directory of this project,
 2. The entry space shows any directory but not the one wanted/needed,
- When 1, click [Next].
- When 2, Click the square (with ...) right of the entry space.
 - Browse to the Vivado directory of this project and double click the project.
 - Arrived in the project directory, double click the file project.xpr.

- Vivado will now open the project.
- Start working.

To run a project follow this guide:

- Open a terminal (Linux) or command window (Windows).
- Change directory (cd) to this Vivado directory.
- Type: Vivado (Windows) or Vivado & (Linux - to get the terminal back).
- Wait till Vivado has started and shows the main GUI screen.
- In the "Quick Start" box, select [Open Project]
- A file browser will pop up.
- Depending Vivado settings:
 1. The browser window will show the project directory to work on.
 2. The browser window will show the contents of another directory.
- When 1, double click the project directory.
- When 2, Browse to the Vivado directory of this project and double click on project directory.
- Arrived in the project directory, double click the file project.xpr file.
- Vivado will now open the project.
- Start working.