

Chapter 02 - Terminology - TRAINING - Common

Course authors (Git file)



1 Searching



Browse the resources

Task: Review the flow terminology

- Try to formulate the meaning and purpose of all the following search results in your own words.
- Search for each of the flow steps
 - Synthesis
 - Floorplan
 - Placement
 - Clock Tree Synthesis
 - Routing
 - Finishing
- Search for as much flow components as possible (see the components names in the diagram in the lecture slides)
- If no result is found, try a search engine (or chatGPT).

Matt Venns list:

<https://www.zerotoasiccourse.com/terminology/>

Getting the words in place

In the beginning it can be hard to learn all the new words and give them meaningful connections immediately.

Let's try to create a timeline (or taskline) for "How to make microchips?" in a joint effort.

Task: Create a diagram "How to make a microchip?"

- Everyone can give a keyword of the topic "How to make a microchip?"
- We try to figure out the meaning and the position in a timeline / taskline?
- Flipchart, Whiteboard, Texteditor?



List the open-source tools in OpenROAD

OpenROAD uses a lot of open-source tools, that were available even before OpenROAD.

Task: Create a list of tools

- Use this link list as the knowledge base:
 - <https://openroad-flow-scripts.readthedocs.io/en/latest/tutorials/FlowTutorial.html#running-the-automated-rtl-to-gds-flow>
- Find the names of the open-source tools that are used in ORFS.
- Create a list with the columns:
 - Name of the open-source tool
 - Flow step and flow component in ORFS where the tool is used.
 - Description of the function of the tool
 - Bonus: What was modified or contributed to this tool by the OpenROAD team?



Example row

Example row in the list:

- Yosys
- Synthesis
- Verilog and constraints to netlists
- Most of the initial development was coded by Claire Wolf (not by ORFS)

