# Chapter 7 - OpenROAD flow scripts

Course authors (Git file)



- What are we going to do now?
- The features of ORFS



### Section 1

What are we going to do now?



# **Previous chapters**

#### What happend on the way to here:

- GDS-2-RTL: OpenROAD
- OpenROAD flow scripts (ORFS)
- ORFS flow steps and flow components
- First run of the flow scripts
- Analysing: Heatmaps and more (ORFS GUI)
- A Dive into the PDK



# This chapter

NOW:

Make your design better.



# Idea of today

There is a good tutorial about ORFS in the official documentation:

https://openroad-flow-scripts.readthedocs.io/en/latest/tutorials/FlowTutorial.html

The ORFS online-tutorial was not written for the use with the IHP PDK especially, but we can adopt this easily.



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## OpenROAD Flow Scripts Tutorial

#### Introduction

This document describes a tutorial to run the complete OpenROAD flow from RTL-to-GDS using OpenROAD Flow Scripts. It includes examples of useful design and manual usage in key flow stages to help users gain a good understanding of the OpenROAD application flow, data organization, GUI and commands.

This is intended for:

- Beginners or new users with some understanding of basic VLSI design flow. Users will learn the basics of installation to use OpenROAD-flow-scripts for the complete RTL-to-GDS flow from here.
- Users already familiar with the OpenROAD application and flow but would like to learn more about specific features and commands.

#### Introduction

User Guidelines

Getting Started

Configuring The Design

Running The Automated RTL-to-GDS Flow

Viewing Results And Logs

OpenROAD GUI

Understanding and Analyzing

OpenROAD Flow Stages and Results
Troubleshooting Problems

Figure 1: ORFS Online Tutorial



## Section 2

The features of ORFS





# Design config variables (some)

