

# Chapter 1 - Introduction and overview

## Introduction

Thorsten Knoll



- 1 Welcome
- 2 Course components
- 3 Course overview:
- 4 The Training sessions
- 5 Open-source EDA for digital designs
- 6 AMA (Ask me anything)



# Trainer profile

Name, Company / Uni

Why i'm here. My motivation.

What i've done before.

What interests me most.



# Participants backgrounds and motivations

Name, Company / Uni

Why i'm here. My motivation.

What i've done before.

What interests me most.



# Columns example



- Item 1.
- Item 2.
- Item 3.



# Chapters



# Lectures



# Trainings





# Cheat Sheets



# Questions








The questions are meant for re-visiting and remembering a previous chapter. They should be a guide for an interactive session between the trainer and the room: \* Trainer: The trainer asks the questions. \* Room: Answers the questions. If no answer can be found, the trainer helps with the answer.



# Table of content (Chapter names and short descriptions)



# Schedule for the course

	Mon	Tue	Wed	Thu	Fri
Morning	<b>L1:</b> Intro and Overview  <b>L2:</b> Workflow RTL-to-GDS	<b>Q1, Q2, Q3:</b> Recap  <b>L4:</b> OpenROAD First run  <b>T4:</b> Training	<b>Q4, Q5:</b> Recap  <b>L6:</b> The data in OpenROAD	<b>Q6, Q7:</b> Recap  <b>L8:</b> Simulation and PPA  <b>T8:</b> Training	<b>L10:</b> GDS and Tapeout  <b>Q8, Q9, Q10:</b> Recap
Lunchbreak					
Afternoon	<b>L3:</b> Dig. Design and examples  <b>T3:</b> Training	<b>T4:</b> Training  <b>L5:</b> PDK Examination  <b>T5:</b> Training	<b>L6:</b> The data in OpenROAD  <b>T6:</b> Training  <b>L7:</b> LVS/DRC auditing	<b>L9:</b> Scripting in OpenROAD	Spare time and Wrap-Up

L : Lectures

T : Training and  
Hands-On

Q : Questions

# Login at IHP

- Onboarding for everyone to the computers



# Levels

- Success points inbetween lectures
- This is too fast
- This is too slow



# Availability GitHub PDF Downloads

- Follow in your own tempo. Get all the data here:
- Link / QR to the course materials



# From Design to Microchip

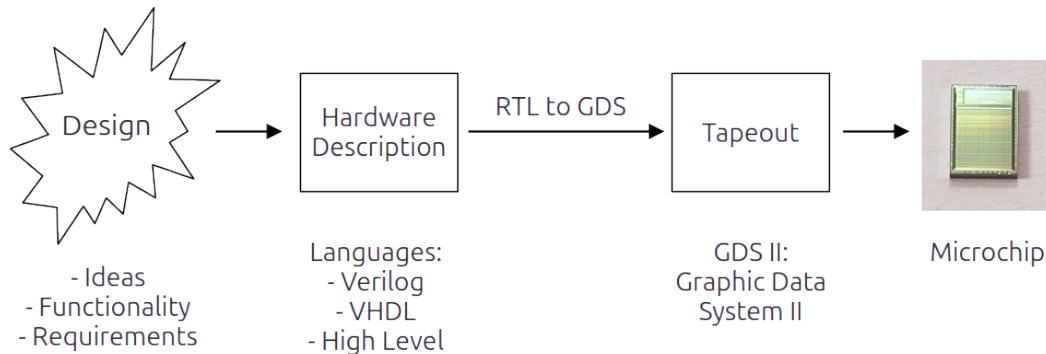


Figure 2: Microchip Creation





# RTL to GDS - Workflow

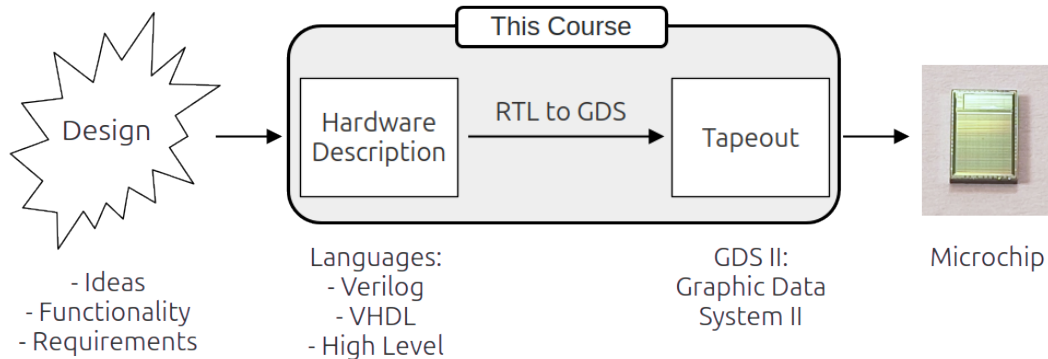


Figure 3: RTL 2 GDS and this course



# The cheatsheet

First usage of the cheatsheet:

- EDA
- RTL
- GDS II
- ....



# Further topics

- What is the new thing with this course?
- Advantages of open-source in EDA
- The actual state of open-source EDA
- Goals of this course.
- How to participate and interact with this course.
- Producing chips at IHP with the open PDK



# AMA (Ask me anything)

- Opportunity to ask questions about everything (chapter 1 ?).

