

Makerchip IDE

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

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Learning Objectives

In this tutorial, we will learn to



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In this tutorial, we will learn to

▶ **Edit and**



Learning Objectives

In this tutorial, we will learn to

- ▶ **Edit and**
- ▶ **Run simulations in the Makerchip IDE**



System Requirements

To record this tutorial, I am using



System Requirements

To record this tutorial, I am using

▶ **Ubuntu OS v20.04**



System Requirements

To record this tutorial, I am using

- ▶ **Ubuntu OS v20.04**

- ▶ **eSim v2.2**



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The process demonstrated in this tutorial is similar in Windows OS also



Pre-requisites

To follow this tutorial, the learner must have



Pre-requisites

To follow this tutorial, the learner must have

- ▶ Basic knowledge of eSim



Pre-requisites

To follow this tutorial, the learner must have

- ▶ Basic knowledge of eSim
- ▶ **Familiarity with verilog**



Pre-requisites

To follow this tutorial, the learner must have

- ▶ Basic knowledge of eSim
- ▶ Familiarity with verilog
- ▶ Basic knowledge of Makerchip-NgVeri feature



Pre-requisites

- ▶ For pre-requisite eSim tutorials, please visit <https://spoken-tutorial.org>



Code Files

- ▶ The files used in this tutorial are provided in the Code files link



Code Files

- ▶ **The files used in this tutorial are provided in the Code files link**
- ▶ **Please download and extract the files**



Code Files

- ▶ The files used in this tutorial are provided in the Code files link
- ▶ Please download and extract the files
- ▶ Make a copy and then use them while practicing



More about lint_off commands

- ▶ To know more about lint_off errors, please refer <https://verilator.org/guide/latest/warnings.html#list-of-warnings>



Summary

In this tutorial, we learnt to

- ▶ Edit and
- ▶ Run simulations in the Makerchip IDE



Assignment

As an assignment, please do the following

- ▶ Download and open the file **shift.v** in **Makerchip** tab
- ▶ **shift.v** is available in Code files link
- ▶ Click on **Edit in Makerchip** option



Assignment

- ▶ Remove the errors appearing in the **LOG** tab
- ▶ Compile and view the waveforms in the **WAVEFORM** tab
- ▶ Add the required signals
- ▶ Recompile and verify the waveforms



About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer
- ▶ You will have to register to ask questions



- ▶ For any general or technical questions on eSim, visit the FOSSEE forum and post your question

<https://forums.fossee.in/>



Circuit Simulation Project

- ▶ The FOSSEE team coordinates the Circuit Simulation project
- ▶ For more details visit:
<https://esim.fossee.in/circuit-simulation-project>



TextBook Companion Project

- ▶ The FOSSEE team coordinates the TextBook Companion project
- ▶ For more details visit:
<https://esim.fossee.in/textbook-companion-project>



Lab Migration

- ▶ The FOSSEE team coordinates the Lab migration project
- ▶ For more details visit:
<https://esim.fossee.in/lab-migration-project>



Acknowledgement

- ▶ **The Spoken Tutorial project is funded by Ministry of Education, Govt. of India**



Thank you

- ▶ **This is Josiga, a FOSSEE Summer fellow 2022, IIT Bombay signing off**

