

# Simulating Astable Multivibrator

**Spoken Tutorial Project**

**<https://spoken-tutorial.org>**

**National Mission on Education through ICT**

**<http://sakshat.ac.in>**

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In this tutorial, we will-

- ▶ Create and simulate an Astable Multivibrator.
- ▶ Understand .cir and .cir.out files.
- ▶ Observe and understand the Ngspice terminal.



# System Requirements

- ▶ **Ubuntu Linux OS version 16.04**



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- ▶ **eSim version 1.1.2**

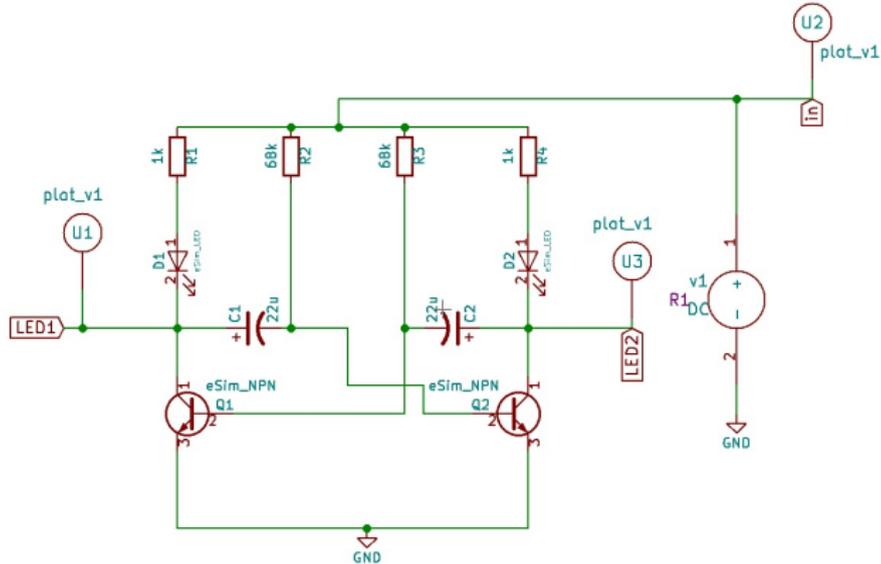


# Prerequisites

**To practice this tutorial, basic knowledge of electronics is required.**



# Circuit Diagram



# Download Code File

- ▶ **The partially made circuit schematic is available in the Code Files link.**
- ▶ **Download and extract this file on your Desktop.**
- ▶ **We will use the downloaded code file to practice the rest of the tutorial.**



# Summary

In this tutorial, we learnt to :

- ▶ Create and simulate an Astable Multivibrator.
- ▶ Understand .cir and .cir.out files.
- ▶ Observe and understand the Ngspice terminal.





# Forum to answer questions

- ▶ Questions not related to the Spoken Tutorial?
- ▶ Do you have general / technical questions on the Software?
- ▶ Please visit the FOSSEE Forum.  
<https://forums.fossee.in/>
- ▶ Choose the Software and post your question.



# Lab Migration

- ▶ **The FOSSEE team coordinates to migrate labs that use proprietary software to eSim.**
- ▶ **We give honorarium and certificate to those who do this.**

**For more details, please visit this site:**

**<https://esim.fossee.in/lab-migration-project>**



# Circuit Simulation Project

- ▶ **The FOSSEE team coordinates convert existing circuit design and simulations into eSim.**
- ▶ **We give honorarium and certificate to those who do this.**

**For more details, please visit this site:**

**<https://esim.fossee.in/circuit-simulation-project>**



# Acknowledgements

- ▶ **Spoken Tutorial Project is a part of the Talk to a Teacher project.**
- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India.**
- ▶ **More information on this Mission is available at**

<https://spoken-tutorial.org/NMEICT-Intro>



# THANK YOU!

For more information, visit our website  
<https://fossee.in/>

