

## SELF Workshops

We help you to conduct FreeEDA SELF (Spoken Tutorial based Education and Learning through Free FOSS study) workshops free of cost.  
Spoken tutorials on FreeEDA are:

### Beginner Level:

1. Introduction to FreeEDA
2. Schematic Creation and Simulation using FreeEDA
3. Designing Circuit Schematic in KiCad
4. Designing Printed Circuit Board (PCB) using FreeEDA
5. Electric Rules Checking and Netlist Generation in KiCad
6. Mapping Components in KiCad
7. Designing Printed Circuit Board in KiCad

### Advanced Level:

1. Operating Point Analysis in Ngspice
2. DC Sweep Analysis in Ngspice
3. Model Building using FreeEDA
4. Subcircuit Creation using FreeEDA

## Book on FreeEDA



We have written a book, '**Oscad: An open source EDA tool for circuit design, simulation, analysis and PCB design**', published by Shroff Publishers, Mumbai, 2013. It explains the installation and use of FreeEDA in detail, with lots of illustrative examples. An e-version of the book can be downloaded for non-commercial purposes from: <http://freeda.in/downloads>.

## Future work

### Digital Circuit Simulation

OpenModelica is a multi-domain modelling and simulation tool based on the Modelica language. Work is going on to integrate it with FreeEDA so that its powerful ODE/DAE solvers and optimisation algorithms can be used for circuit optimisation.

### Integrating FreeEDA and OpenModelica

VHDL/Verilog are standard hardware description languages (HDL). One can create digital circuits by using VHDL/Verilog. An interface for digital circuit simulation using HDL, is being developed in FreeEDA

## Contact Us

Lab Migration lab-migration@freeda.in	SELF workshops SELF-workshop@freeda.in	Textbook Companion textbook-companion@freeda.in	General queries queries@freeda.in
--	---	--	--------------------------------------

We are looking for more FOSS enthusiasts to join our team. Contact us at [jobs@fossee.in](mailto:jobs@fossee.in).



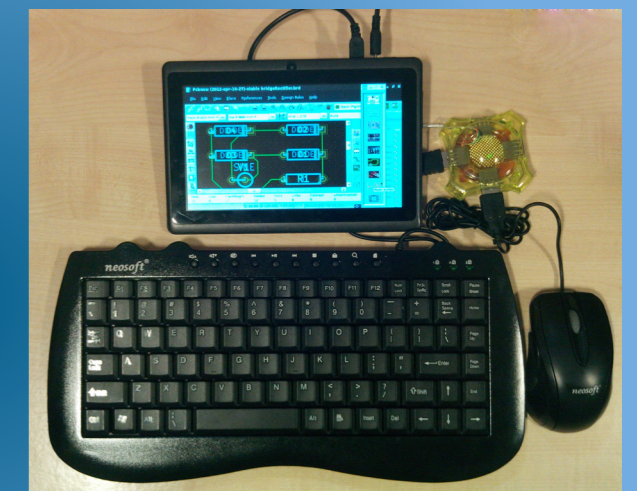
# FreeEDA

A Free and Open Source **EDA Tool**.

Every resource mentioned in this brochure is available free of cost.



FreeEDA website



FreeEDA on Aakash

FreeEDA (previously known as Oscad) is an Open Source EDA tool for circuit design, simulation, analysis, and PCB design, developed by the FOSSEE team at IIT Bombay. It is an integrated tool built using Open Source software such as KiCad (<http://www.kicad-pcb.org>), Scilab (<http://www.scilab.org/>) Ngspice (<http://ngspice.sourceforge.net/>) and Fritzing (<http://fritzing.org/>).

- Released under GNU GPL license
- Runs on Ubuntu Linu, Windows XP and Windows 7
- Success fully ported to Aakash, the world's lowest priced computing tablet

## About Us

FOSSEE (Free and Open Source Software for Education) project is a part of the National Mission on Education through ICT, with the thrust area being 'Adaptation and deployment of Open Source simulation packages equivalent to proprietary software', funded by MHRD, based at the Indian Institute of Technology, Bombay (IITB).  
For more details, visit <http://fossee.in/>

### Other Projects under FOSSEE:

- Scilab
- Python
- OpenFOAM
- OR-Tool
- Sandhi
- Osdag

<http://freeda.in>



IIT Bombay

**fossee**  
better  
education

Funded by the National Mission on Education through ICT, MHRD, Govt. of India