

Advice and Free Tools for Drawing Circuit Schematics

Compiled by Jon Erickson, 04 Sep 2018

General Advice

Making nice circuit diagrams is a bit of an art form. These [very helpful guidelines](#) comes by way of the legendary Horowitz and Hill.

(<http://opencircuitdesign.com/xcircuit/goodschem/goodschem.html>)

Drawing Tools

[CircuitLab](https://www.circuitlab.com): (<https://www.circuitlab.com>)

- html based schematics
- includes circuit simulator
- sign-up for free account to save/download drawings

[SchemeIt](http://www.digikey.com/us/en/mkt/scheme-it.html): (<http://www.digikey.com/us/en/mkt/scheme-it.html>)

- html based, very easy to use
- sign-in to digikey account (free) in order to save drawings as pdfs

[Schematics.com](http://www.schematics.com) (www.schematics.com)

- web-based interface, easy to use
- can save and share designs, and export good quality .png
- have to sign up/sign in with google/fb/etc.

[EagleCAD](https://www.autodesk.com/products/eagle/free-download) (<https://www.autodesk.com/products/eagle/free-download>)

- professional level schematics and PCB layout (used in the 'real world')
- massive library of parts
- a learning curve to climb, fairly easy to learn (great tutorial from Sparkfun [here](#))

CircuitTikz

General info and examples: <http://www.ctan.org/pkg/circuitikz>

TeX Package download: <http://www.texample.net/tikz/examples/circuitikz/>

This is sort of an 'expert mode' package used with TeX (an incredibly powerful typesetting program, especially geared for technical writing that includes lots of equations and figures). CircuitTikz is a package used with TeX. Drawings produced are professional quality, but you must code your circuit in text programming, then compile it to actually produce the drawing.