# Fritzing

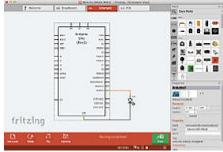


**Fritzing** is an <u>open-source</u> initiative<sup>[2]</sup> to develop amateur or hobby <u>CAD software</u> for the <u>design</u> <u>of electronics hardware</u>, to support designers and artists ready to move from experimenting with a prototype to building a more permanent circuit. It was developed at the <u>University of Applied</u> <u>Sciences Potsdam</u>.<sup>[3]</sup>

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## Goals

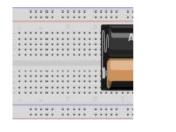


Fritzing's schematic view

The software is created in the spirit of the <u>Processing</u> programming language and the <u>Arduino</u> microcontroller<sup>[4]</sup> and allows a designer, artist, researcher, or hobbyist to document their Arduino-based prototype and create a <u>PCB</u> layout for manufacturing. The associated website helps users share and discuss drafts and experiences as well as to reduce manufacturing costs.

Fritzing can be seen as an <u>electronic design automation</u> (EDA) tool for non-engineers: the input metaphor is inspired by the environment of designers (the <u>breadboard</u>-based prototype), while the output is focused on accessible means of production. As of December 2, 2014 Fritzing has made a code view option, where one can modify code and upload it directly to an Arduino device.<sup>[5]</sup>

Component images are distributed under <u>CC-BY-SA</u>, which will also be the license for any generated breadboard views.





Breadboard view of a simple circuit, drawn with Fritzing.

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Circuit diagram of the same circuit.

#### Developer

The Fritzing source code is written in  $\underline{C^{++}}$  using the  $\underline{Qt}$ -framework. The source code can be downloaded and edited via the  $\underline{GitHub}$  repositories. The source is split in two main repositories: Fritzing-App and Fritzing-Parts.

# Maker

Fritzing allows for easy creation of <u>printed circuit boards</u>. FritzingFab enables users to order PCBs with designs made on the Fritzing software.

Additionally, the <u>website</u> contains a <u>forum</u> where users can share and comment on each other's designs.

### See also

- <u>Electronics portal</u>
- <u>Comparison of EDA software</u>
- List of free and open source software packages
- List of free electronics circuit simulators