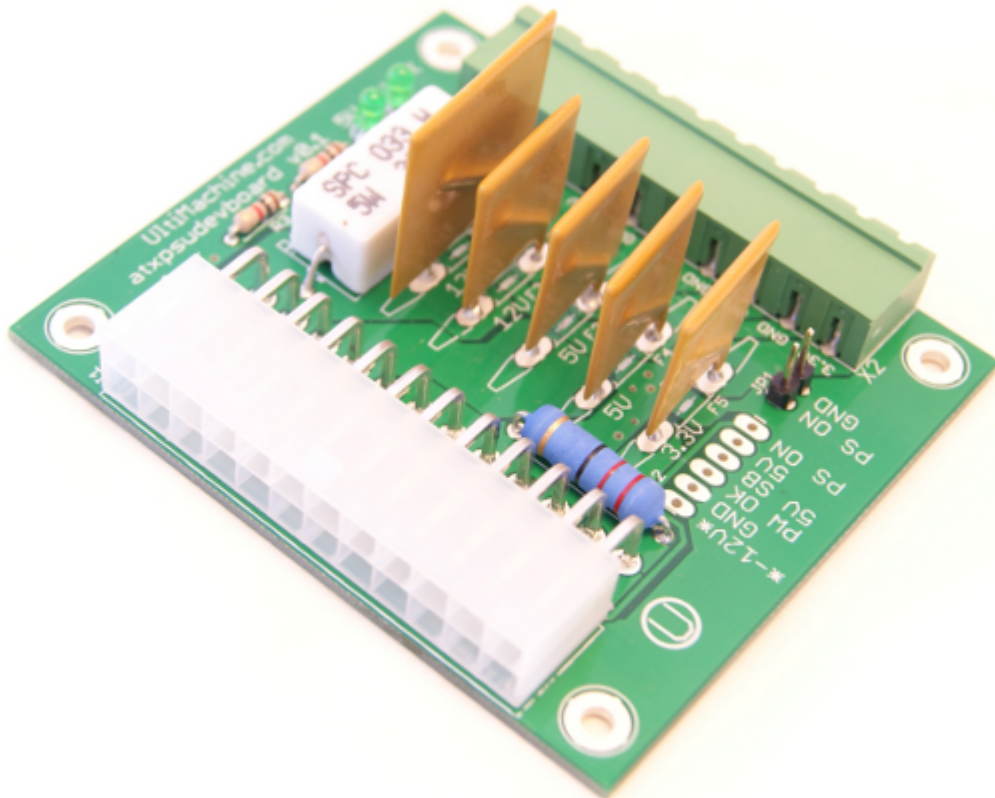# ATX PSU Dev Board
Assembly Instructions for v0.1

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0.2.1 Preparation

Tools The following tools and materials are required to assemble the ATX PSU Dev Board:

- Soldering Iron
- Solder
- Flush/diagonal cutters

Additional tools that might be helpful, but not required:

- Lead bender

Soldering If you do not have prior experience soldering, we recommend checking out a few of the following websites for some tutorials.

- `http://mightyohm.com/files/soldercomic/FullSolderComic_EN.pdf`
- `http://www.ladyada.net/media/common/soldering.pdf`
- `http://store.curiousinventor.com/guides/How_to_Solder`
- `http://www.sparkfun.com/tutorials/106`
- `http://radiojove.gsfc.nasa.gov/telescope/soldering.htm`

0.2.2 Assembly

The components of this board will be inserted on the side with the outlines

Begin by inserting the two 1kΩ resistors and the LEDs into the board. The LEDs should have the longest lead in the hole facing the resistor. If they are inserted incorrectly they will not work. Resistors are not polarized components, so they can be inserted in orientation. \

Next flip over the board and solder the components in. \

The fuses will be inserted next. They have a coating that slightly descends down the leads. \

In order to make a good connection the fuses should slightly hover over the holes. This is so the coating on the leads does not interfere with soldering. You want to bring the fuse above the board. You can do this with RepRap filament or something else, such as a long screw. The orientation of the fuses does not matter.

Next you will want to solder in the remaining resistors. Again, orientation does not matter for resistors.

Now is a good opportunity to check that all connections were soldered well. Ideally the solder should wick up the lead onto the other side of the board. It should also have a nice tapered look. Add some flux and reheat the joint to touch-up the connections if needed. \

Next you will want to add the ATX connector. It has barbs on the housing that should clip onto the circuit board.

Figure 1: Bag Layout

1 Usage

1.1 Source