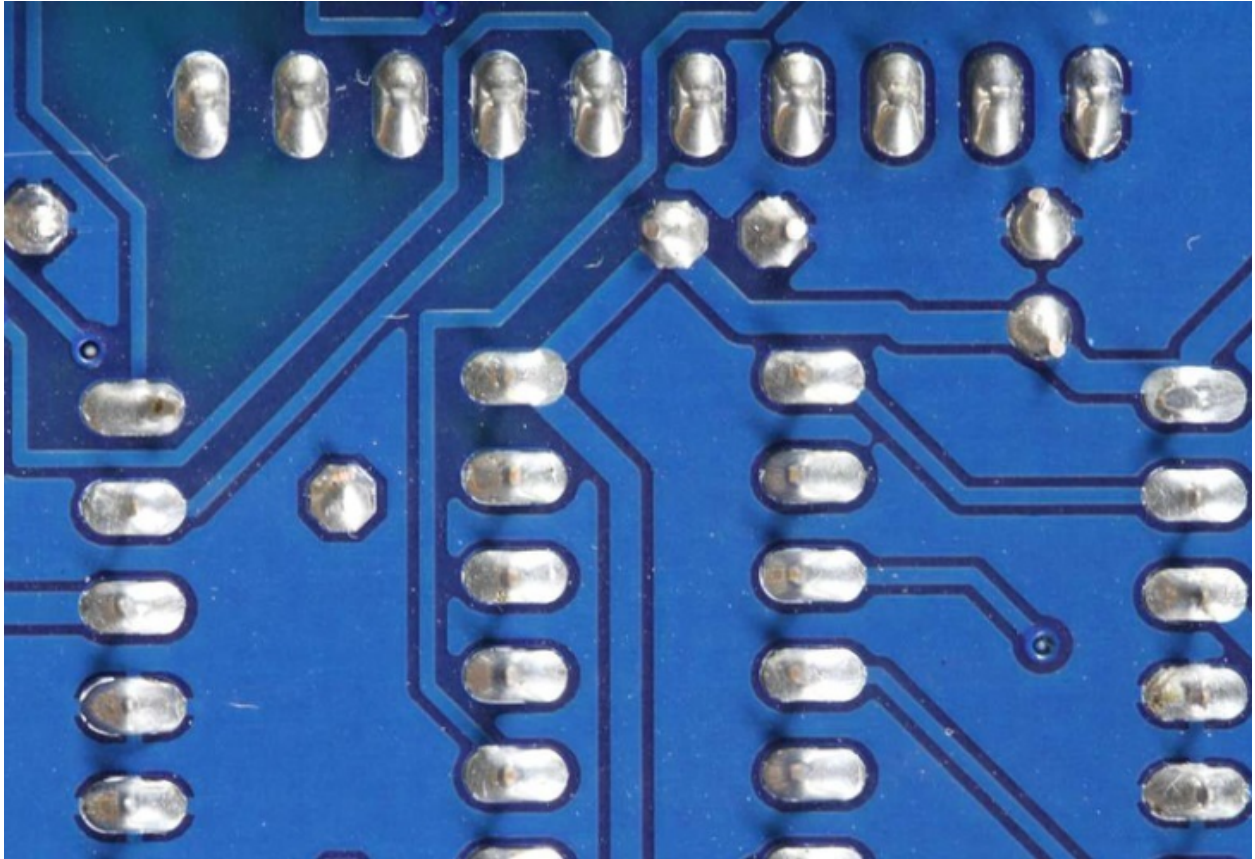


## Making a good solder joint | Adafruit Guide To Excellent Soldering | Adafruit Learning System

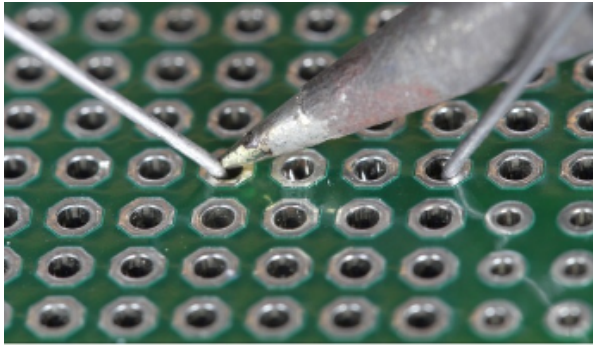
### Making a good solder joint



Once you have prepared the your tools and the joint to be soldered, making a good solder joint requires just a few simple steps.

#### Heat the joint

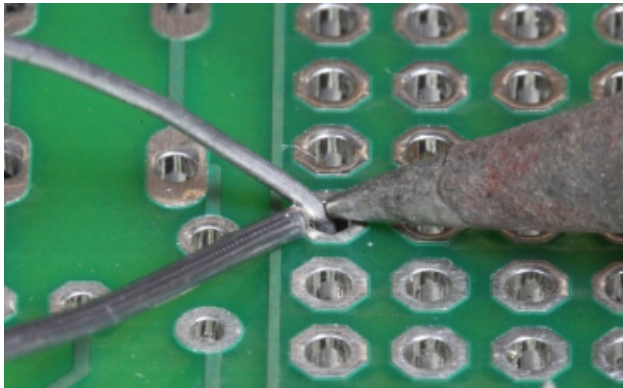
Heat the joint with the tip of the iron. Be sure to heat both the solder pad and the component lead or pin. A small drop of solder on the tip will help to transfer the heat to the joint quickly.



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### Apply the solder

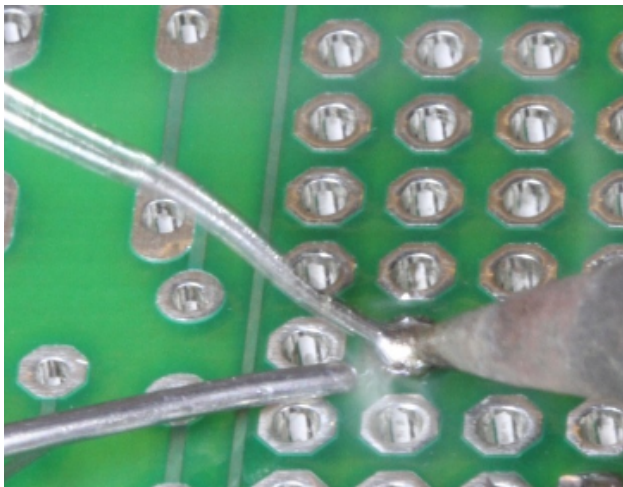
Touch the end of the solder to the joint so that it contacts both the solder pad and the component lead or pin. It should melt and flow smoothly onto both the pin and the pad. If the solder does not flow, heat the joint for another second or two and try again.



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### Let It Flow

Keep heating the solder and allow it to flow into the joint. It should fill the hole and flow smoothly onto both the solder pad and the pin or component lead.



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### Let It Cool

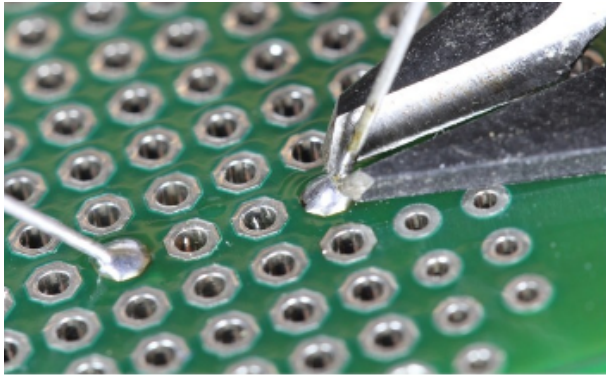
Once enough solder has been added to the joint and it has flowed well onto both the component lead and the solder pad, remove the iron from the joint and allow it to cool undisturbed.

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### Trim the Lead

Use your diagonal cutters to trim the lead close to the board.





*Note: This step applies only to components with wire leads. It is not necessary to trim the pins on Integrated circuit chips or sockets.*





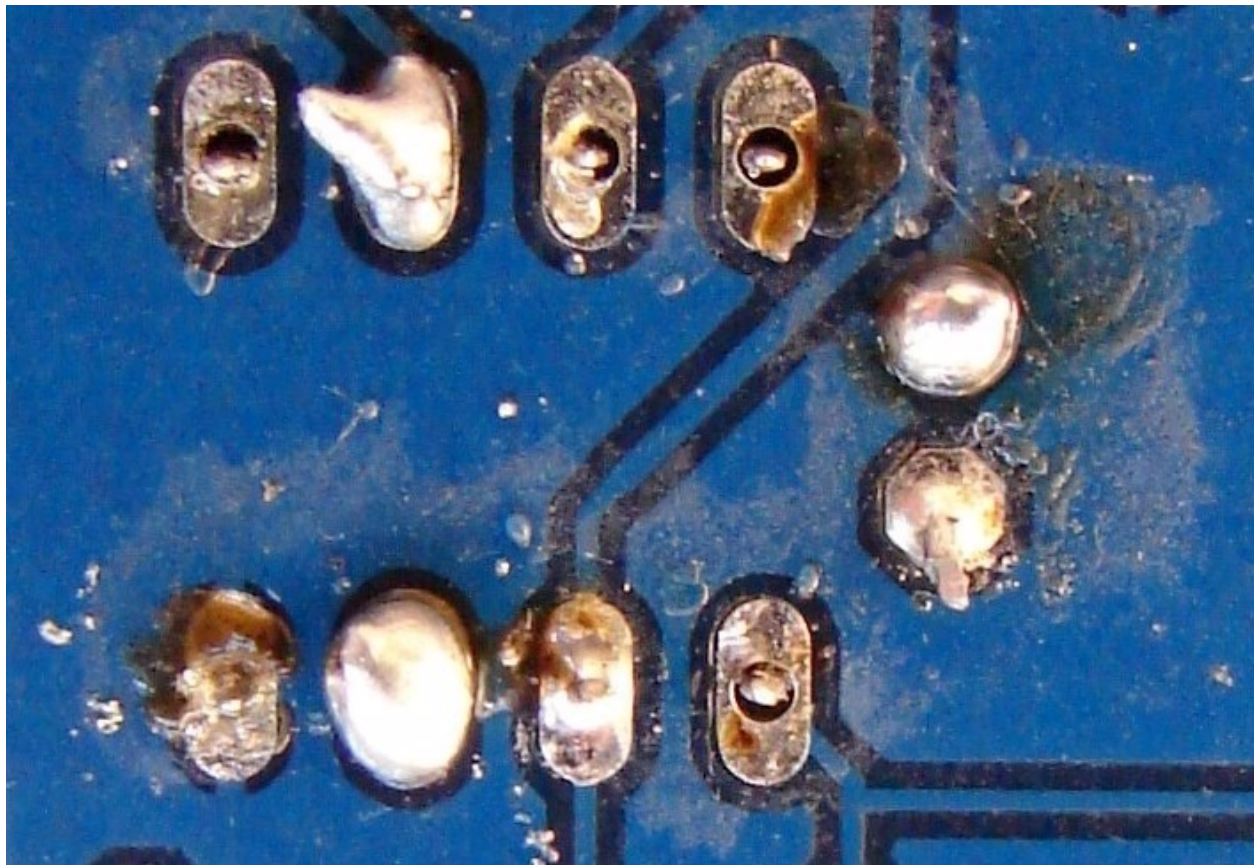
Congratulations!

Reward yourself with a [Soldering Badge](#).

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## Problems?

The last page of this guide illustrates a number of common soldering problems with advice on prevention and repair.



PREPARATION

SURFACE MOUNT COMPONENTS

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