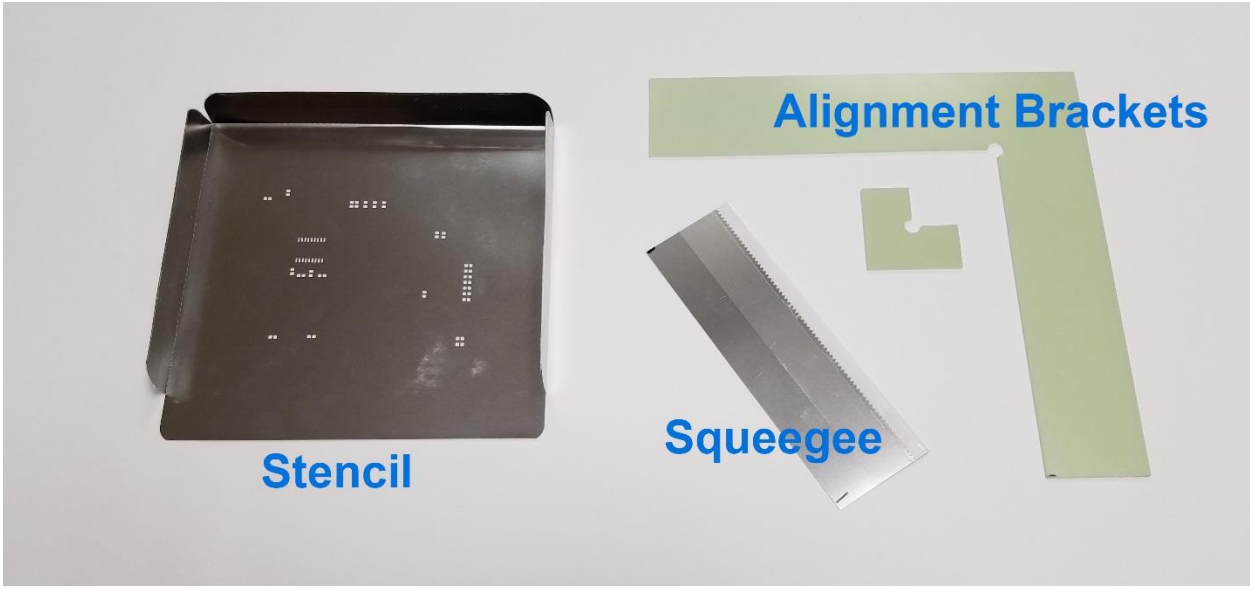
Desktop Stencil Tutorial

Stencils are a great way to apply solder paste to PCBs during the component assembly process. They help ensure solder paste is applied exactly where you want it – and only where you need it. The stencil itself is manufactured based on the PCB design data which ensures it will match exactly with your PCB.

If you've purchased a desktop stencil from Bay Area Circuits and need a little instruction on how to use it, you've come to the right place! Follow the simple steps below to setup your stencil for use.

First, let's review what's included with a stencil order from Bay Area Circuits:

- Stencil (manufactured per your specifications)
- Alignment Brackets (2)
- Squeegee

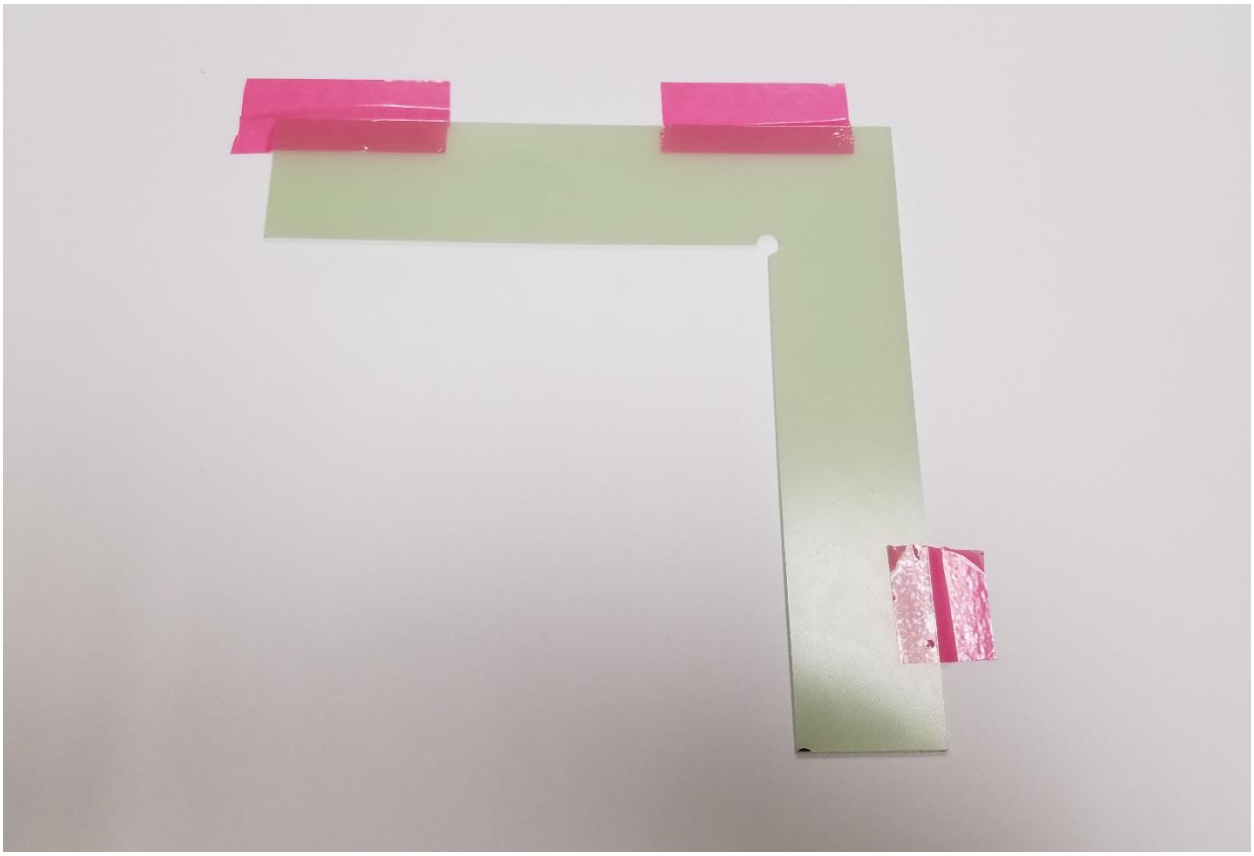


What's not included?

- PCB + Components
- Solder Paste
- Tape

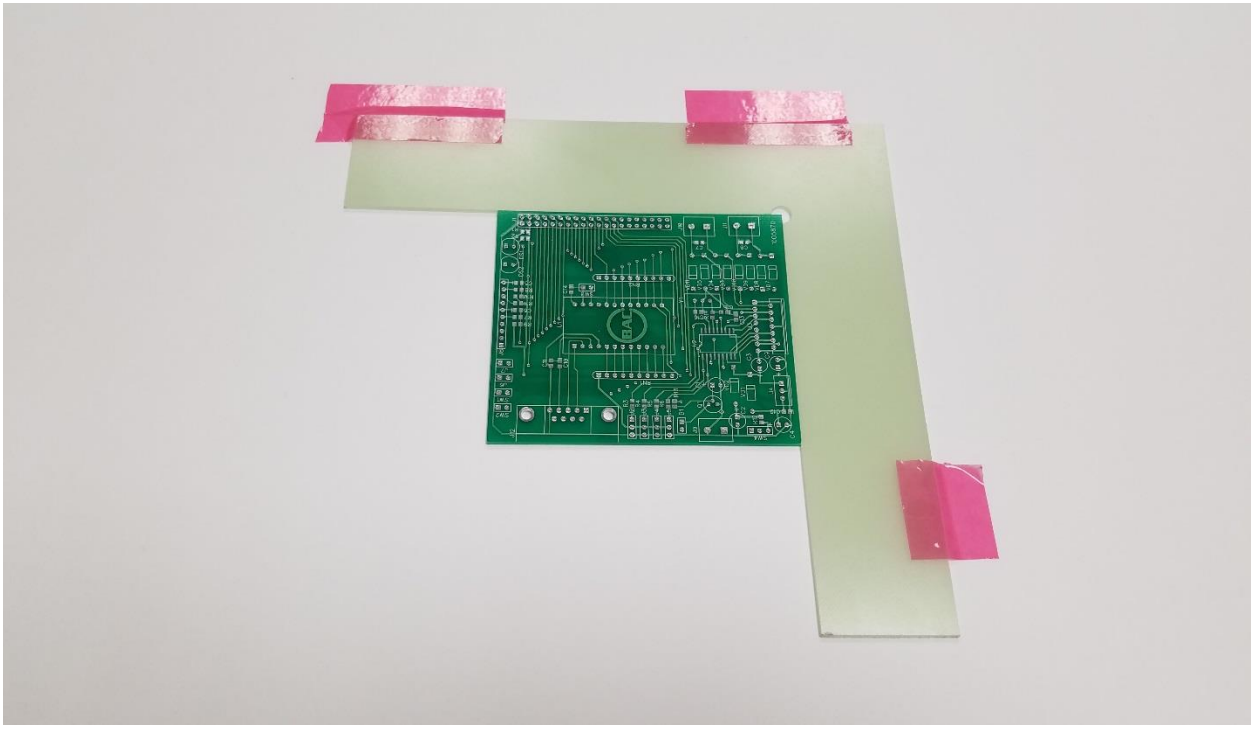
Step 1: Secure Alignment Bracket #1

Start by securing the larger alignment bracket to a flat surface with tape.



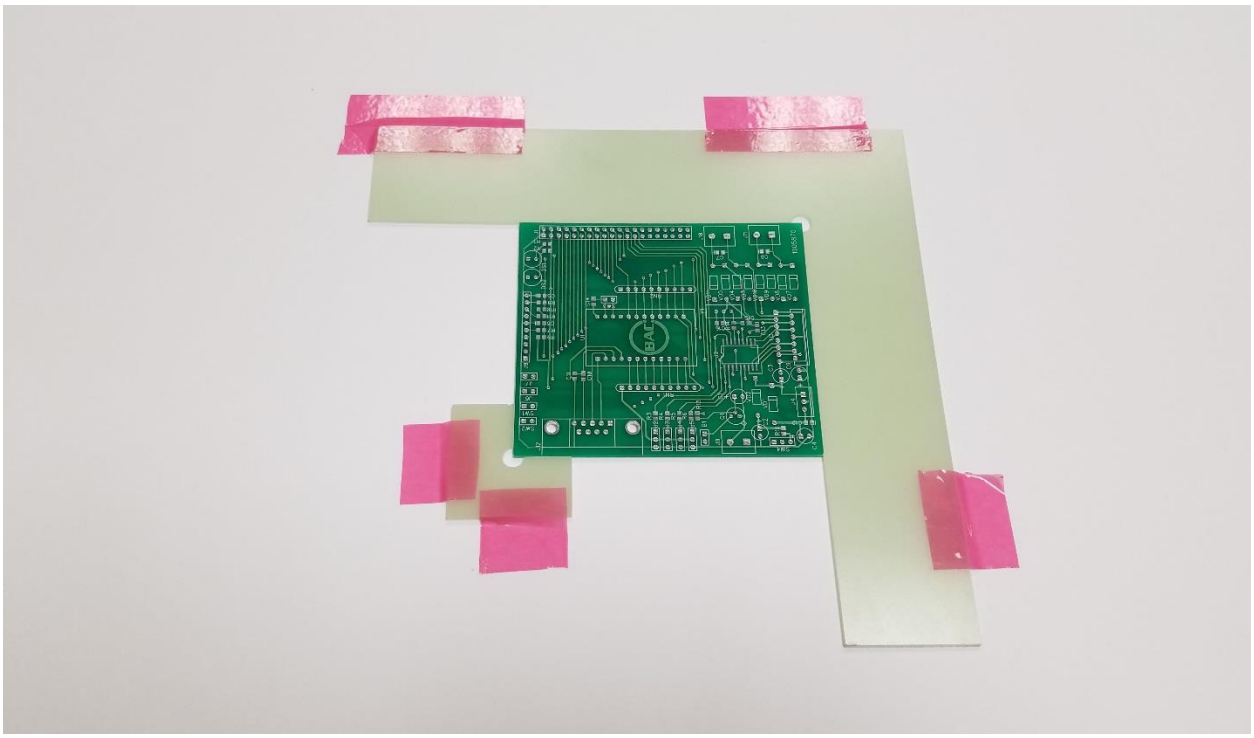
Step 2: Insert PCB

Insert PCB into the corner of the alignment bracket, ensuring a tight fit. Be sure to insert the PCB so that the flat end of the stencil will rest on the alignment tool (see Step 4).



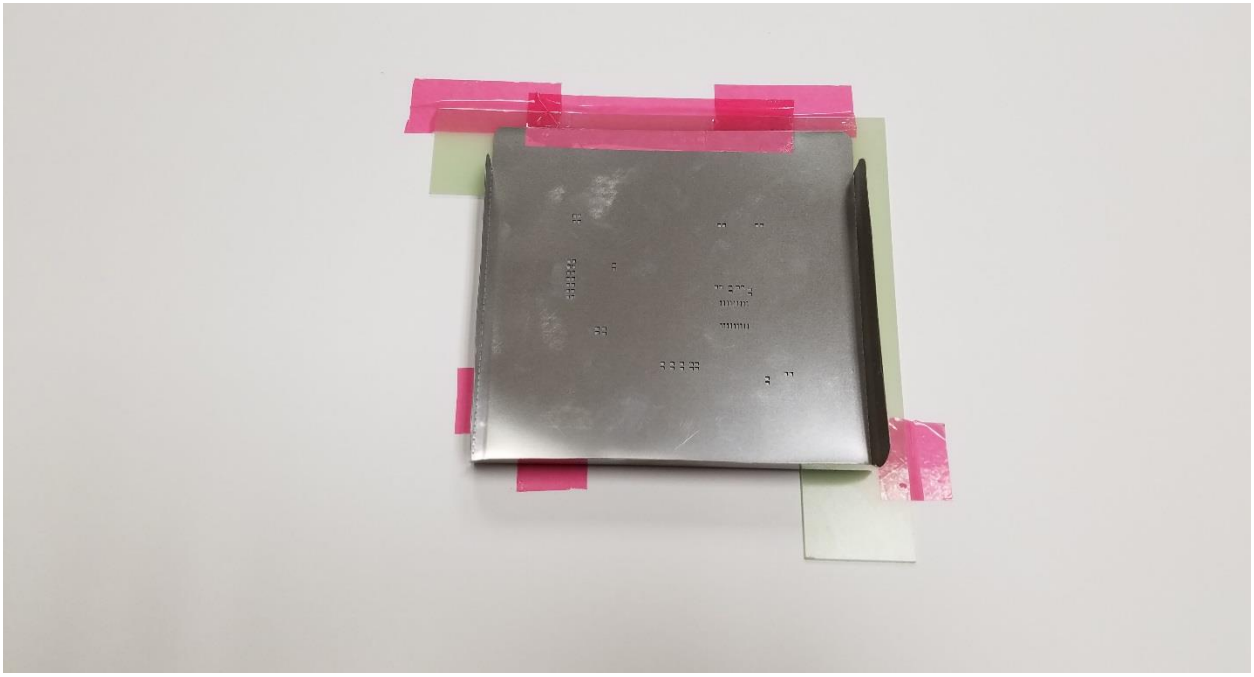
Step 3: Secure Alignment Bracket #2

Add the smaller alignment bracket and secure with tape to frame in the PCB firmly.

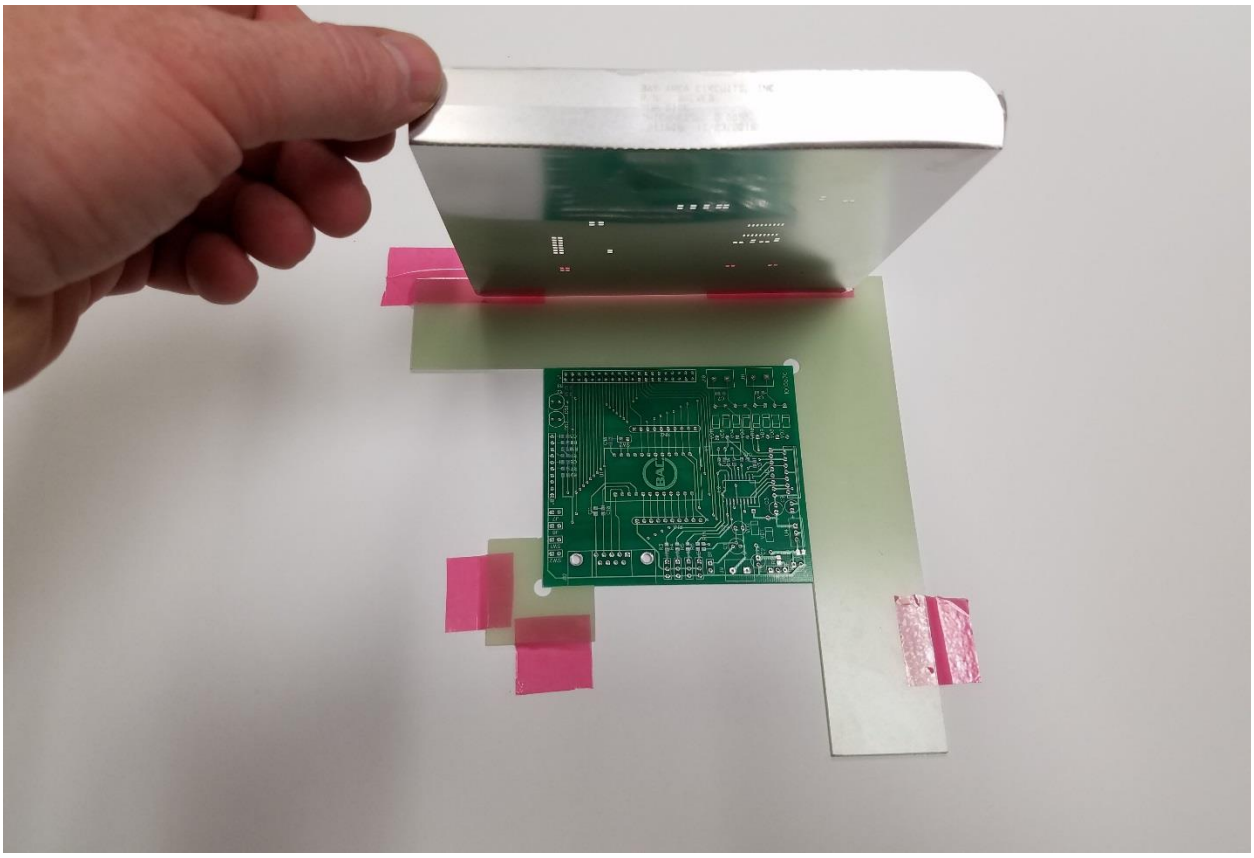


Step 4: Align and Secure the Stencil

Align the stencil on top of the PCB so that the holes in the stencil align properly with the features of the PCB. You'll also want to ensure that the PCB is oriented so that the flat edge of the stencil lays across the alignment bracket.

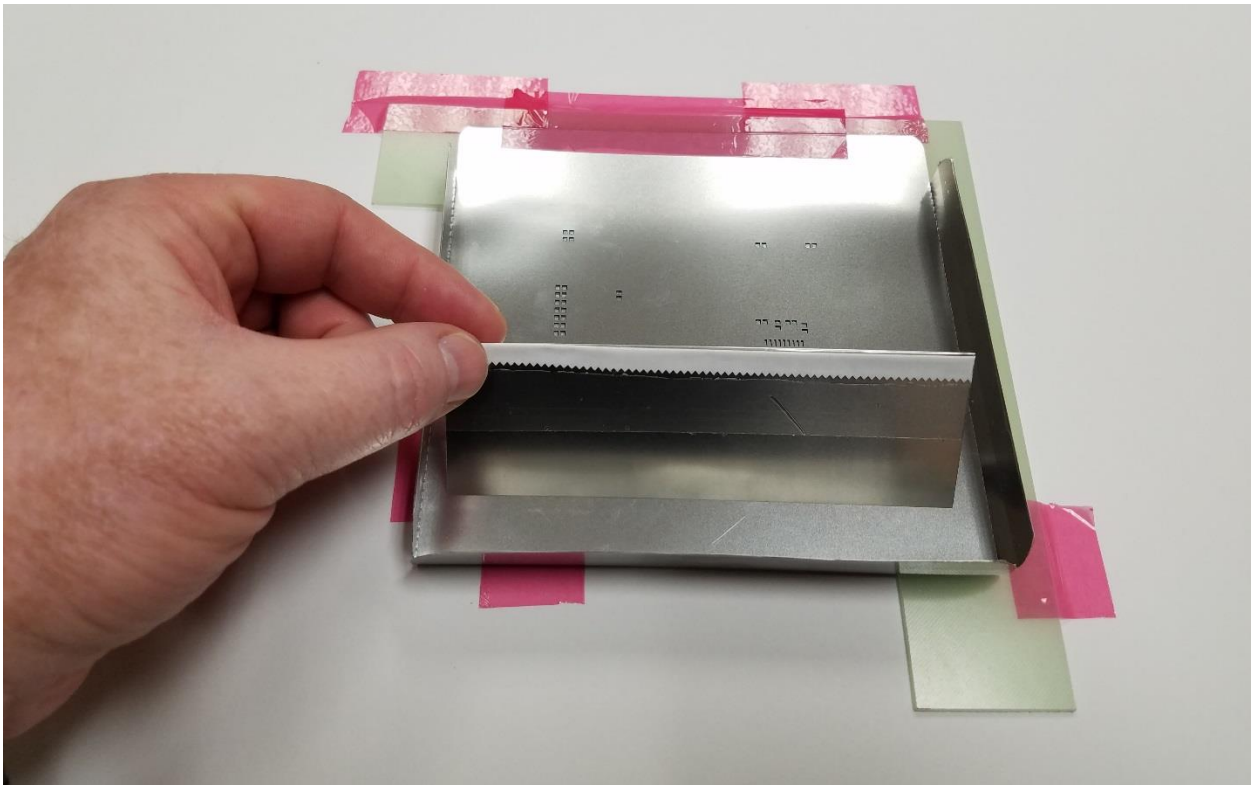


Next, apply tape to the flat edge of the stencil to secure it in place, but still allow the stencil to be raised and lowered to remove the PCB after solder paste has been applied.



Step 5: Apply Solder Paste

You're now ready to apply solder paste. Begin by adding a row of solder paste across the stencil. Use the included squeegee to drag the solder paste across the stencil which will deposit solder paste through the holes in the stencil and on to the PCB.



After applying the solder paste, remove the PCB from inside the alignment brackets. For multiple PCBs, insert the next PCB inside the alignment brackets and repeat Step 5. Now your board is ready for assembly!

That's it! For additional assistance, please contact the Bay Area Circuits customer service team at support@bacircuits.com.