Preparing Electrical Contacts

This page is a draft of the user manual entry on preparing electrical contacts on printed sensors.

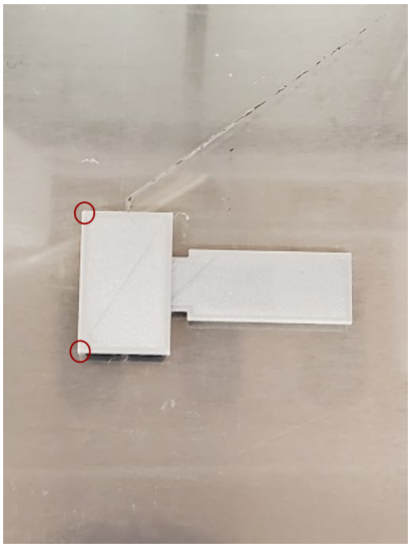
Materials

This section is not finalized as we have not yet fully established our materials.

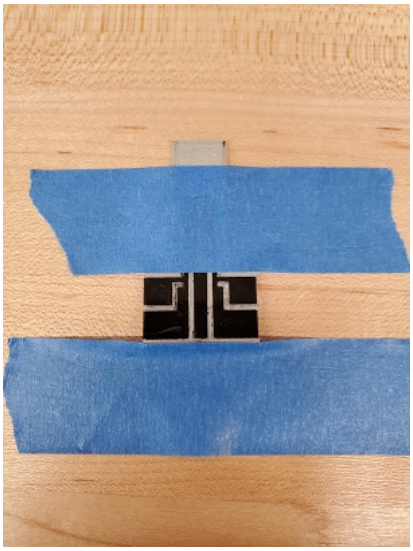
- Printed sensor
- A dull and flat blade
- Electrical wire (preferably solid core)
- Conductive adhesive (Conductive tape, silver paint or epoxy)
- Painter's tape

Procedure

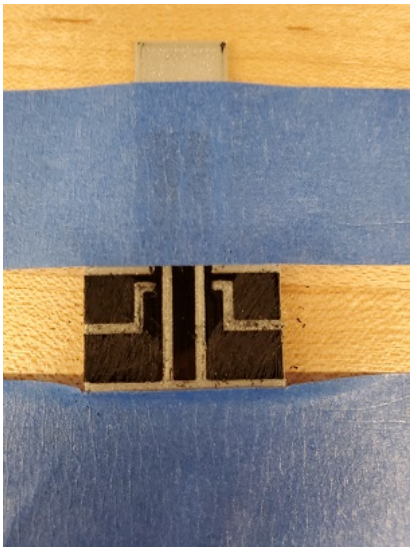
1. Using a blade with a dull and flat tip, pry the sensor of the print bed at the corners of the sensor base (highlighted in the image below).



2. Place the sensor on a flat table with an easily cleanable surface. Tape the sensor to the table using standard painter's tape, as shown in the image below.



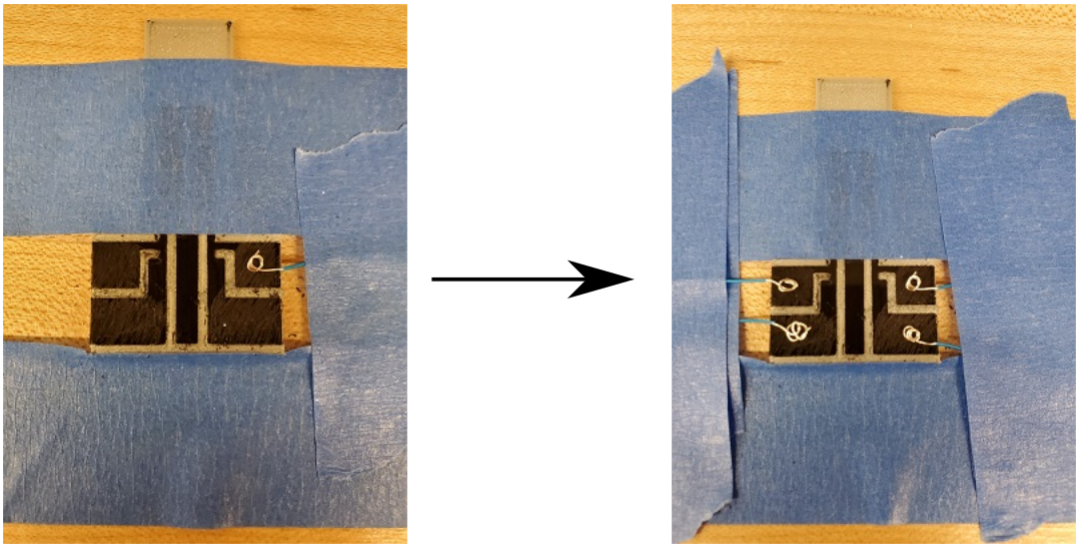
3. Using a flat blade, gently scratch the surface of the electrical contacts. The roughened surface will allow for better adhesion to silver paint or other adhesive.



4. Cut four approximately equal lengths of solid core electrical wire. Strip an equal length off each side of every wire. Curl one end of each wire into a U or loop shape. Place the curled end of each wire on the middle of each contact pad. Tape the wire to to the table, as shown in the image below, to secure the wire position.

NOTICE

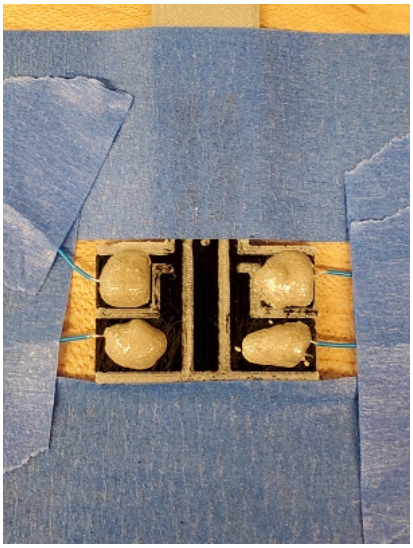
Note: Ensure that each wire is in direct contact with the electrical contacts, as failure to do so could result in poor electrical contact or open circuits.



5. Apply a small amount of silver paint to each wire as per section **Using Conductive Paint**.

NOTICE

Note: Ensure that you are familiar and comfortable with the use of conductive paints. Applying too much can cause the liquid paint to spread out and connect to another another electrical contact. This will short circuit the sensor, causing it to become non-functional.



6. Let the silver paint dry at room temperature for 12 hours or as per instructions provided by the silver paint manufacturer.