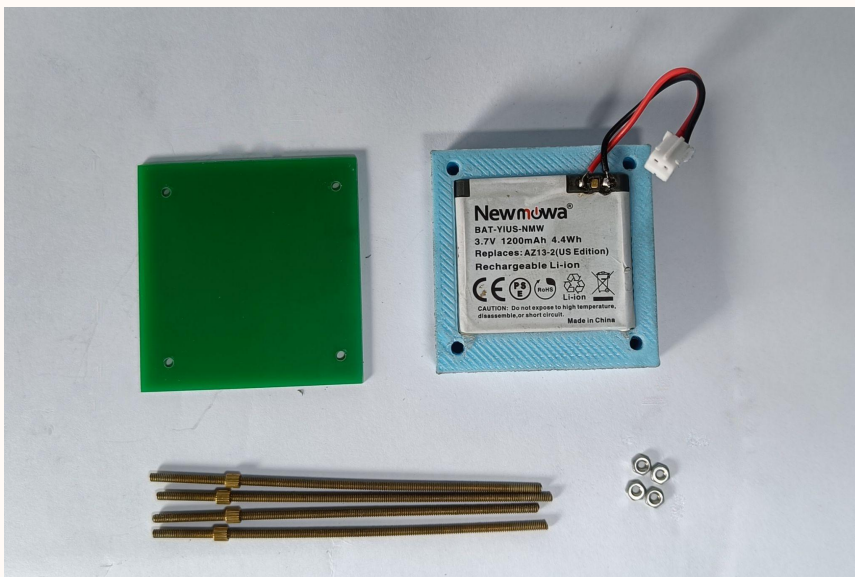# PikoQube: PocketQube Training Kit
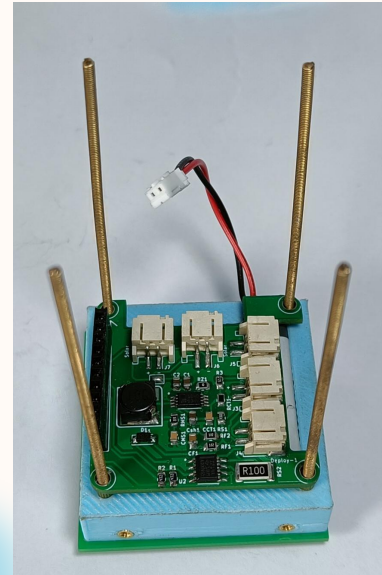
Assembly Instructions

ORION
SPACE

1. Solder the connector to the battery.
Insert the battery to the battery casing and screw the back panel along with 4 long headers and nuts.
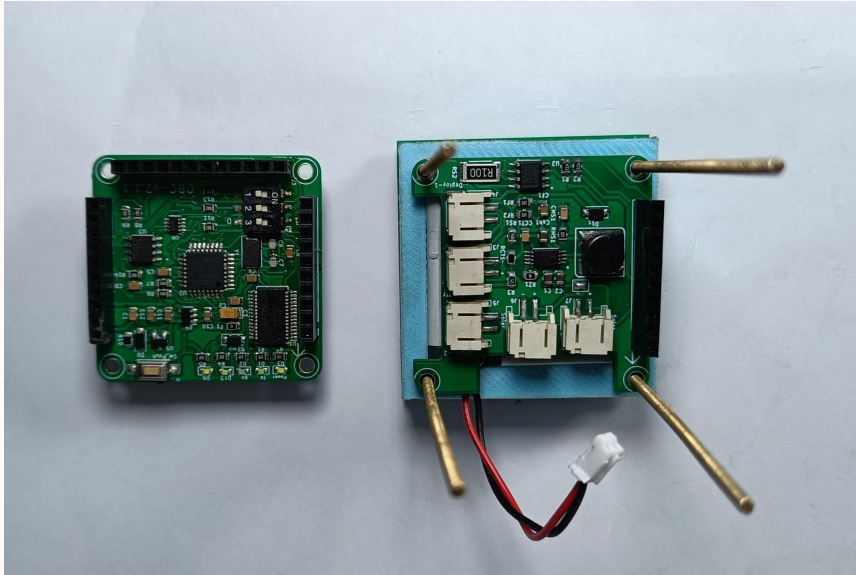
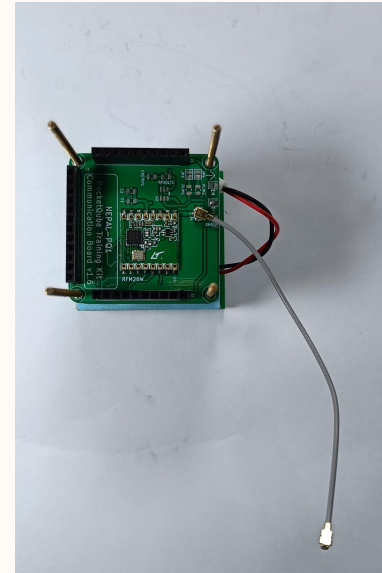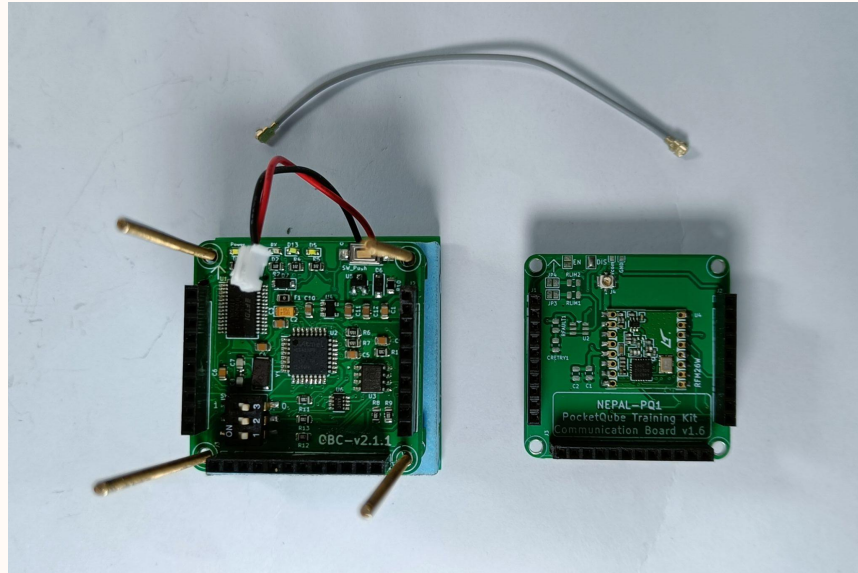**2.** Place the EPS with the right alignment as shown in the photos below.

3. Place the OBC above the EPS.
Look into the arrow sign in the boards which should align with each other.

4. Place the COM Board above the OBC.
Also connect the UFL Connector in the COM Board whose other end should be connected to the antenna panel.


Never disconnect the antenna while the transceiver of the COM board is transmitting data. It can damage the transceiver.
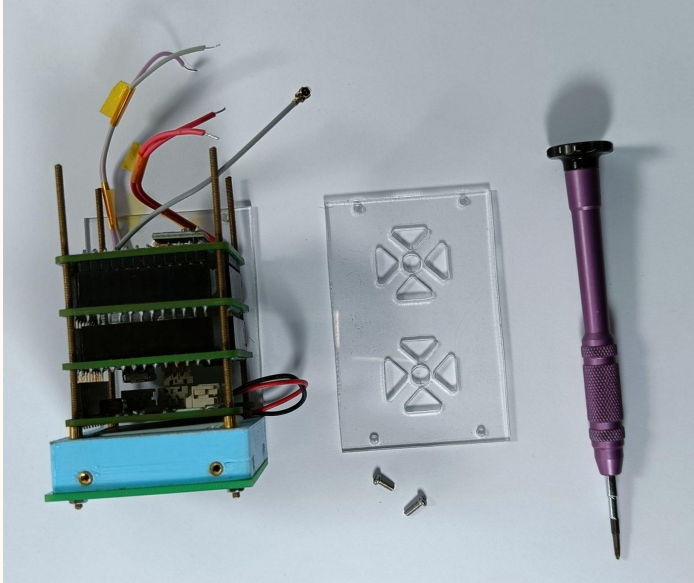
5. Place the payload board above the COM Board.
If the wires are not soldered, solder two set of wires. Once connects the deployment resistor and another connects to the feedback switch of the antenna panel.
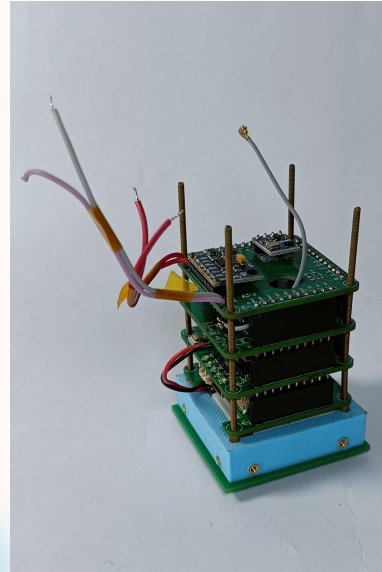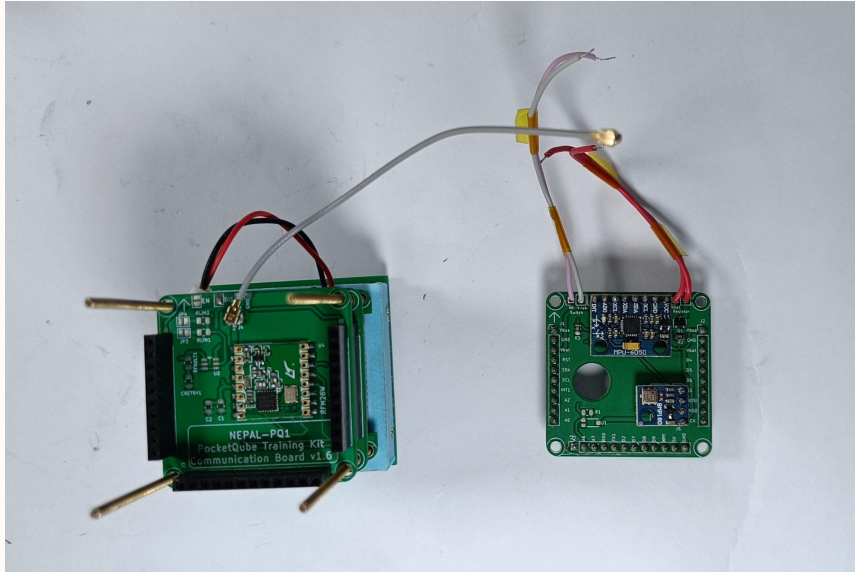
6. Screw side panel A to one side with the bolts provided to one side.
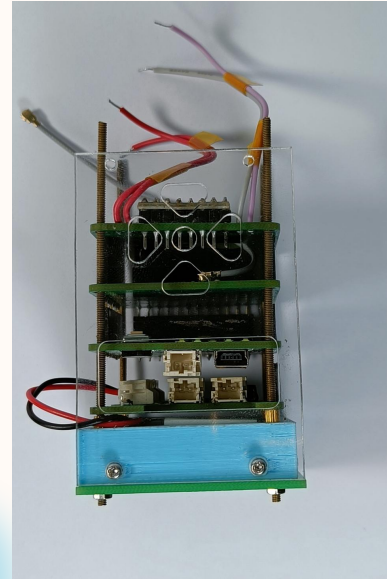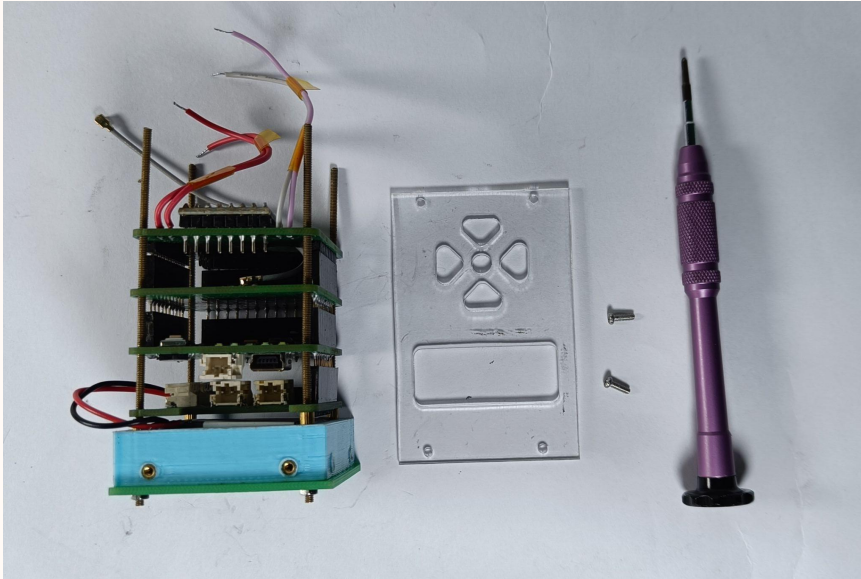
**7.** Screw side panel B to the other side with the bolts provided.

8. Screw the 3d printed top panel with the side panels and adjust the height while aligning with the holes on the panels.
Also screw the solar panels on the top side. The solar panel has a JST female connector which should be connected to the EPS.
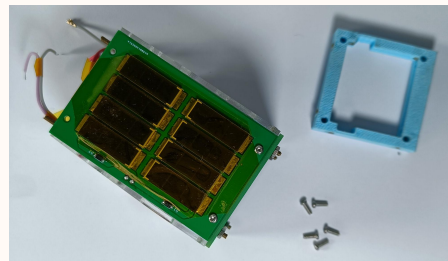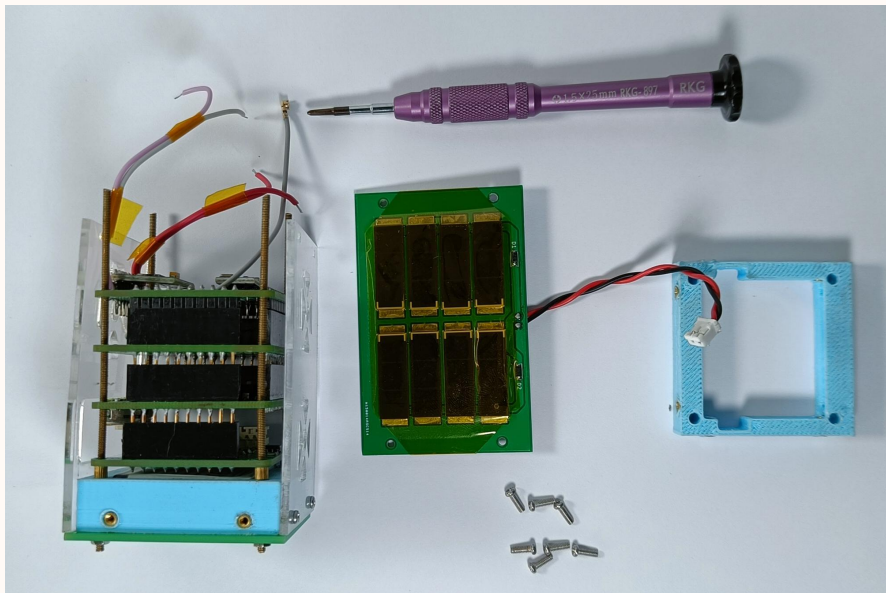
9. The deployment panel also know as Base Plate should be screwed now. It has two JST connectors which should be connected in the EPS. The kill switch turns the satellite ON or OFF.
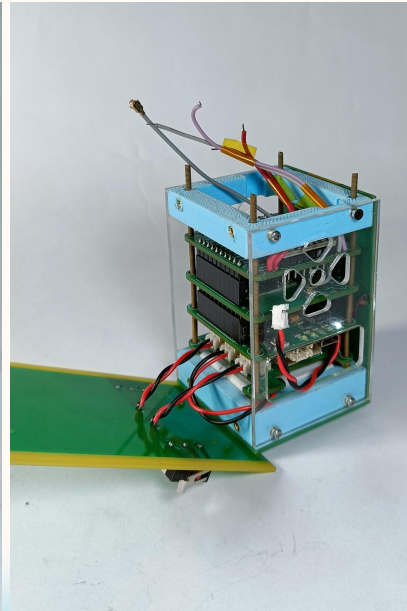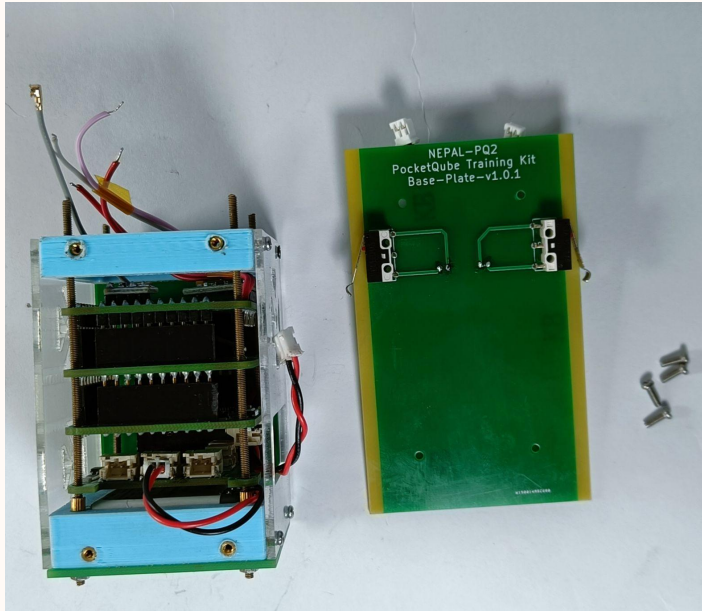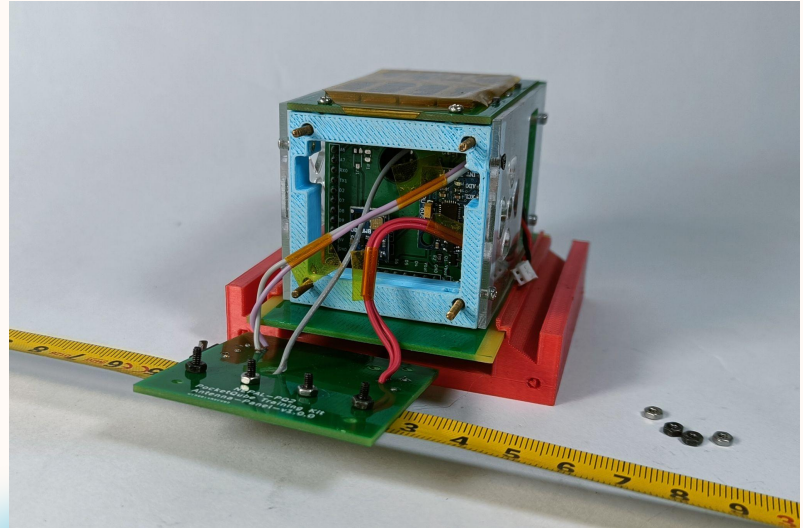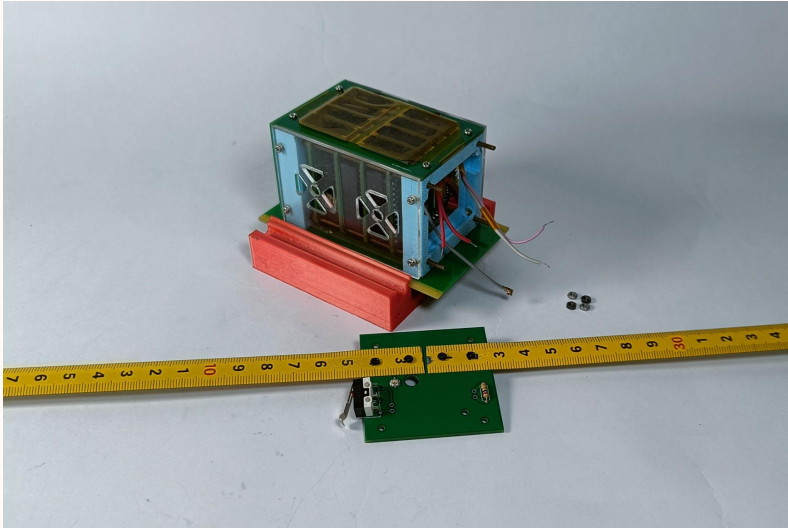

ON State when the
switches are not pressed
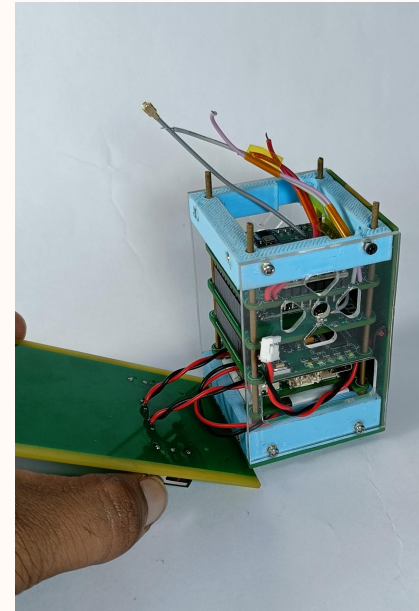
OFF State when the
switches are pressed

10. Screw the Antenna Panel above the 3D Printed Top Casing.
Solder the wires from the payload to the antenna panel: One for the resistor and the other for the Feedbacks switch.
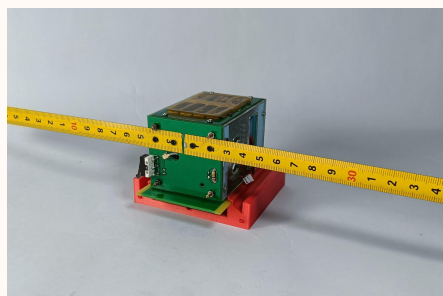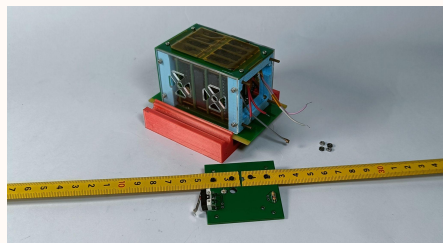
11. Screw the Antenna Panel above the 3D Printed Top Casing.
Solder the wires from the payload to the antenna panel: One for the resistor and the other for the
Feedbacks switch.
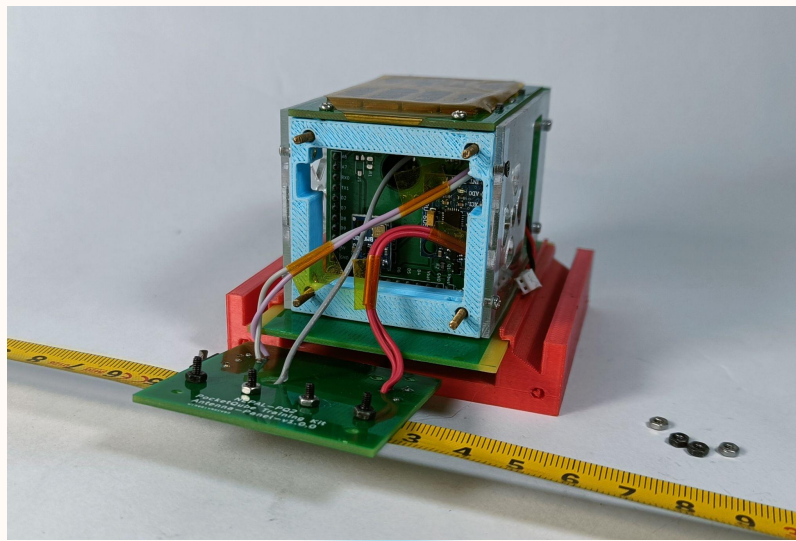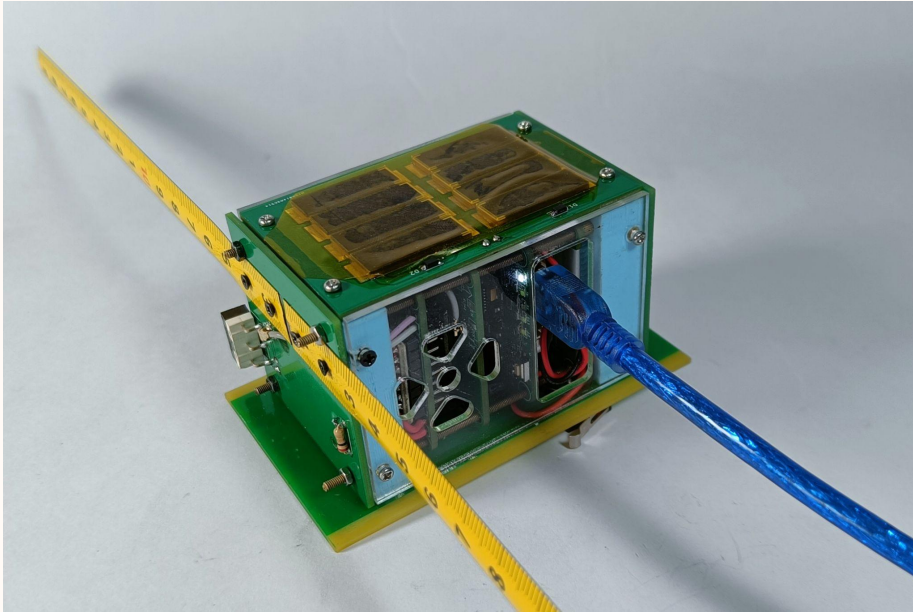
12. The system can be programmed by connecting the provided USB.
Download Arduino IDE and program it as Arduino Pro–Mini, 3,3V, 8MHz.
Program the blinky code found the the example section and you are ready to go further.

Do you have any questions?

orionspace.nepal@gmail.com
www.orionspace.com.np
www.picosatlab.com

Thanks!