

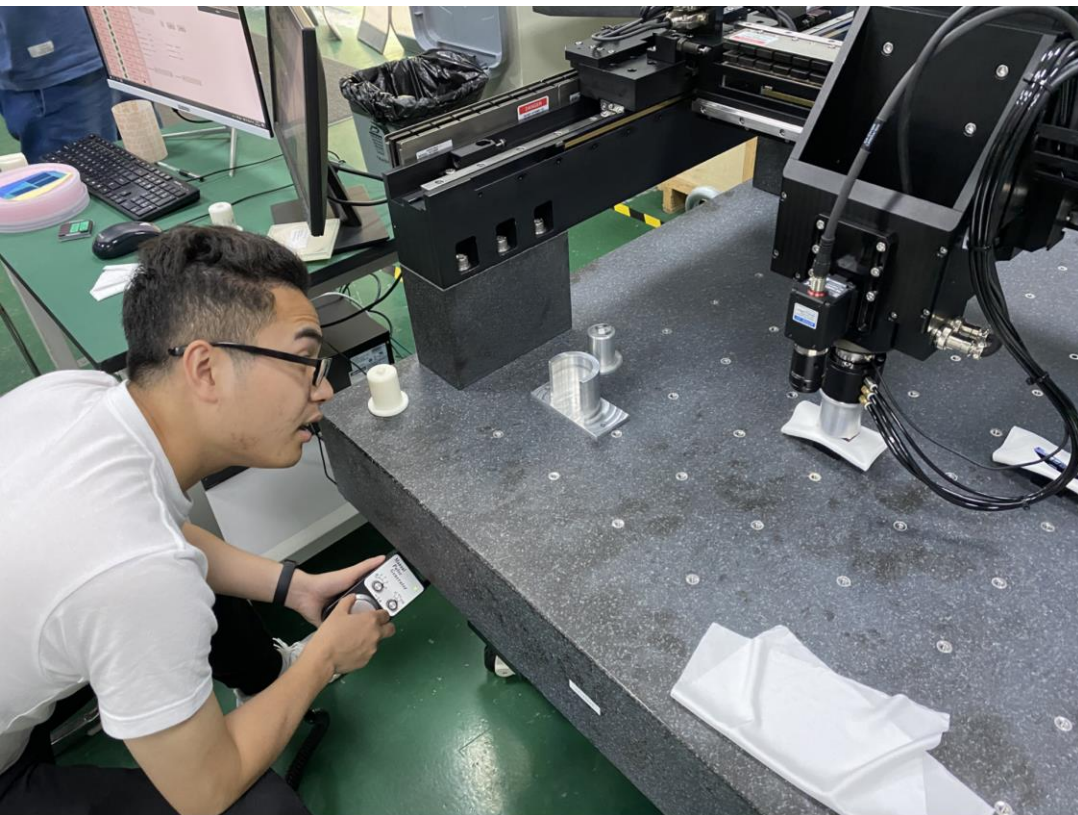
CEPC MOST2 prototype assembly

Xinhui Huang

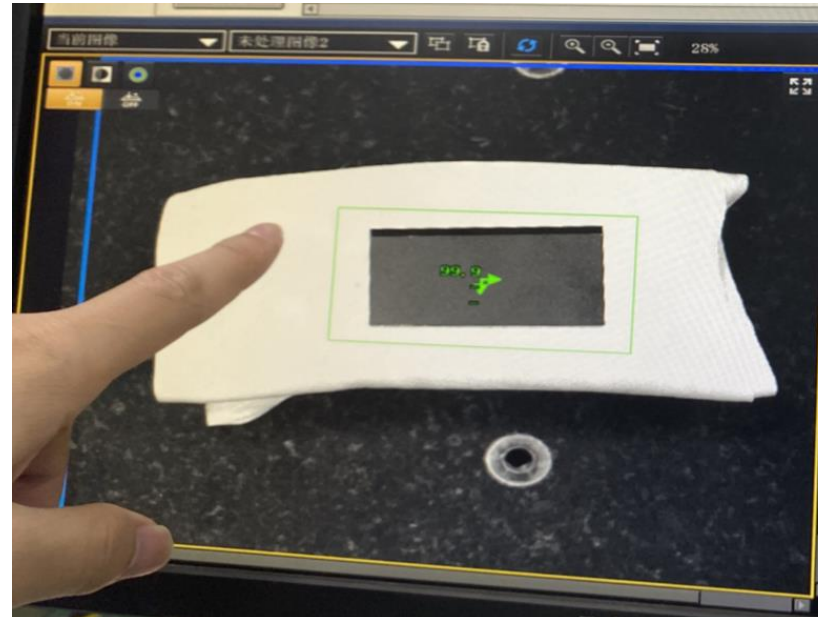
Gantry for vertex detector prototype assembly

- 3~5um good position resolution require high assembly precision
- Cooperate with domestic company on R & D Gantry automatic module assembly.
 - **Pattern recognition with high resolution camera**
 - Automatic chip pick-up and positioning
 - Automatic Glue dispensing

Gantry system



Pattern recognition

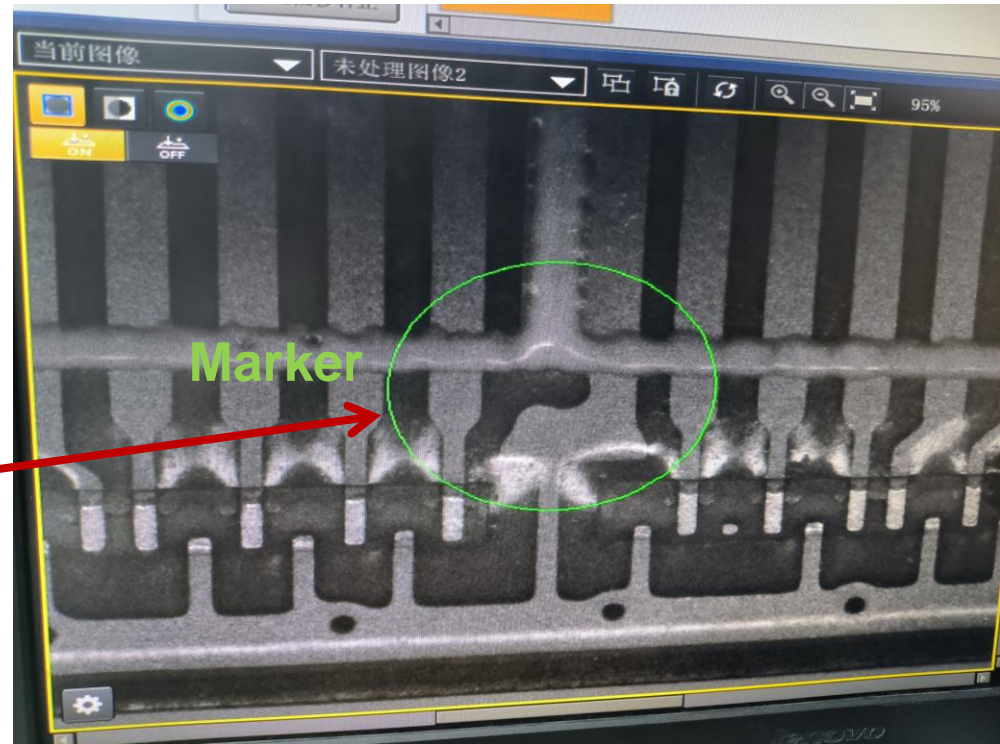
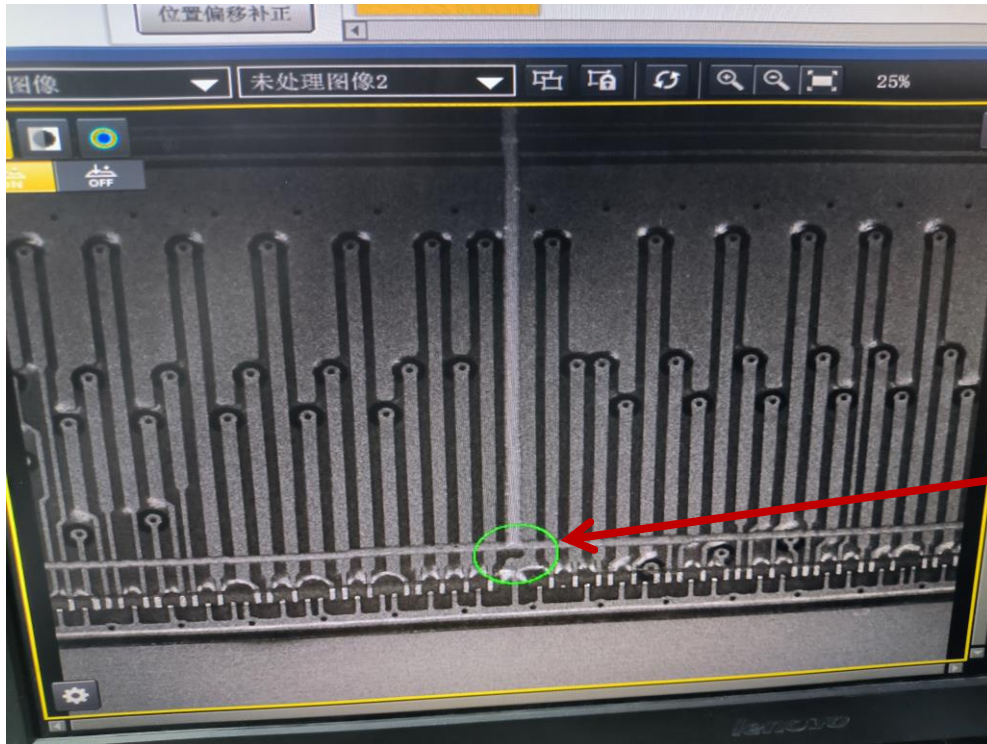
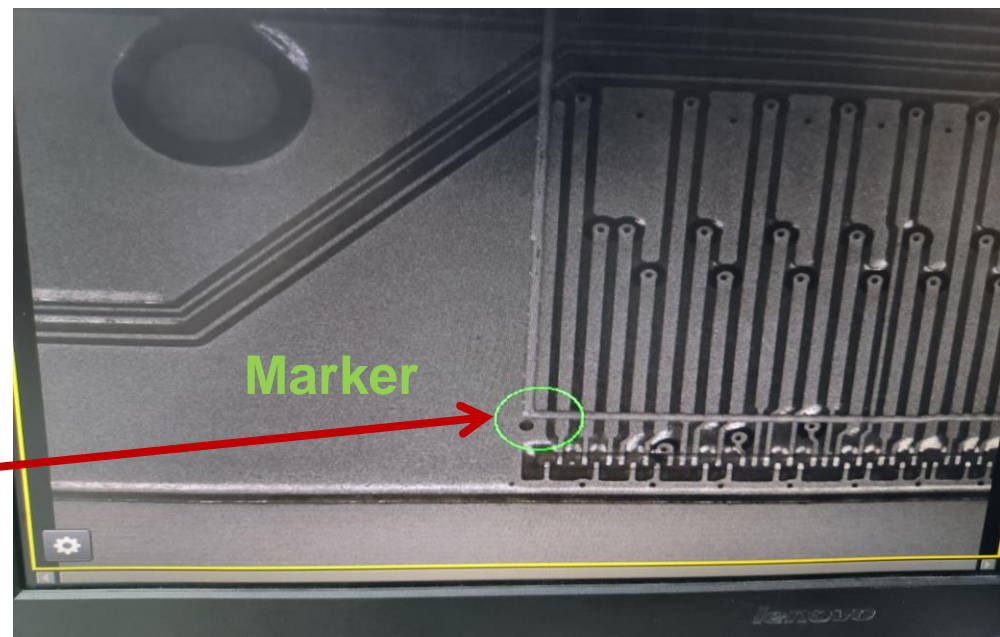
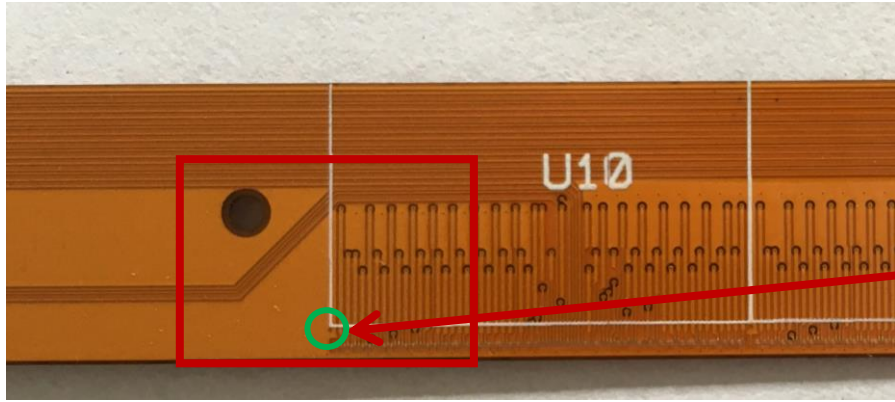


automatic glue dispensing



Markers

The markers are too small.

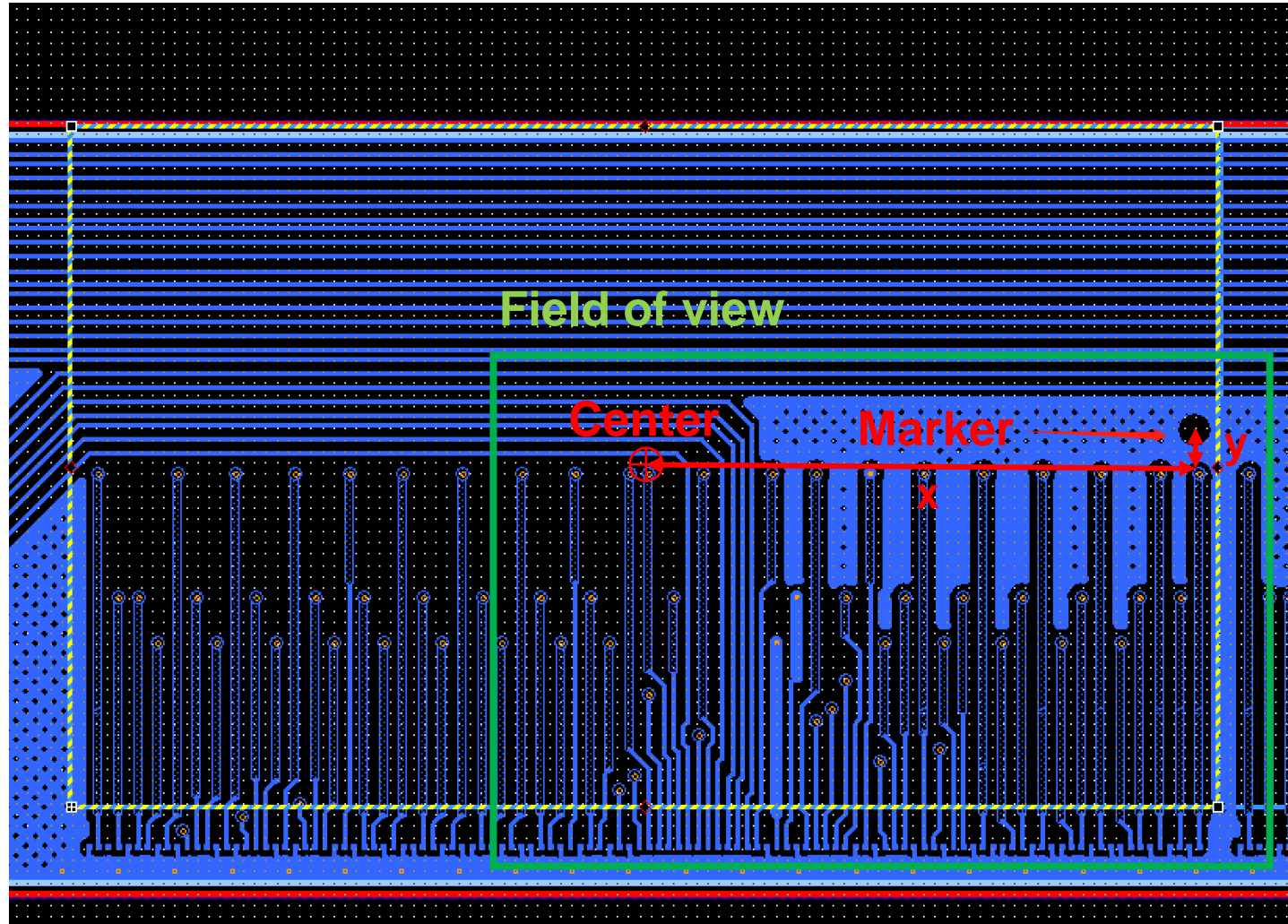


Cannot hold the shape

Markers

Plan:

- Reset and resize the markers in the **upper position** with **larger radius**.
- Locate the marker with its position relative to the center of the sensor.



Gluing test

Plan:

- Glue the glass on the flex cable.
- Thickness of the glass: 100 μ m.

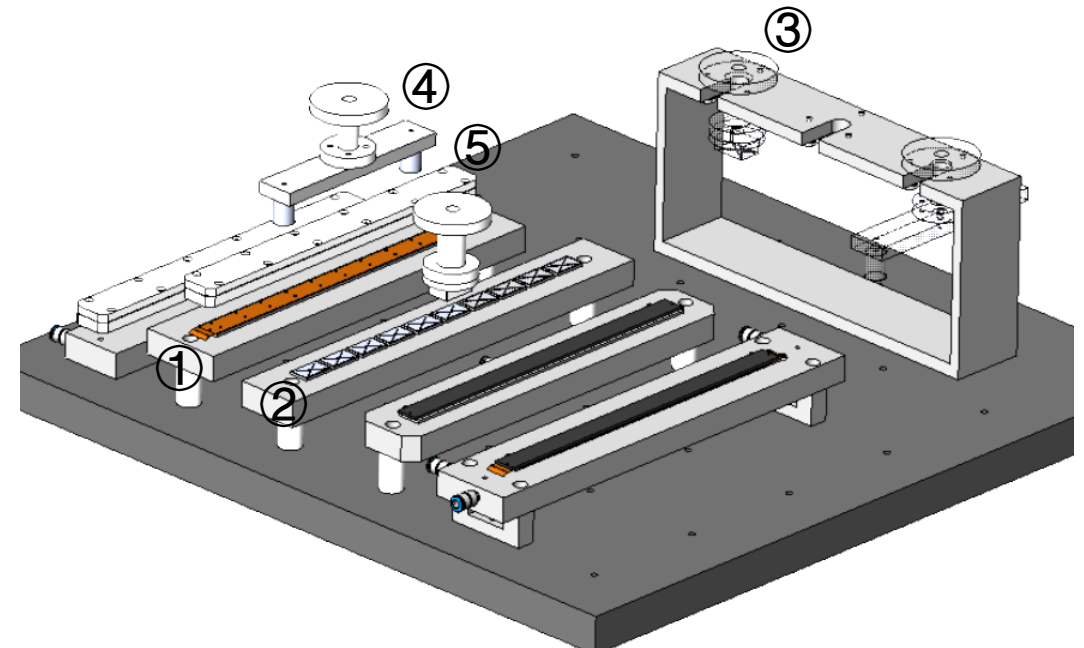
Glass is a bit wider than the flex cable v1.

The glass is designed to fit the new version of the flex cable.



Tools:

- ① Vacuum chuck for flex;
- ② Vacuum chuck for sensors(glass);
- ③ Sensor pick-up tool;
- ④ & ⑤ Sensor alignment pick-up tool;
- ⑥ Vacuum chuck for single sensor.



From Jinyu's talk