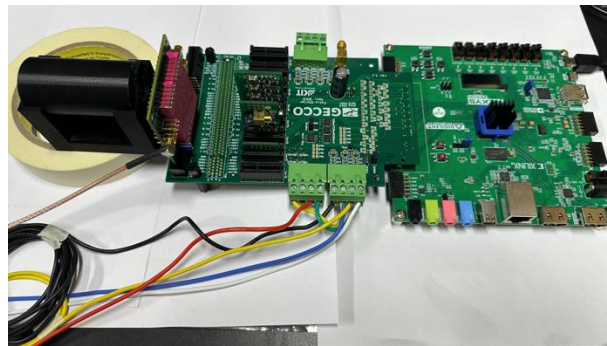


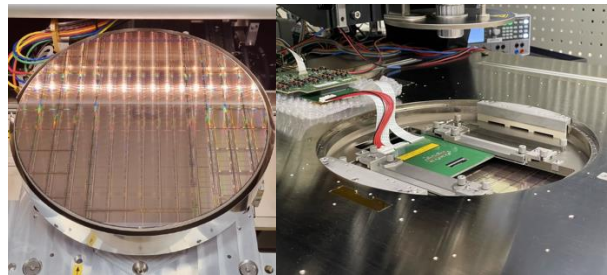
# **Status of AstroPix chip QC preparation**

**Sanghoon Lim**  
**Pusan National University**

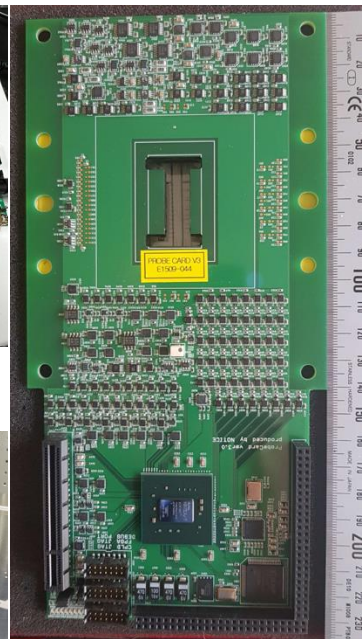
- Probe card design for V3
  - Initial discussion with NOTICE based on the design file
  - Still under discussion about details
- AstroPix V3 lab test
  - Recently, successful operation with the up-to-date A-STEP firmware and software
- Wafer probing for wafer-level test
  - Under discussion with the ALICE ITS3 team and several wafer-probing companies in Korea to test ALICE ITS3 ER1 wafer
- Single-chip test machine
  - Initial design for a prototype from C-ON tech
  - Machine validation will be done with ALPIDE, then move to AstroPix



**AstroPix V3 lab test setup**



**ALICE ITS3 ER1 wafer probing**



**Probe card for ALPIDE**



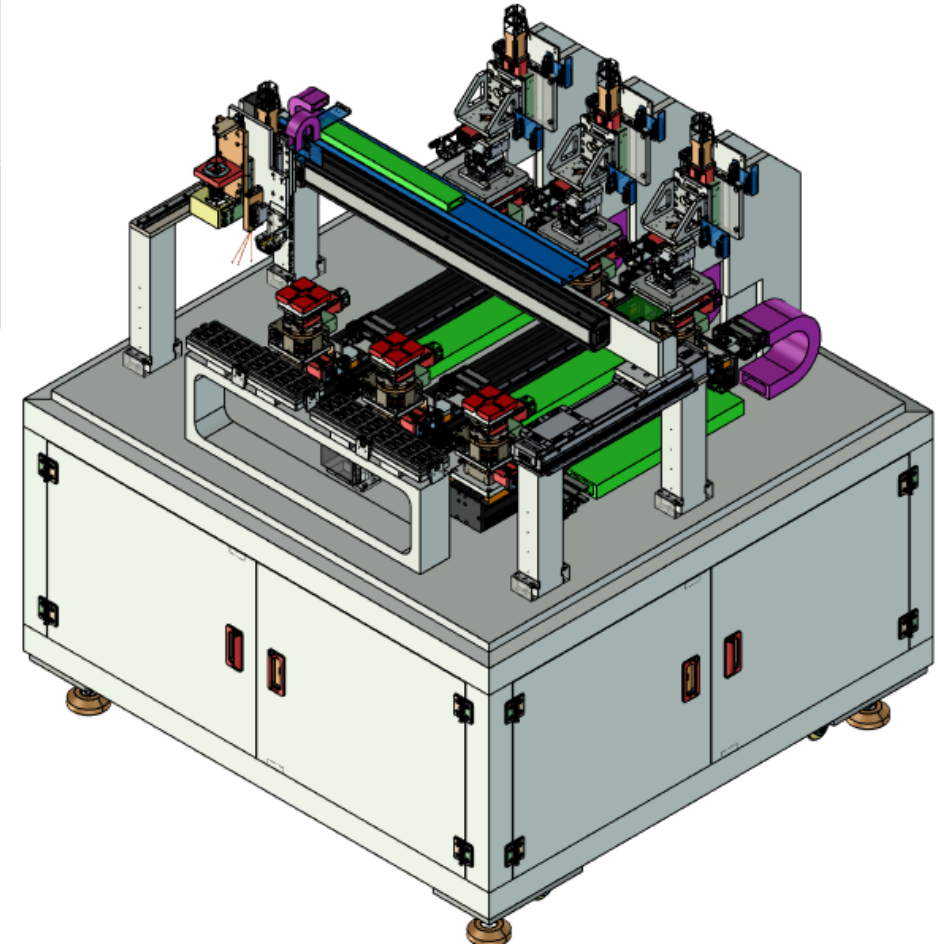
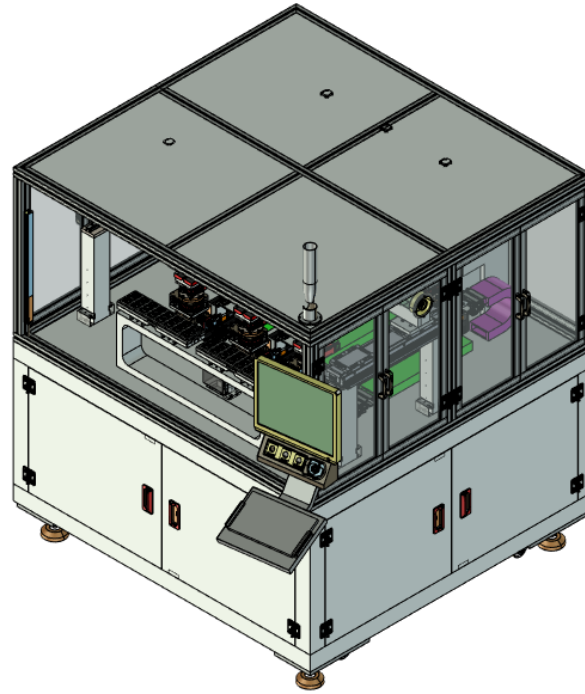
# Probe Test System

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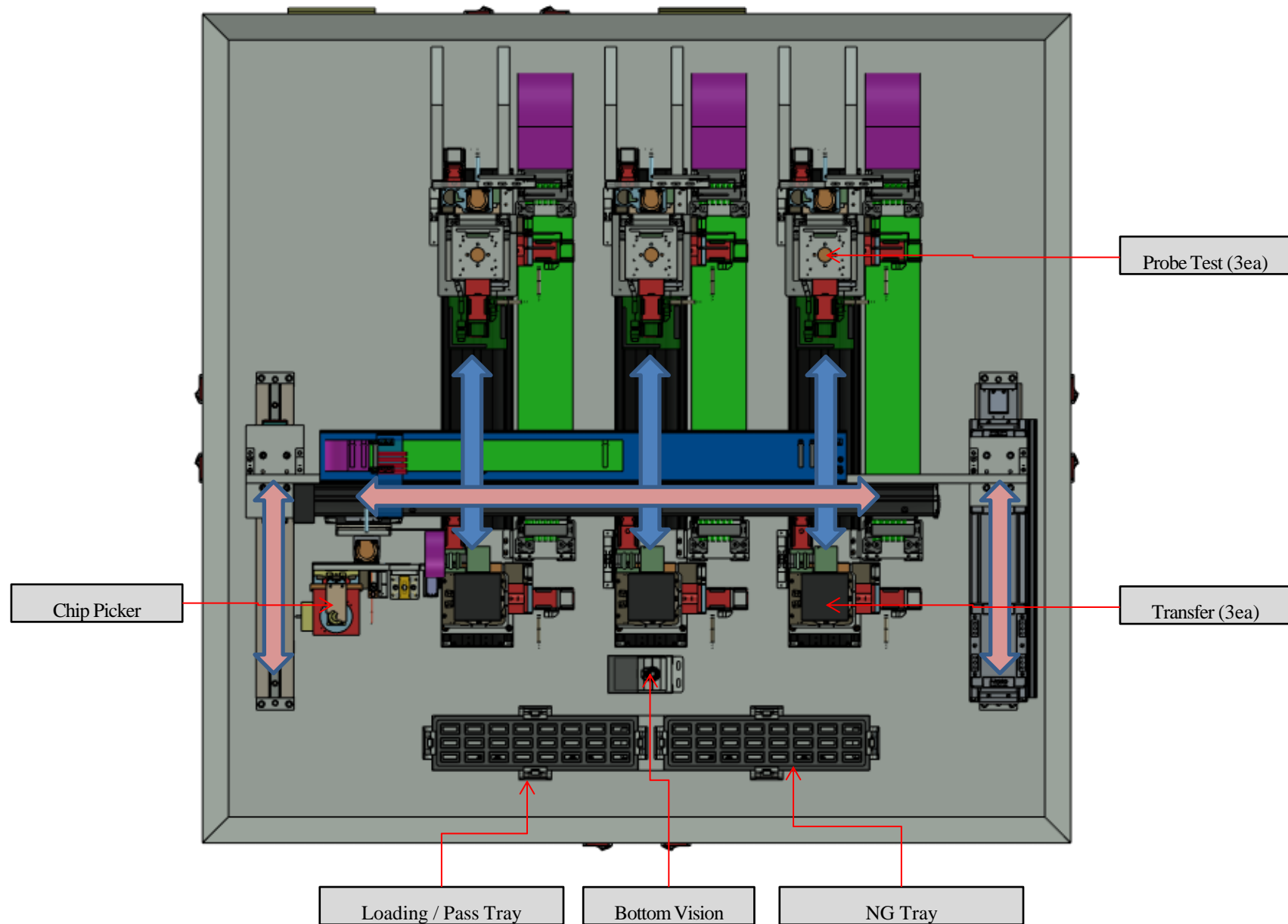
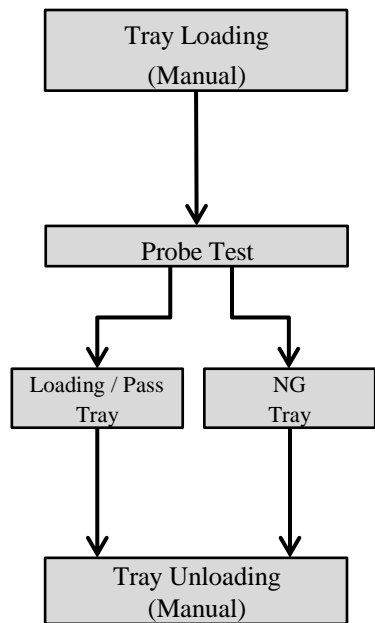
## ➤ Description

- Probe Test System
- Tray Loading : Manual
- Probe Test Motion : Z Axis – Servo Motor
- Chip Picker Motion : X,Y,Z Axis - Servo Motor
- Transfer Motion : Y Axis - Servo Motor
- Vision : Dispensing Align Top/Bottom Vision



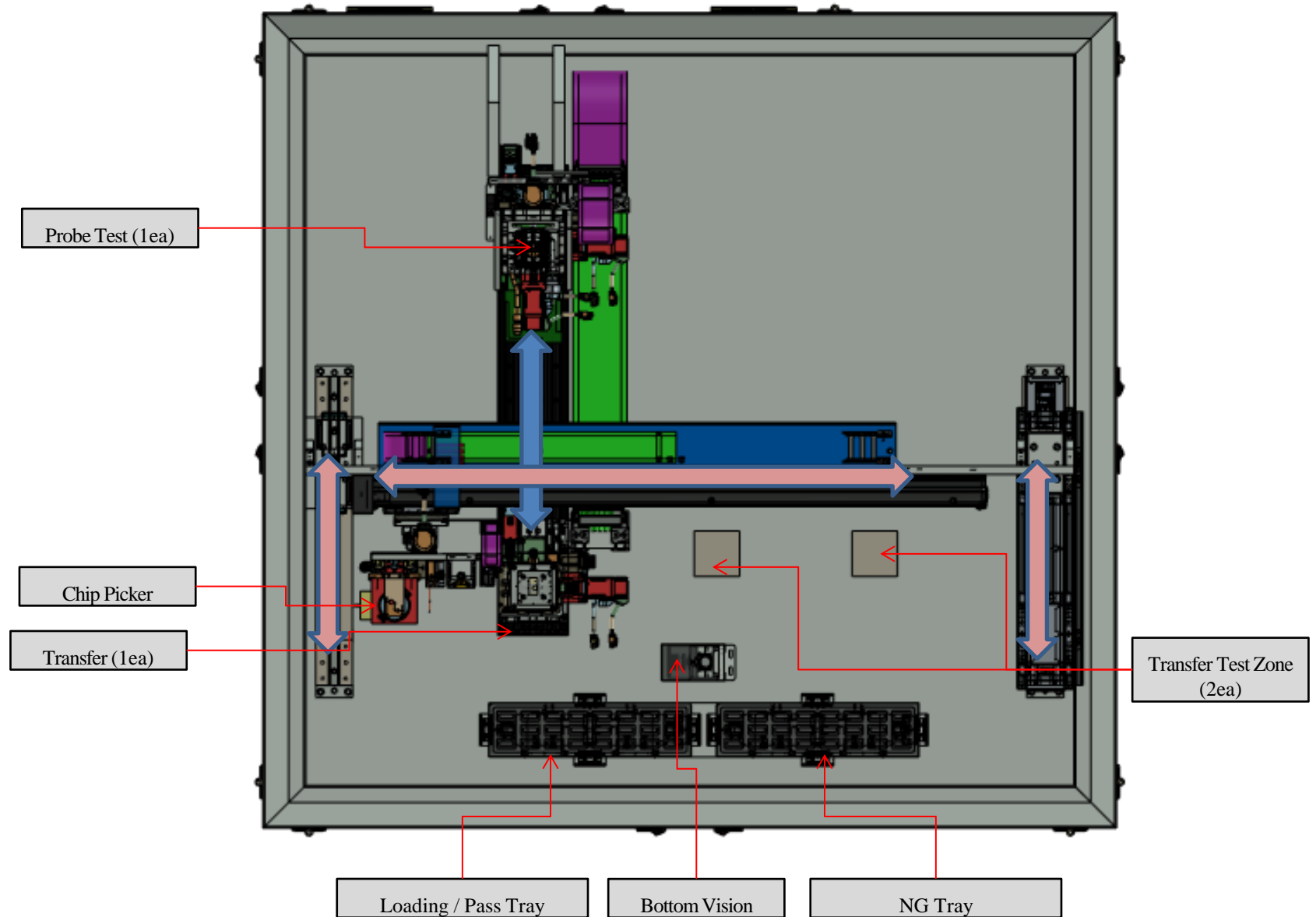
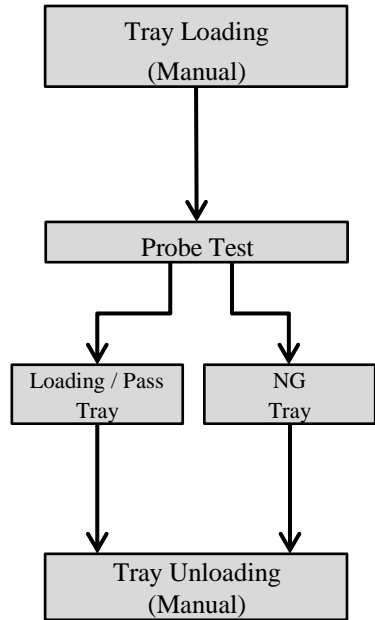
# Process Flow (A TYPE)

## Process Flow

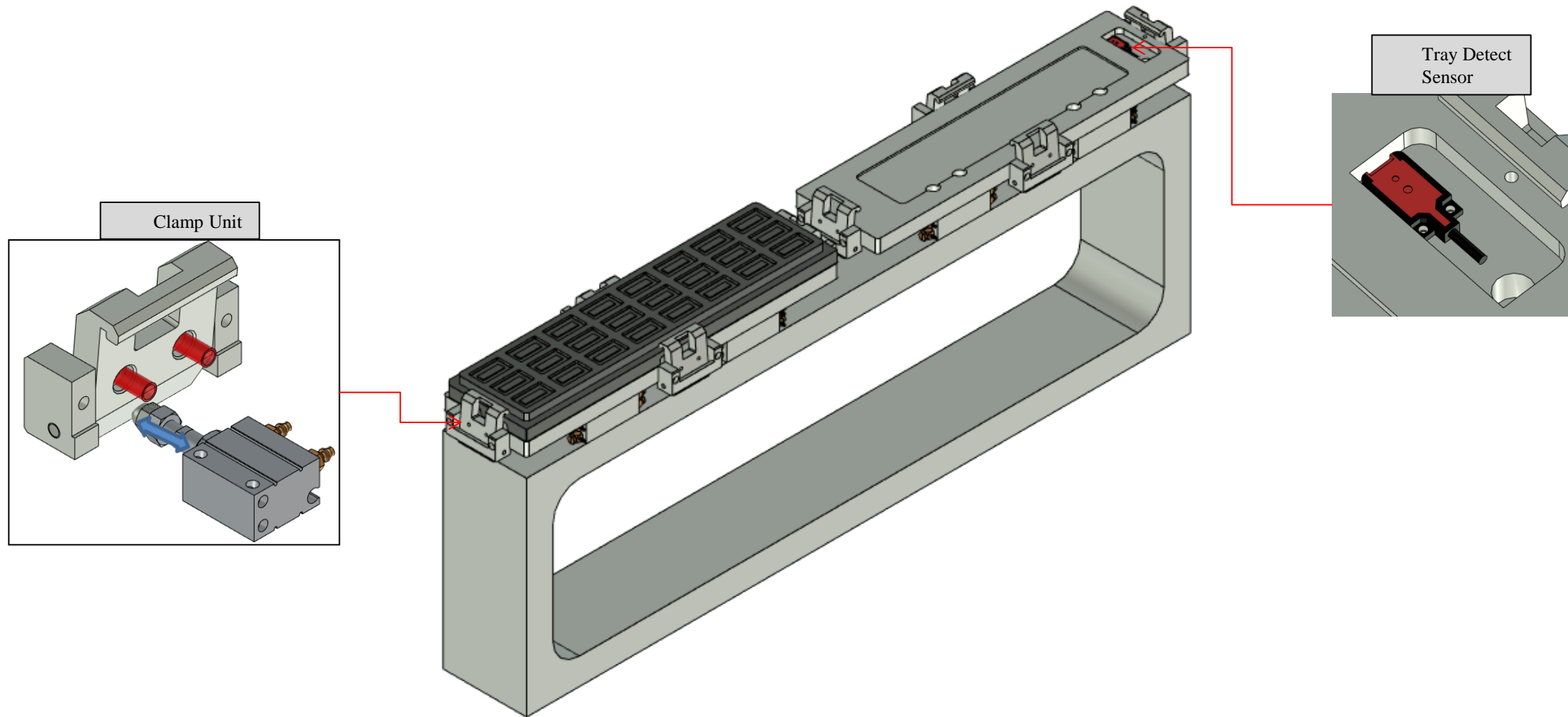


# Process Flow (B TYPE)

## Process Flow

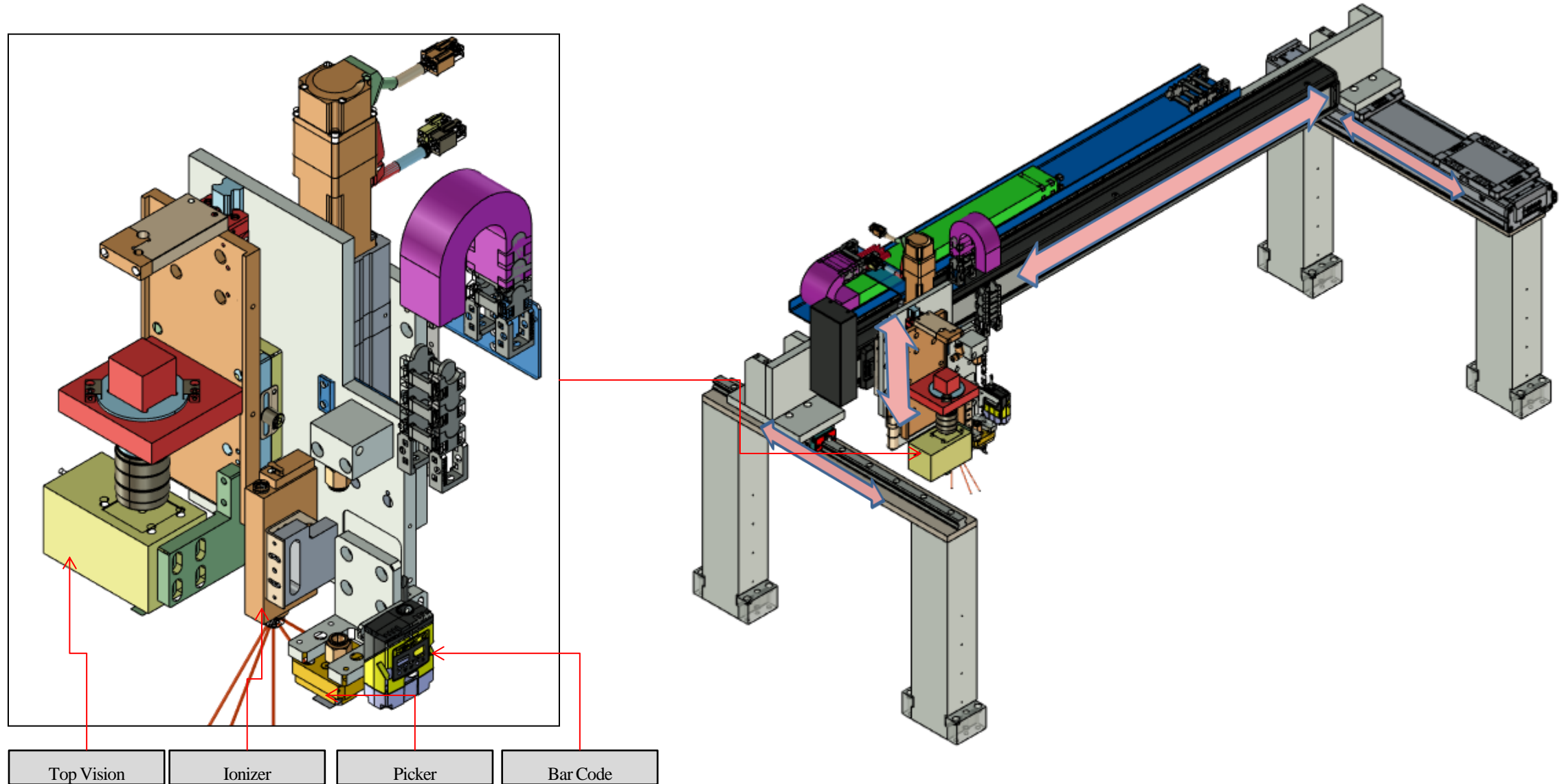


## Tray Loading



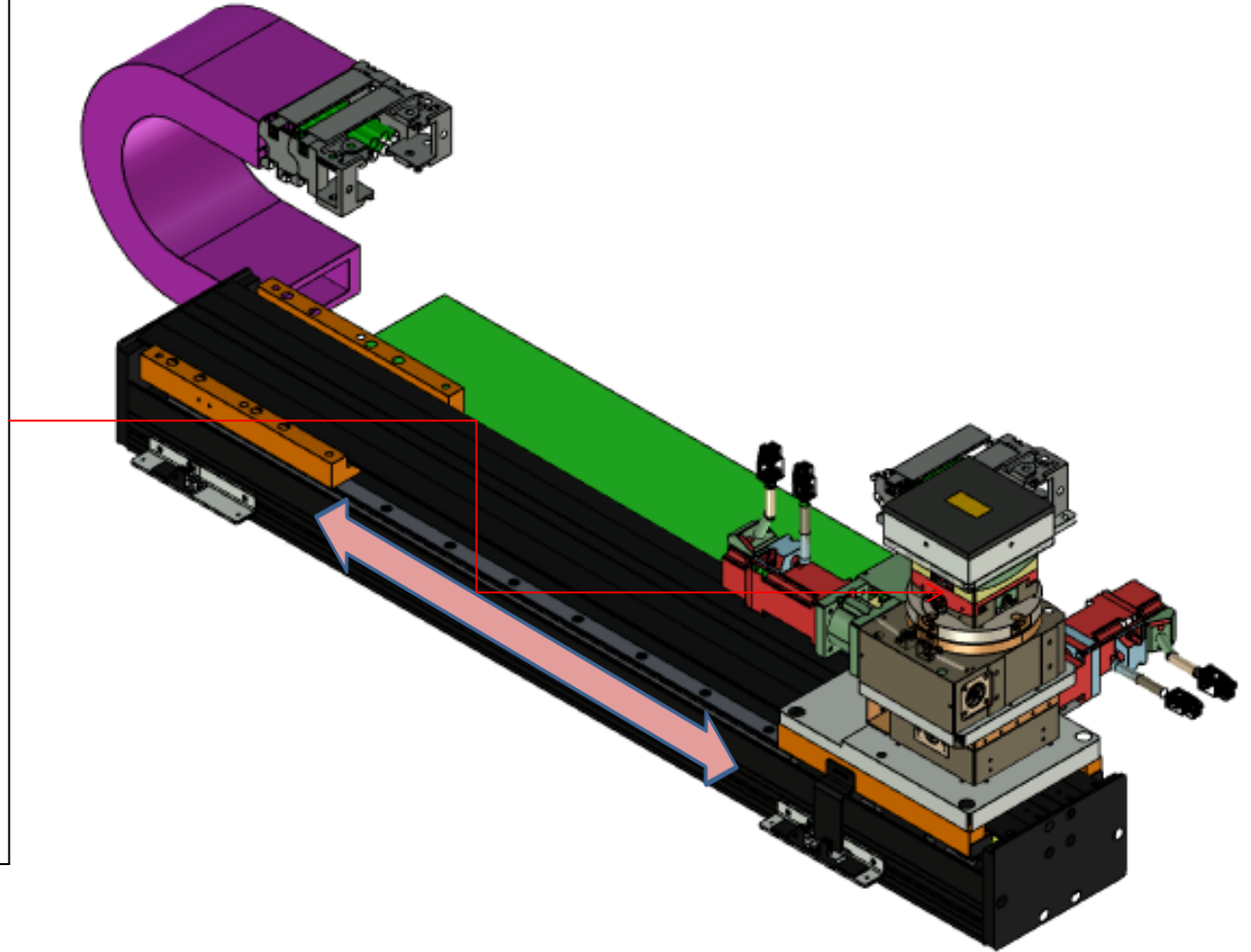
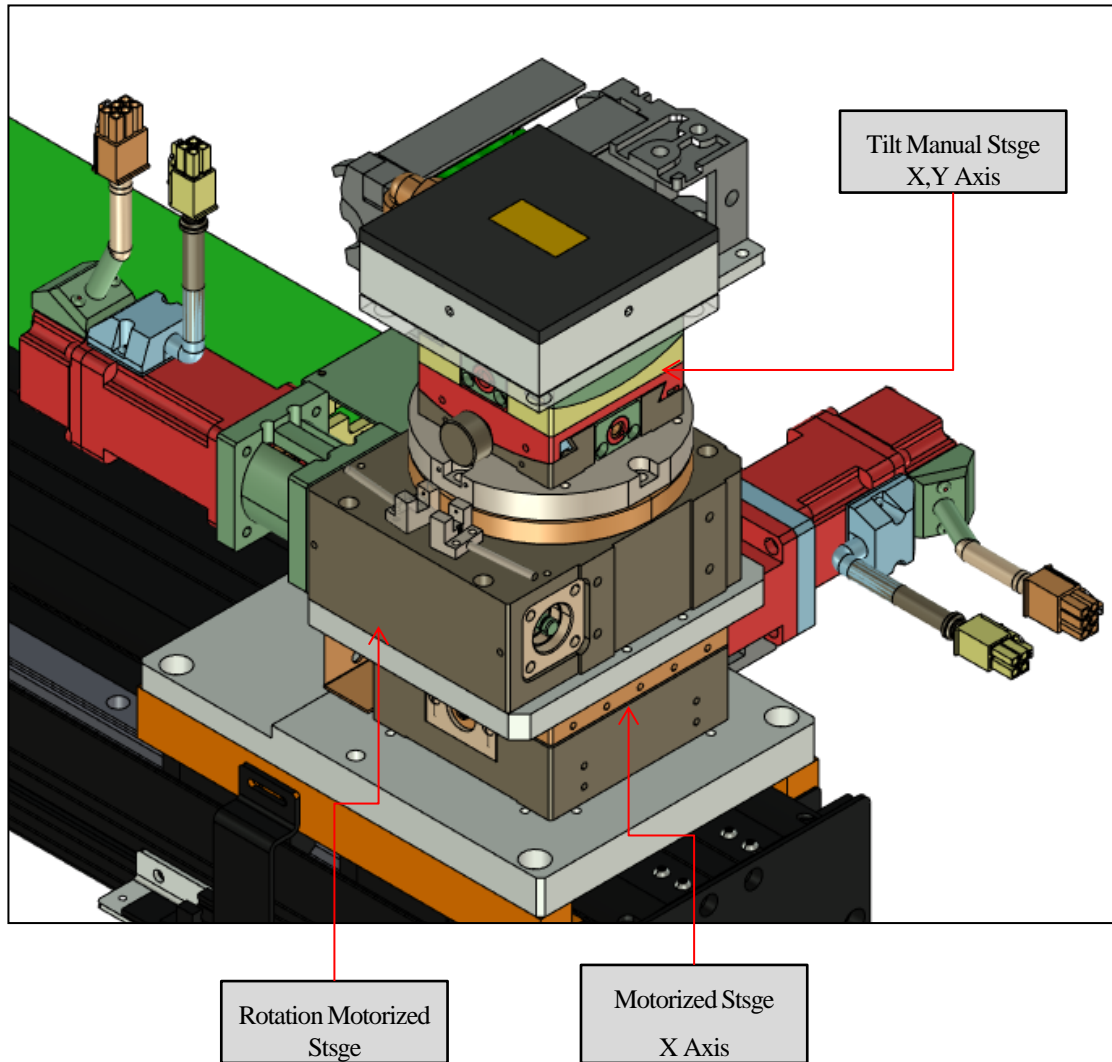


# Chip Picker

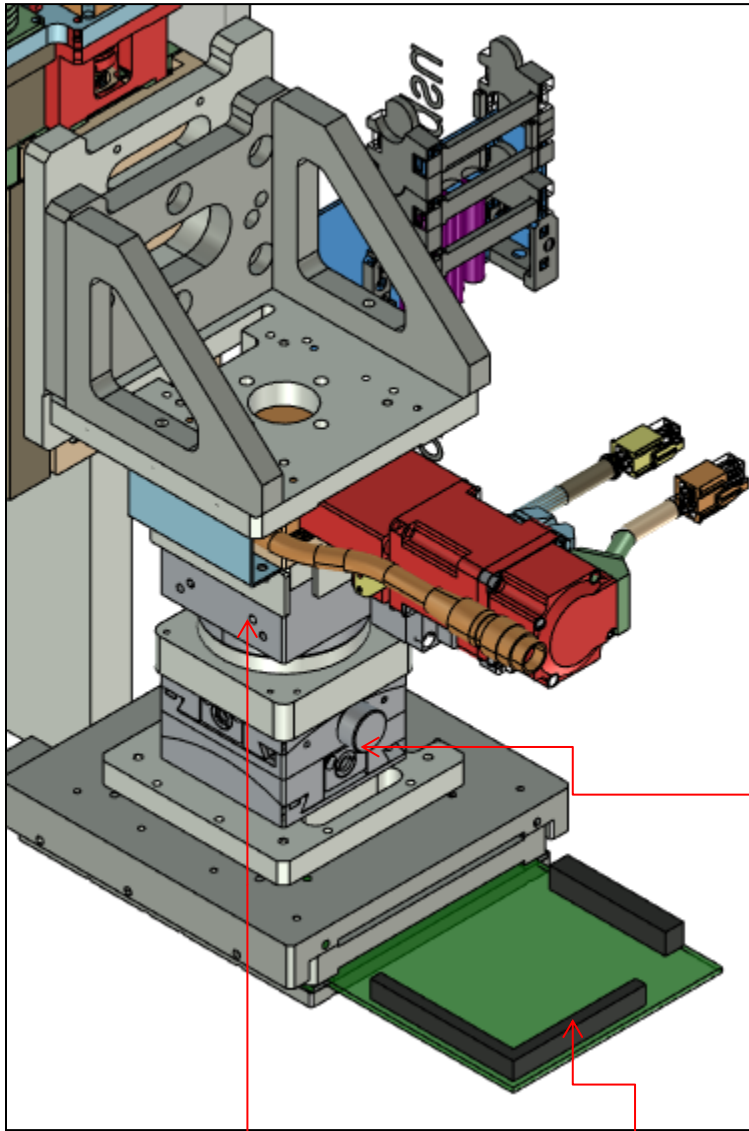




## Transfer (3ea)



## Probe Test (3ea)



Rotation Motorized  
Stsge

Probe Test Board

Tilt Manual Stsge  
X,Y Axis

