

PXD Mechanics



CK for Tscharlie Ackermann

Diamond Location

Assembly Tools

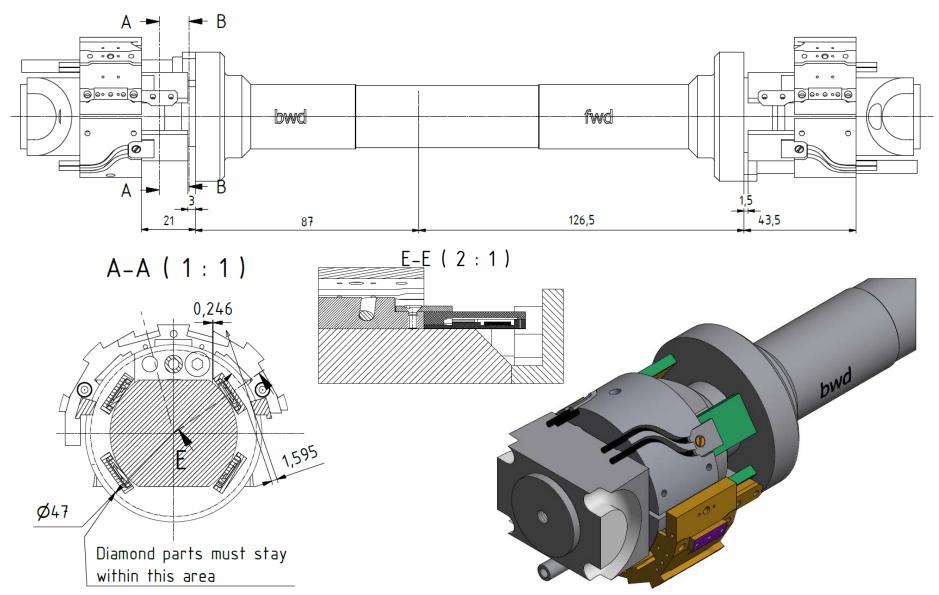
BEAST Phase 2 Mechanics Design

(IBBelle & AIM discussed separately)



BEAST Phase 2: Diamond Support

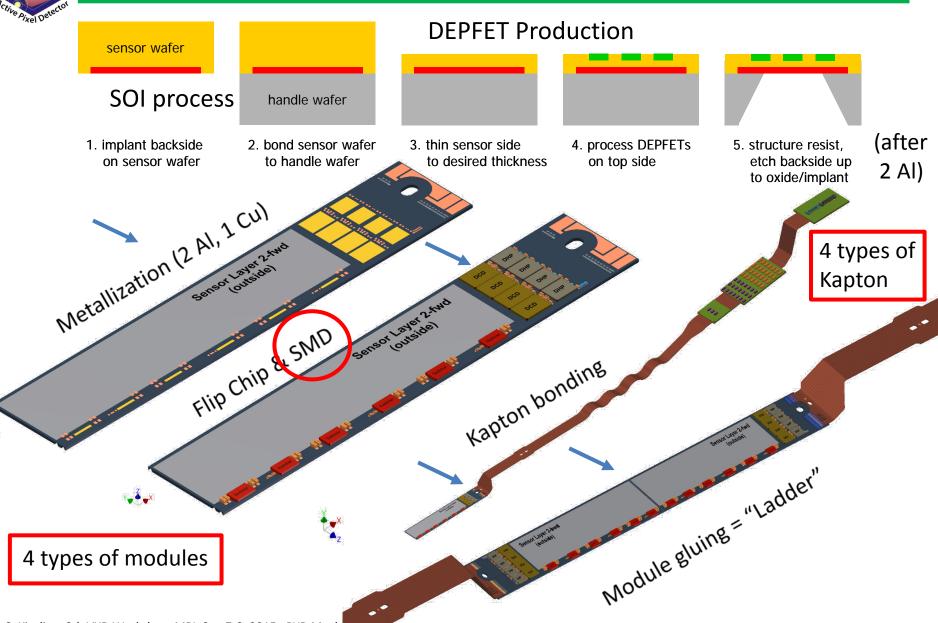






Production Steps of PXD Ladders



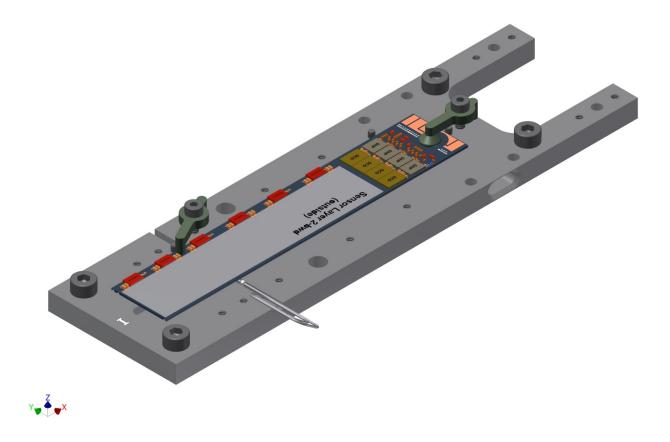




Mechanics: Ladder Assembly Tools (I)



Principle: Sensor fixed in variable transport jig, will not leave the jig until installed on the SCBs

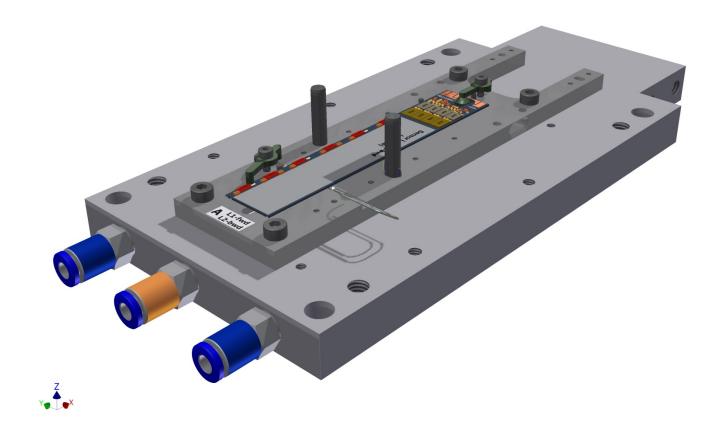




Mechanics: Ladder Assembly Tools (I)



Principle: Sensor fixed in variable transport jig, will not leave the jig until installed on the SCBs

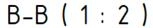


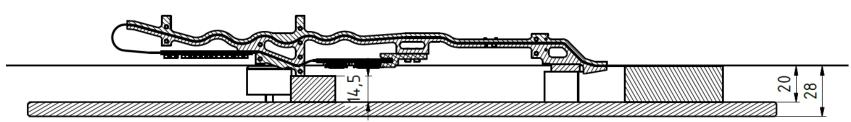


Mechanics: Ladder Assembly Tools (II)



Added complexity: how to manage the long Kapton cable





Aufbau für Kapton L1-fwd

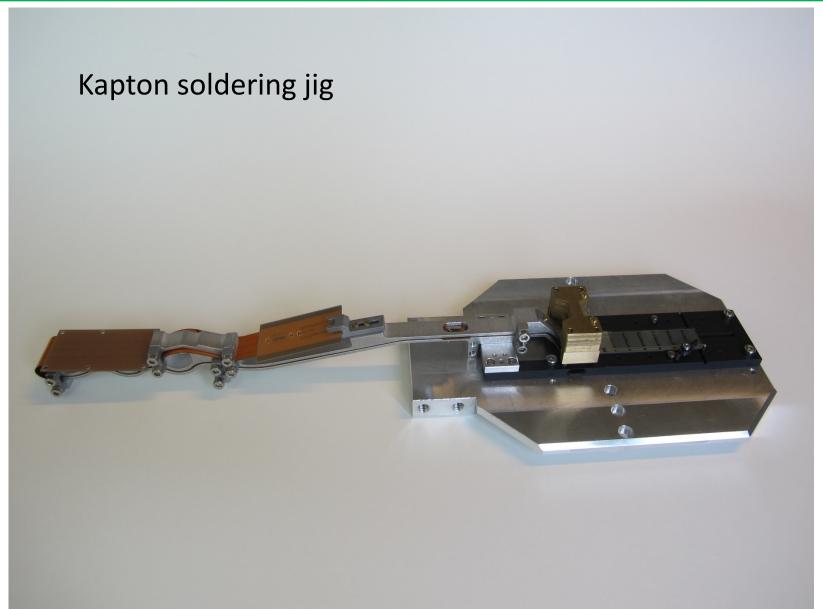
Jig needed to solder Kapton onto the sensor

(afterwards wire bonding of Kapton to pads on sensor



Mechanics: Ladder Assembly Tools (III)

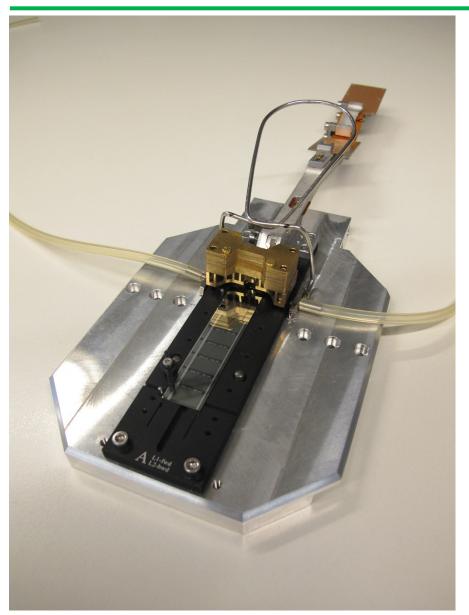






Mechanics: Ladder Assembly Tools (IV)





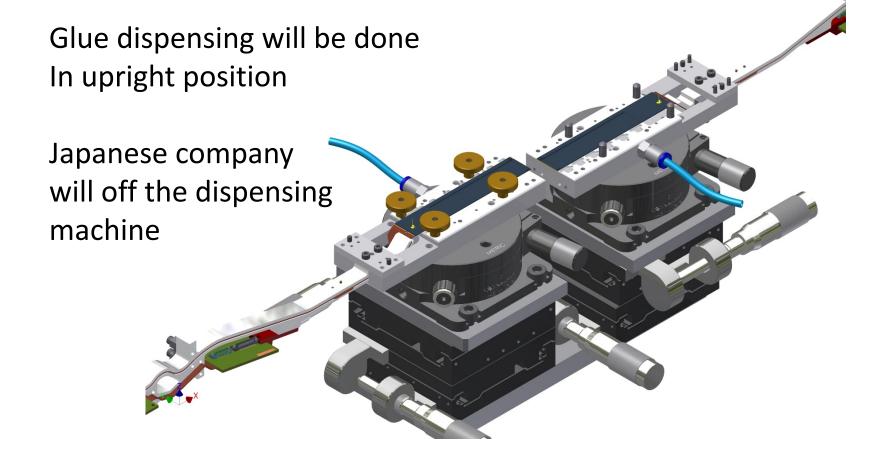
Jig complete for testing the sensor, including vacuum and cooling lines



Mechanics: Ladder Assembly Tools (V)



Jig assembly for glueing two modules to a ladder (under construction)





Mechanics: BEAST Phase 2 Assembly



