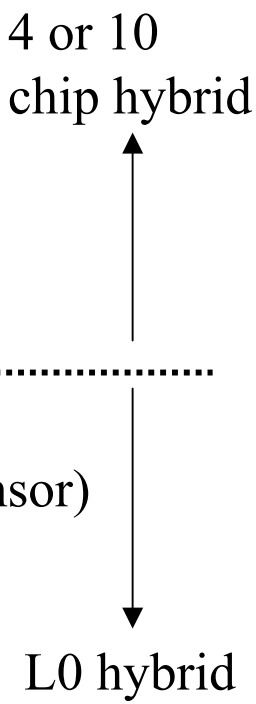
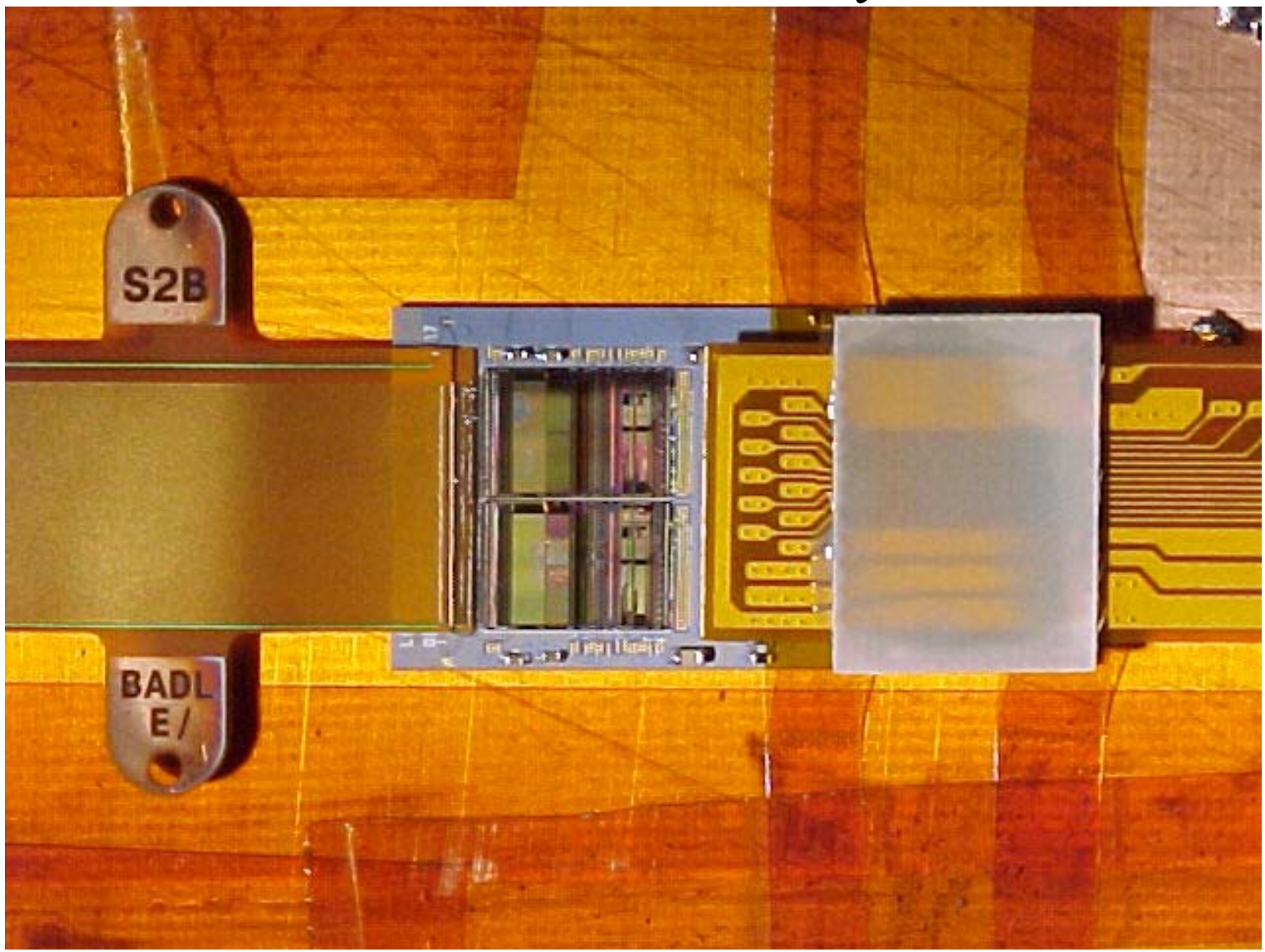
L0 module prototyping plan

- What we built so far:
  - No.3 First prototype with SVX4 (L1 hybrid)
  - No.4 with irradiated sensor
  - No.5 Installed on the support structure
  - No.6 has 10 chip hybrid with two sensor – very good for systematic comparison in the cable and spacer studies.
  - No.7 First prototype with L0 hybrid (with cut sensor)
  - No.8 in progress (L0 hybrid with new chip and un-cut sensor)
  - No.9 in progress (ditto)



No.7 module with L0 hybrid



Goal

- Simultaneous read out of multiple modules on the support structure.
  - No. 8 and 9 will go to the structure ➔ B-sector because of the wider sensor.
  - Two for A-sector, two for B-sector would be the ideal ➔ should we build two more for A-sector? But the cut sensor is not happy so far.
  - Question: can we use the prototype hybrid support by UW?
- Finalizing the analog cable design.
  - >500 μm space under the bottom cable.
  - We still don't understand the reason why we don't see the non dependence of noise on the spacer ➔ I propose to have two spacers (~140 μm) between each cable. (also taking into account the fact that the effective dielectric constant of the spacer close to unity)
  - Pre-laminated cable seems to be OK.
  - Almost done.

Spacer prototype