

SiLC sensor R&D – Next „small“ Steps



1. 8“ PROOF OF PRINCIPLE

- Most simple: single sided, single metal, AC, Rpoly biased, etc.
- The idea is to blow up the CMS design (Vienna can do the mask drawings)
- Cost for mask???

2. Chip – Sensor bump bonding PROOF OF PRINCIPLE

- Valid design study for ILC and SLHC
- On 6“ or 4“ Strip or Strixel or pixel doesn't matter
- Fan-out on a double metal layer to match chip pattern (thick oxide)
- We use the CMS Pixel chip PSIX or ...
- Vienna can probably do the mask or any volunteer?
 - Basically, we could use an existing mask and add additional layer mask: metal; Oxide

3. 6“ Evaluation & Keeping of options

- We have to convince ourselves that for inner layers we cannot go for 6“ **or vice versa**
- 8“ will come with a certain thickness and double sided 8“ is also probably another long step
- More companies can comply

