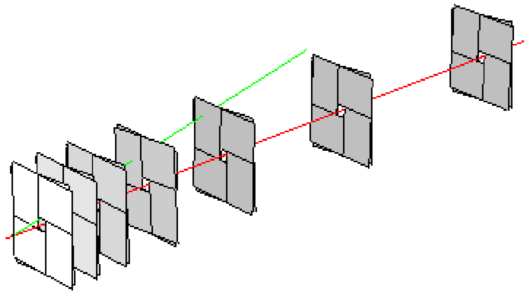


Vertex Detector

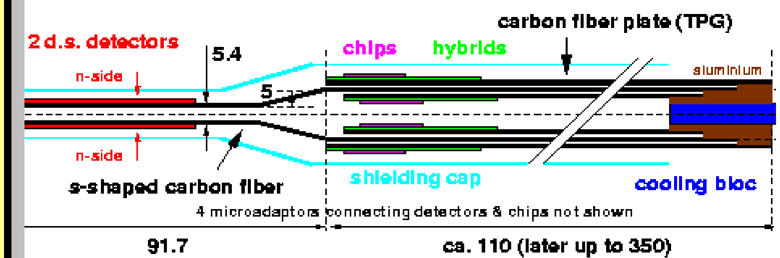
<u>Installation Status:</u>

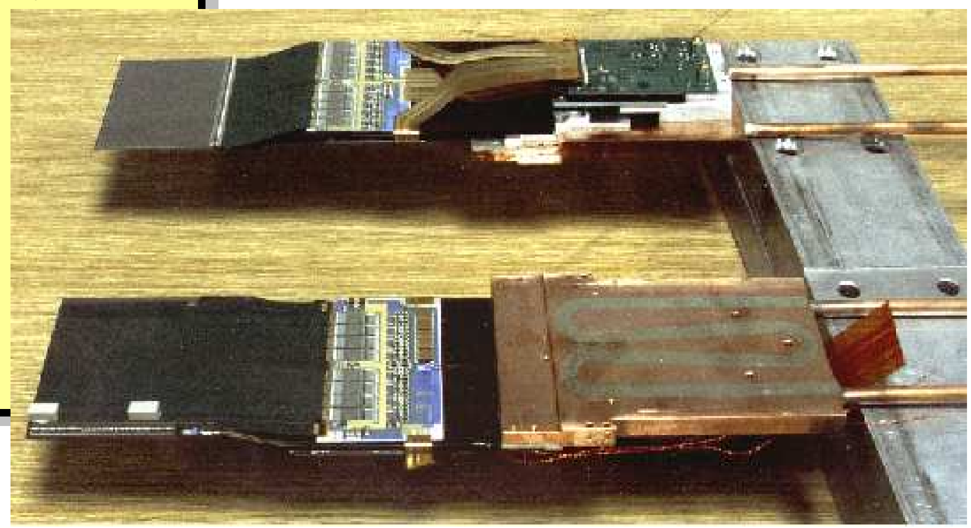
- **final infrastructure**
- **12 double sided detector modules installed** (+ 5 in August)
- **final readout chain**

- movable RF shield (5 μm steel bands)
- vertex vessel vacuum worse than 1997, under investigation

<u>August Shutdown:</u>

- 5 more modules
- installation of laser system





Helix Readout Chip

Helix 128S–2.1 (used in 1998)

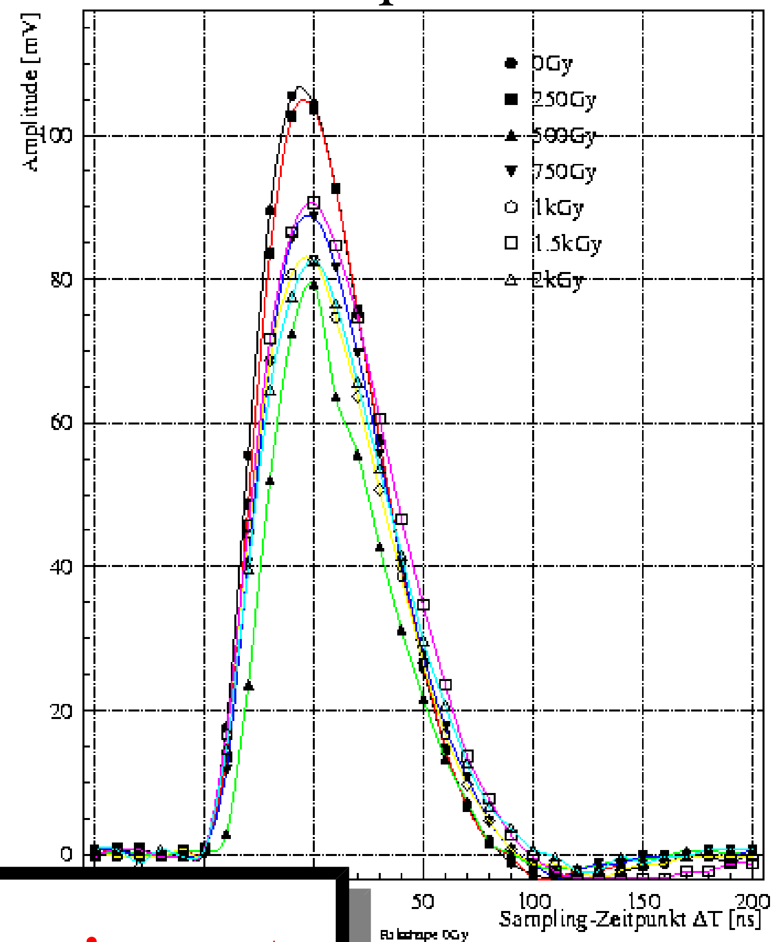
- reduced radiation hardness
- digital–analog cross talk

Helix 128S–2.2 (since April 1998)

- new pipeline design
  tested up to 400 kRad
- readout at 40 MHz
- acceptable cross talk
- **close to final readout chip**

Helix 128S–2.3 (under test)
Helix 128S–3.0 (in progress)

Puls shape / dose



Version 2.2 fulfills HERA–B requirements