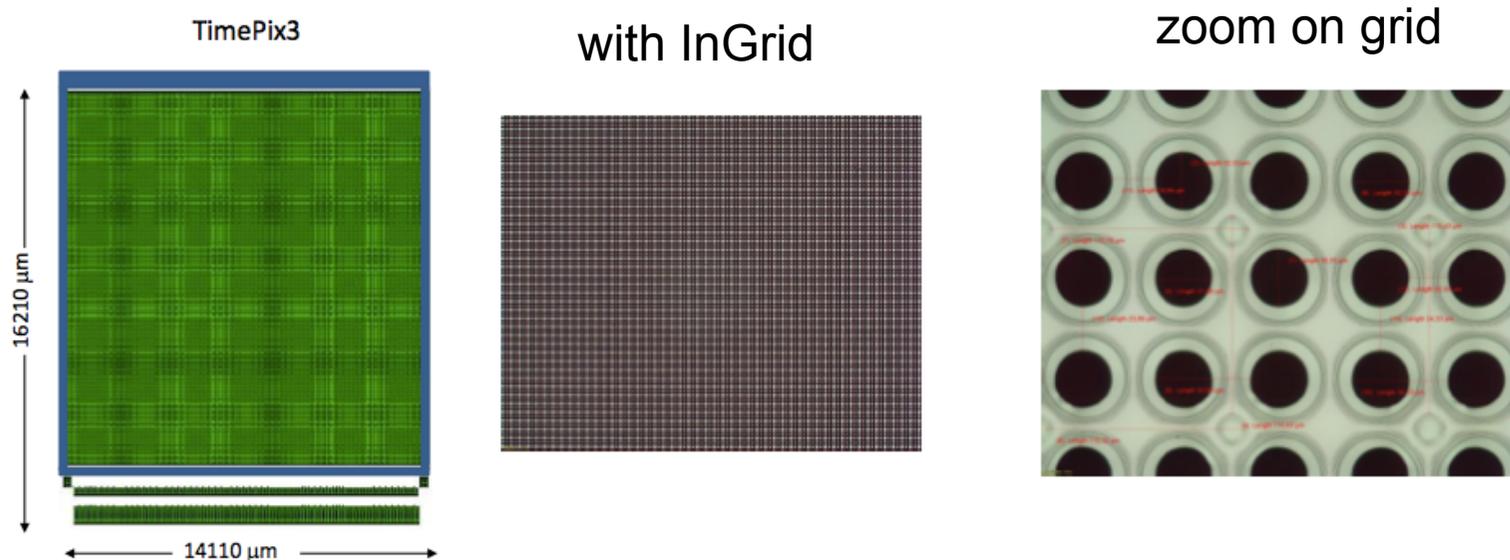


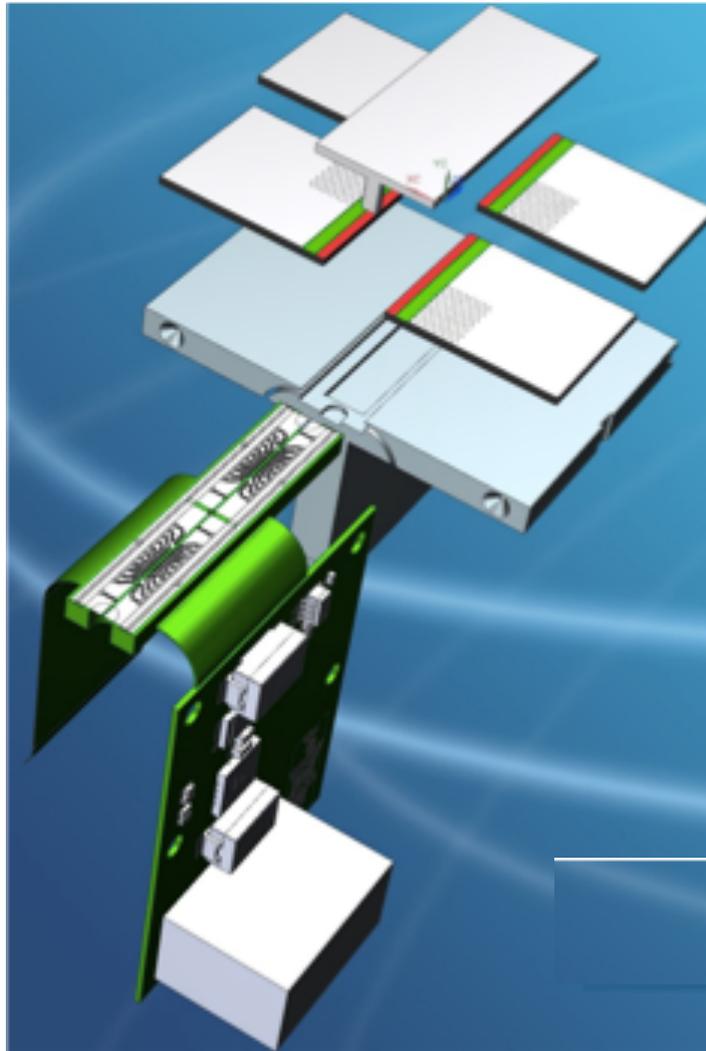
ILC Highlight: Pixel TPC TimePix 3 with InGrid Bonn



Sparking and the protection layer $4 \mu\text{m Si}_x\text{N}_y$

- Origin of sparks and detector failure was tracked down to cracks in protection layer. A careful cleaning and monitoring process was developed at IZM.
- Extensive sparks tests have been done at Bonn taking more than a million sparks without detector failure.
- At Nikhef and Bonn we will mount single TPX3 chips with InGrids and perform tests.

Pixel TPC: Quad design



Auke Korporaal, Bas van der Heijden
Charles Ietswaard

- Design work has been started in June in the ET and MT for a Quad module with 4 TPX3 Ingrid chips
- using SPDR readout
- Gas closure and Cooling
- keeping in mind:
Tiling Quads into a bigger module; Guards to define a homogeneous E field and precise mechanics (20 μm)

First version December

A mechanical pre-prototype will be circulated to get some idea how the Quad might look.