

Characterization of active edge planar pixels produced at VTT

Friday 16 November 2012 10:20 (20 minutes)

We will report about the characterization of FE-I3 and FE-I4 active edge planar n-in-p pixels produced at VTT, Finland. The sensor thickness is 100 μm and different geometries of the sensor edges have been implemented, down to an inactive width of only 50 μm . The interconnection of the sensors to the ATLAS FE-I3 and FE-I4 chips has been performed at VTT, with solder bump bonding.

In addition to the IV characterization, the results of the measurements with a ^{90}Sr source will be discussed. The charge collection properties of the edge pixels will be compared with those in the center region.

The first analysis of beam test data obtained with these devices before irradiation at CERN-SPS, using the EUDET telescope, will be presented.

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Session Classification: Irradiation Facilities, 3D and Pixel Detectors (joined with ATLAS PPS)

Track Classification: RD50/PPS session (Friday morning)