

11th International "Hiroshima" Symposium on the Development and Application of Semiconductor Tracking Detectors (HSTD11) in conjunction with 2nd Workshop on SOI Pixel Detectors (SOIPIX2017) at OIST, Okinawa, Japan

Contribution ID: 189

Type: POSTER

Development of pixel modules for the forward region of the ATLAS Tracker Upgrade

Sunday, 10 December 2017 20:19 (1 minute)

The assembly and results from testing of pixel modules for the forward regions of the ATLAS Tracker Upgrade will be presented. Sensors have been developed for the ATLAS FE-I \mathbb{S} readout chip. Different bump-bonding methods have been investigated and the results of the bump-bonding yields determined from electrical measurements will be presented. The hybrid flex design and its assembly to the bump-bonded pixel module will be described. Results from the electrical tests of the assembled pixels before and after thermal cycling will be given. The interfaces to the electrical services will be discussed, particularly those to the 5Gbps links.

Contributing Author: Craig Buttar, University of Glasgow

Authors: R.L.Bates, P.J.Dervan, I.Tsurin, K.Arndt, D.Bortoletto, R.Plackett, W.Cunningham, K.Wraight, S.Naik, L.Flores, J.Pater, F.Munoz-Snachez, J.Stuart, S.Eisenhardt

Primary author: BUTTAR, Craig (University of Glasgow (GB))

Presenter: BUTTAR, Craig (University of Glasgow (GB))

Session Classification: POSTER

Track Classification: Pixel sensors for tracking