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Sensors for the CMS Forward Pixel Phase 1 Upgrade KAMURAN DILSIZ, University of Iowa, CMS COLLABORATION — The next incarnation of the CMS forward pixel detector, to be installed during the year end extended technical stop 2016-17, will need to survive an integrated luminosity of 300 fb^{-1} with the inner radius of the active region of the disks decreasing from 6 to 4.5 cm. Based on the Run 1 experience and irradiation studies, the Phase 1 FPIX sensors will again be n-on-n DOFZ silicon, with parameters similar to those in the present run. We will review the design choices including a study during the prototyping phase to explore different p-stop layouts. Results from the quality assurance probing of the full production of sensor wafers will be described. The IV measurements are particularly impressive with current densities in range of 3-4 nA/cm^2 at the full depletion voltage.

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