

Analog performance of ITkPix-V1 pixel readout chip

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The ITkPix-V1 readout front-end (FE) chip, based on 65 nm CMOS technology, is designed by the RD53 collaboration as the pre-production chip for the upgraded ATLAS Inner Tracker Pixel detector operating with extreme rates and radiation at the High-Luminosity LHC. The ITkPix-V1 chip uses a novel differential analog FE design featuring low noise and small time-walk. ITkPix-V1 was submitted in March 2020. In this talk, we will summarize the most recent measurements on the analog FE of this chip.

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