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A prototype chip for pixel hybrid detector in 90 nm CMOS technology

Using a deep submicron technology available on the marked we have designed a pixel readout chip called PX90 (Pixel Xray 90nm) for high-count-rate digital X-ray imaging applications with semiconductor detectors. The ASIC has been fabricated in TSMC 90 nm CMOS process with 9 metal layers. The single pixel size is 100 x 100 um2, while the prototype chip contains the matrix of 40 x 32 pixels. The article presents the PX90 architecture and the measurement results including both functional and X-ray imaging tests.

Summary (Additional text describing your work. Can be pasted here or give an URL to a PDF document):

http://home.agh.edu.pl/~robert/pub/PX90_Vienna2010.pdf

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