

Status of Scribe-Cleave-Passivate (SCP) Slim Edge Technology

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We are pursuing a “slim edge” technology which allows a drastic reduction of inactive region along the perimeter of silicon detectors. Such reduction would benefit construction of large-area tracker and imaging systems. Key components of this method are surface scribing, cleaving, and passivation of the resulting sidewall. We will give a short overview of the project and describe recent progress on the manufacturing technology and device studies. The latter includes charge collection near the edge and irradiation studies.

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