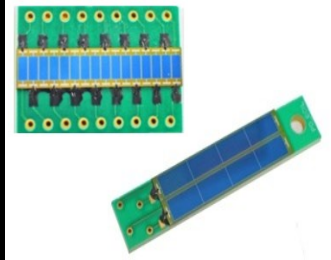


## Photodiode Detectors for X-Ray Systems



SCL Part No.

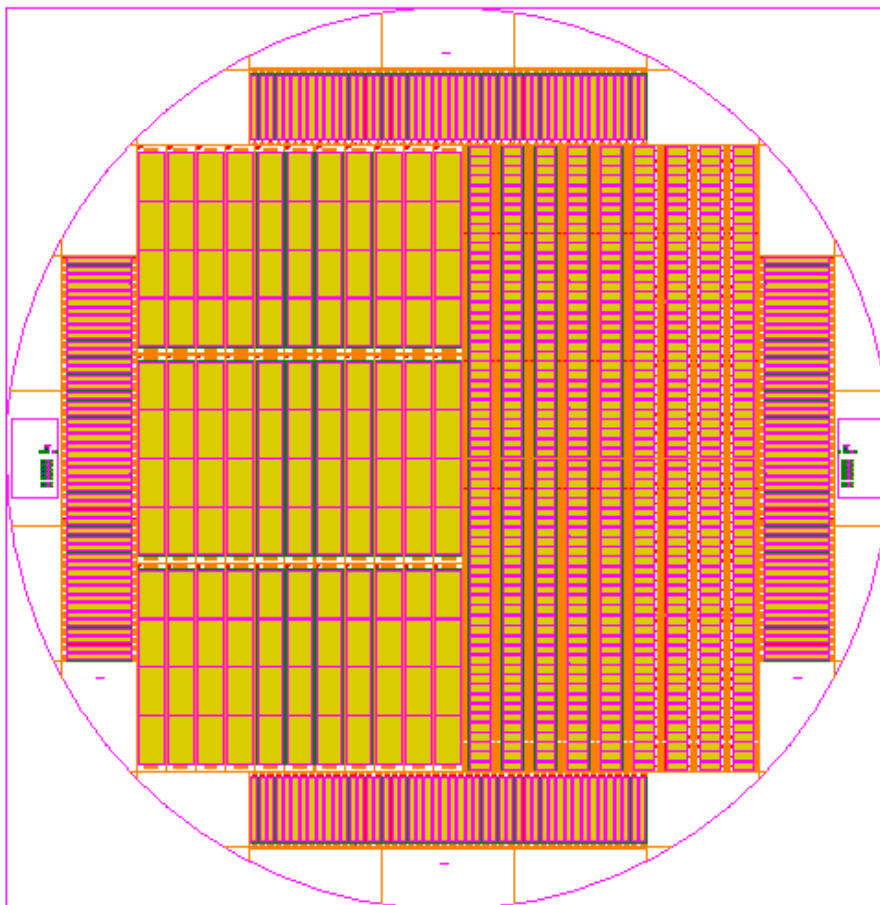
SE3201

### PRODUCT DESCRIPTION:

X-Ray Baggage (Type-A) and Cargo Inspection Systems (Type-B) for scanning of objects for security purpose. The systems currently use imported diode array detectors. SCL has taken up a project for the fabrication of PIN photodiode arrays for these applications. The photodiodes are large area P-I-N photodiodes fabricated on high resistivity n-type float zone wafers. The diodes are enclosed in P+ guard ring.

### FEATURES:

- No of pixels: 16 (type-A)/ Single Photodiode (Type-B)
- Pixel size: 3.2mm × 1.4mm/ 3cm × 0.4cm
- Pixel pitch: 1.5 mm
- Chip size: Approx 3.2mm × 24mm / Approx 3.5cm x 0.5cm
- Dark current < 500pA @ 10V/ < 1nA @10V
- Responsivity - 0.3 A/W at wavelength of 540nm



Layout showing Photodiode Detector variants on 6" Wafer