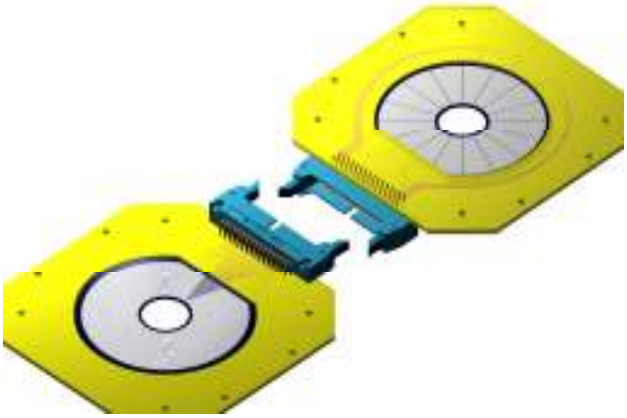
SPECIALIST DETECTORS FOR NUCLEAR PHYSICS

SILICON DETECTOR TYPE: SINGLE AND DOUBLE SIDED RING COUNTER DESIGN

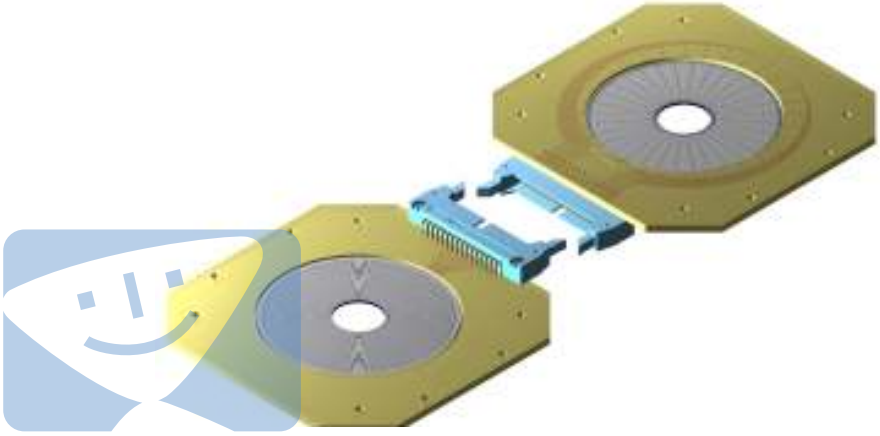
DESIGN: Totally depleted ion implanted detector with segmented rings and optional double sided sectors. The S3 features complete rings with signal outputs tracked on the silicon detector using a narrow double metal readout system. The designs exhibiting over voltage capability with excellent radiation damage resistance and annealing capability for high neutron and heavy ion damage.

DESIGN	**S1**	**S2**	**S3**
WAFER TECHNOLOGY	4	4	4
JUNCTION WINDOW	2M	2M	2D
OHMIC WINDOW	2M	2M	2M
ACTVE OUTER DIAMETER	96 mm	70 mm	70 mm
ACTVE INNER DIAMETER	48 mm	22 mm	22 mm
CHIP OUTER DIAMETER	100 mm	76 mm	76 mm
CHIP INNER HOLE DIAMETER	46 mm	20 mm	20 mm
Nº of JUNCTION ELEMENTS	64 Segments	48 Incomplete Rings	24 Complete Rings
JUNCTION ELEMENT PITCH	1505 um	491 um	886 um
JUNCTION ELEMENT SEAPARAION	96 um	100 um	100 um
Nº of OHMIC ELEMENTS	16	16	32
PACKAGE	PCB	PCB*	PCB*[3]

S1 detector and PCB as viewed from the p- and n-side.



S2 detector and PCB as viewed from the p- and n-side.



S3 detector and PCB as viewed from the p- and n-side.

QUALITY ASSURANCE: ISO9001

[3] S2 and S3 detectors use the same PCB design template.