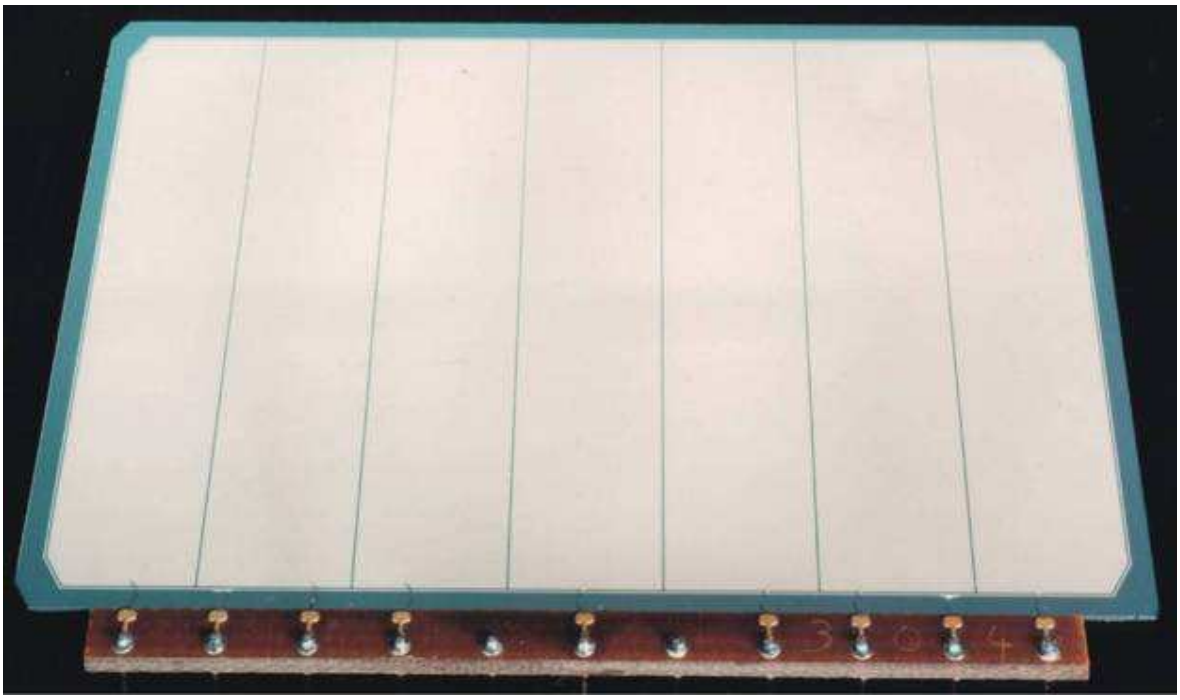
DESIGN I

SPECIALIST DETECTORS FOR NUCLEAR PHYSICS

SILICON DETECTOR TYPE:	MICROSTRIP DETECTOR
DESIGN	Totally depleted ion implanted structures with over voltage operation.
TECHNOLOGY:	3 and 4 INCH SILICON
Nº of ELEMENTS:	7
Nº of OUTPUTS:	9 including substrate and guard ring.
STRIP PITCH:	8.5 mm
TOTAL ACTIVE AREA:	60.0 x 40.0 mm^2
STRIP SEPARATION:	100 µm



FULL DEPLETION (FD) OPERATING VOLTAGE:	FD to FD+30 V
LEAKAGE CURRENT (FD):	50 – 150 nA/strip
TOTAL LEAKAGE CURRENT:	1µA maximum
INTERSTRIP RESISTANCE:	10 – 100 MΩ
TOTAL ALPHA RESOLUTION:	55 KeV Typical
RADIATION HARDNESS:	1nA/cm /100 Rads (Protons)
CONNECTIONS:	Ultrasonic wire bonding
PACKAGE:	PCB edge with vertical pins
MINIMUM ACCEPTANCE:	100 % elements operational
EXPERIMENT:	CERN UA2, Brookhaven RHIC BRAHMS.

QUALITY ASSURANCE :ISO9001