

AC & DC COUPLED ION IMPLANTED TOTALLY DEPLETED DOUBLE SIDED 90° MICRONS TRIP DETECTOR WITH GUARD RINGS

SILICON DETECTOR TYPE: AC and DC coupled ion implanted totally depleted silicon microstrip detector.

DESIGN: Double sided, multi-guard ring design for high radiation environment, 6 inch wafer technology

DETECTOR DESIGN	TTT1	TTT 2	TTT 3	TTT 4	TTT5
WAFER TECHNOLOGY	6	6	6	6	6
DESIGN TYPE	AC	DC	DC	DC	DC
JUNCTION WINDOW	2G	2M	2/7/9 M/G/P/T	2/7/9 M/P/T	2/7/9 G
OHMIC WINDOW	2G	2M	2M	2M	2M
NUMBER OF JUNCTION STRIPS	128	128	128	128	128
JUNCTION ACTIVE AREA (mm ²)	97.30 x 97.30	100.42 x 100.42	100.42 x 100.42	100.42 x 100.42	100.42 x 100.42
JUNCTION STRIP PITCH (um)	758	760	760	760	760
JUNCTION STRIP WIDTH (um)	702	700	700	730	730
JUNCTION STRIP LENGTH (um)	96968	97220	97220	97280	97280
JUNCTION RESISTOR VALUE (MΩ)	10 – 80	-	-	-	-
JUNCTION COUPLING CAPACITOR (pF)	~ 1000	-	-	-	-
JUNCTION GUARD RING DESIGN	SGR	MGR	MGR	MGR	MGR
NUMBER OF OHMIC STRIPS	128	128	128	128	128
OHMIC ACTIVE AREA (mm ²)	97.30 x 97.30	100.42 x 100.42	100.42 x 100.42	100.42 x 100.42	100.42 x 100.42
OHMIC STRIP PITCH (um)	758	760	760	760	760
OHMIC STRIP WIDTH (um)	702	700	700	700	700
OHMIC STRIP LENGTH (um)	96968	97220	97220	97220	97220
OHMIC RESISTOR VALUE (MΩ)	10 – 80	-	-	-	-
OHMIC COUPLING CAPACITOR (pF)	~1000	-	-	-	-
OHMIC GUARD RING DESIGN	SGR	MGR	MGR	MGR	MGR
EXPERIMENT	TIGRE BLAST	MUST II	MUSETT		

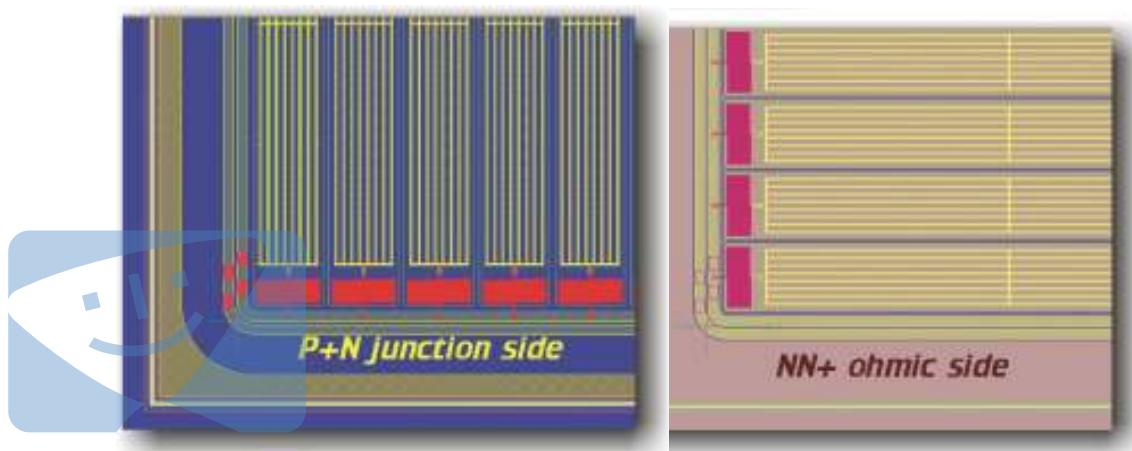
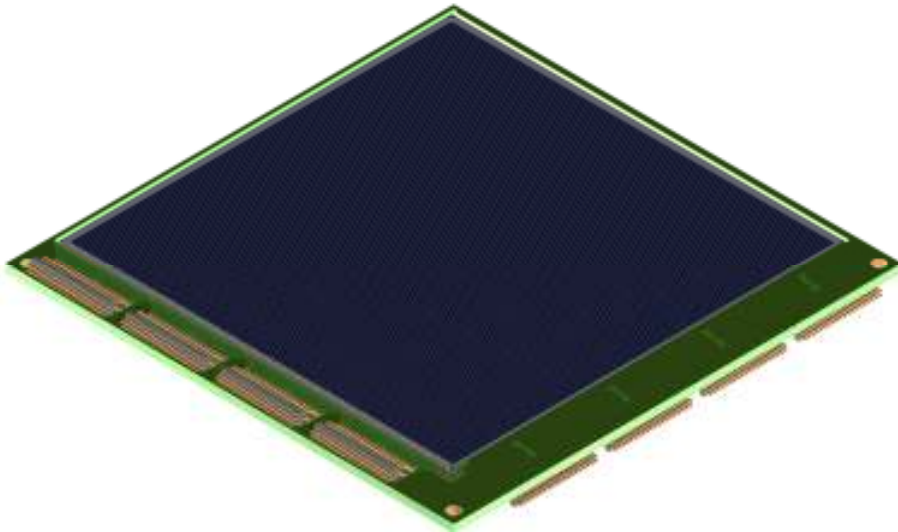


Image of the AC coupled double sided Design TTT1.



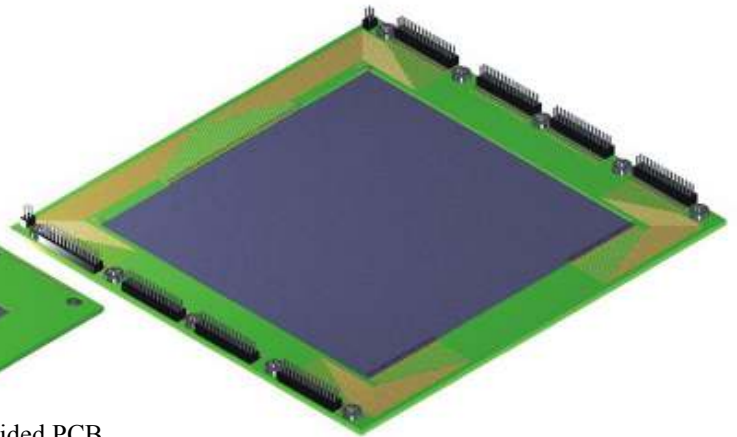
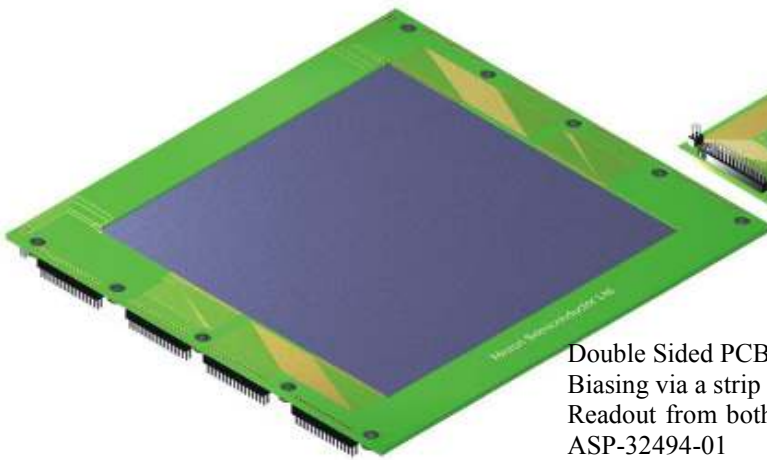
PACKAGES

DESIGN TTT Series Standard Assembly



Double Sided PCB
Readout from one end of strip via Samtec connector Part No. FTMH-120-03-L-DH
A range of mating kapton available upon request
PCB Dimensions 114 x 114 mm²

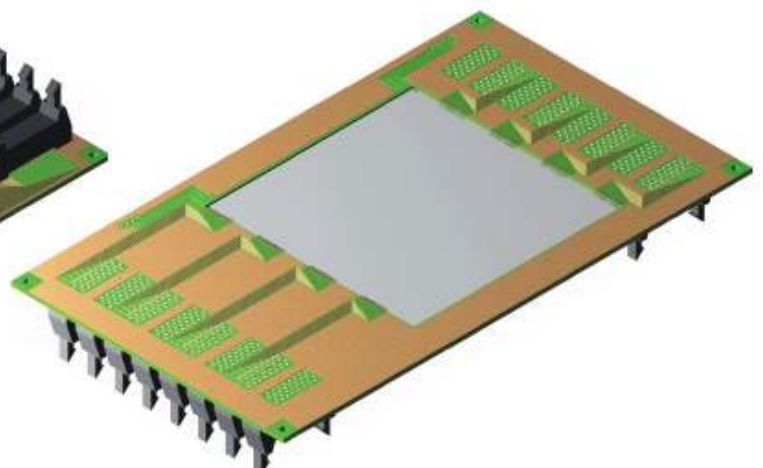
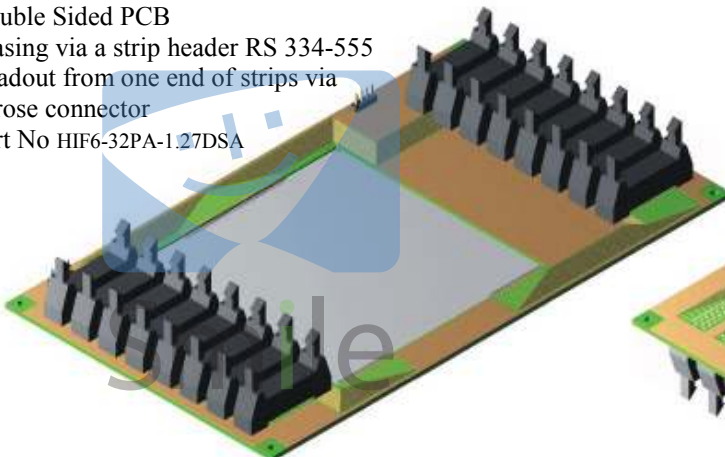
DESIGN TTT1-300 Double Sided PCB



Double Sided PCB
Biasing via a strip header Samtec Part No. FTSH-102-01-L-D
Readout from both ends of strip via Samtec connector Part No. ASP-32494-01
PCB Dimensions 133 x 128 mm²

DESIGN TTT1-300 Double Sided PCB

Double Sided PCB
Biasing via a strip header RS 334-555
Readout from one end of strips via Hirose connector Part No HIF6-32PA-1.27DSA



PCB Dimensions 220 x 128 mm²