H8 BEAM TEST OF BINARY r-ϕ MODULES

(August 95)

All modules have hybrids (about 3cm×7cm) on the detector in the (slightly-offset) center of the strips to readout the strips from the middle.

MODULES TO BE TESTED	TESTS PLANNED
a) 50µm pitch, n-bulk double-sided, AC coupled, 3.4cm wide, 12cm and 6cm readout, Kapton hybrid, 10 chip sets (5-n, 5-p) LBIC chips+CDP128	Position scan along the strips Signal/Noise ratio for 12cm
b) Two 75µm pitch, n-bulk p-strip readout, 2 single-sided back-to-back, DC coupled, 6cm wide, 12cm readout Ceramic hybrid, 12 chip sets LBIC chips+CDP128	12cmx6cm modules Efficiency of inclined tracks Signal/noise ratio for 12cm strip Bias voltage dependence Position scan along the strip
c) Two 75µm pitch, n-bulk p-strip readout, single-sided, DC coupled, 12cm readout Ceramic hybrid, 1 with 2 chip sets (256 ch), 1 with 1 chip set (128 ch) AT&T chips+CDP128	Efficiency of inclined tracks Signal/noise for 12cm strips Bias voltage dependence
d) 75µm pitch, p-bulk n-strip readout, single-sided, DC coupled, 12cm readout Ceramic hybrid, 2 chip sets AT&T chips+CDP128	Efficiency of inclined tracks Signal/noise ratio for 12cm strip Signal/noise vs amplifier power P-BULK detector!

During low intensity run, characterize all detectors.

Configuration

Anchor	DUT	Anchor
75µm DSSD	50µm DSSD	75µm DSSD
50µm DSSD	75µm DSSD, SSSD's	75µm DSSD

During high intensity run, investigate in detail 75µm pitch detector,especially efficiency to inclined tracks-(rotation of detector), and also the position scan along the detector.