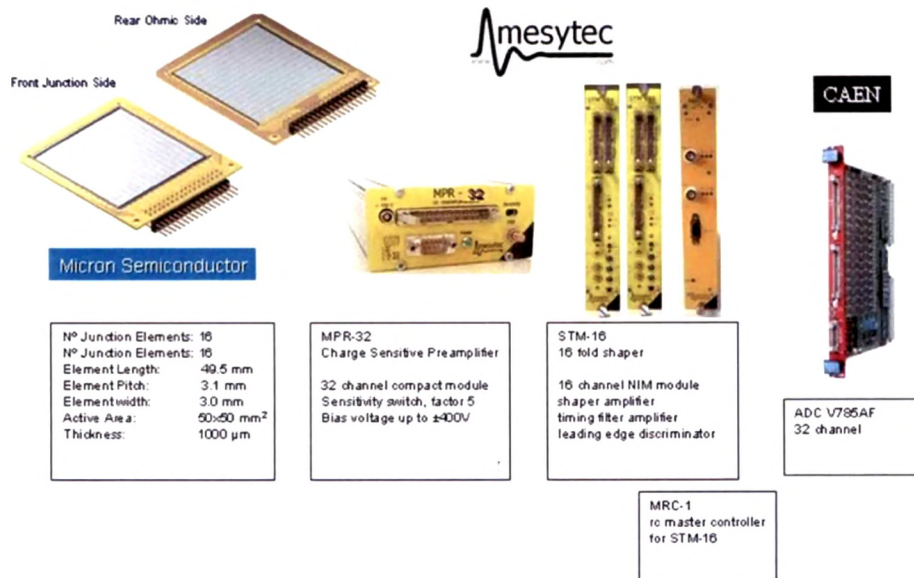


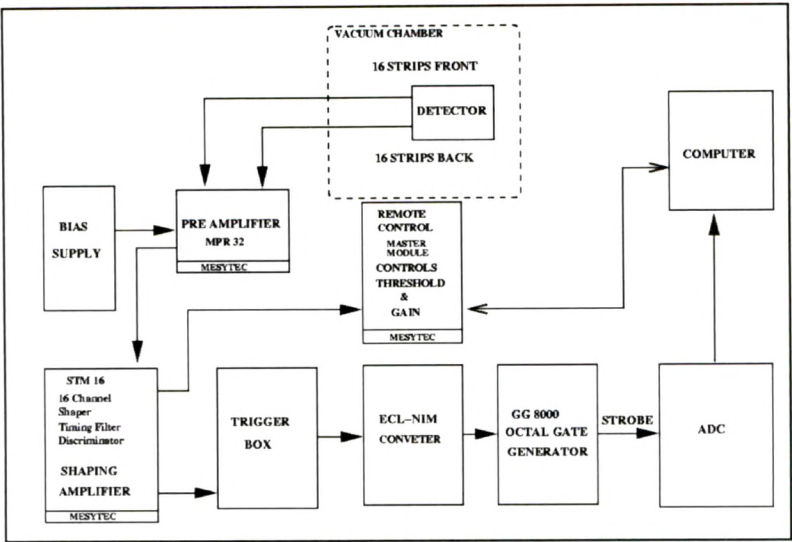
Appendix B

Active Stopper

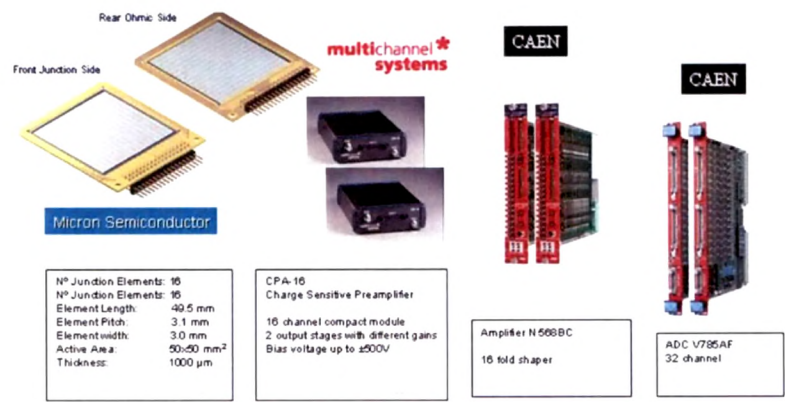
B.1 *mesytec* Electronics



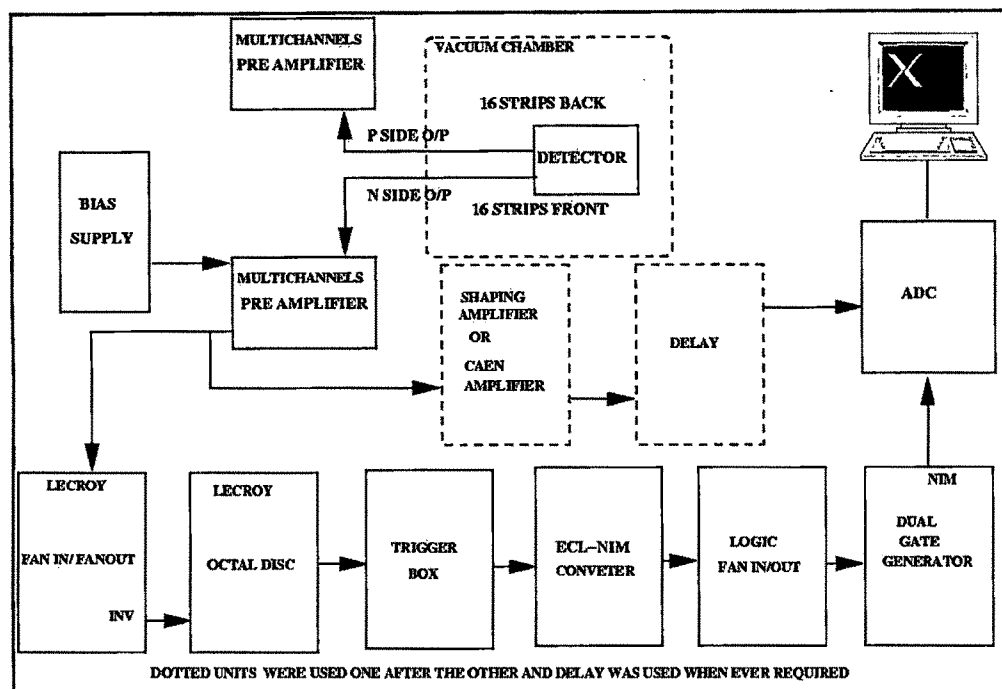
B.2 Block Diagram using *mesytec* Electronics



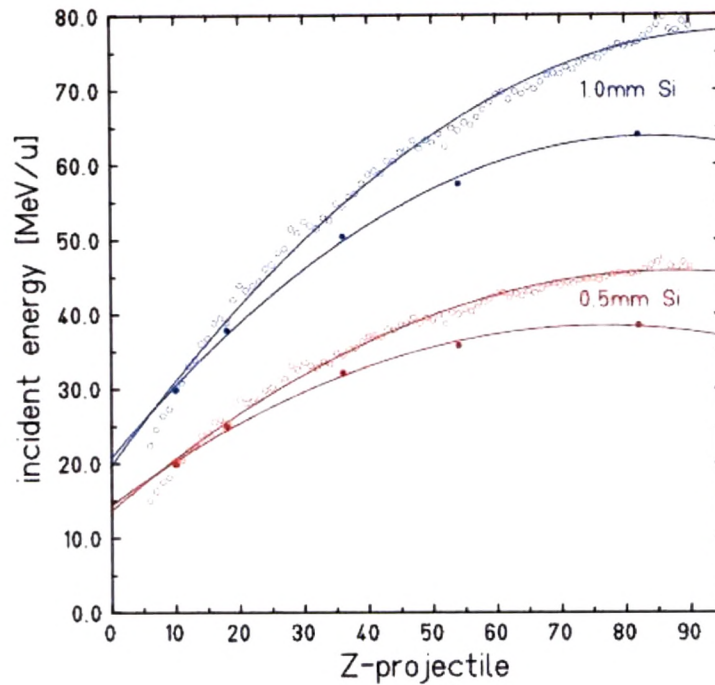
B.3 Multi Channel Systems



B.4 Block Diagram using Multi Channel System



B.5 Maximum Incident Energy for Heavy Ions Implanted in 0.5mm and 1mm Silicon



Projectiles are implanted in 0.5mm (116.5 mg/cm²) and 1mm (233mg/cm²) silicon. The maximum incident energy [MeV/u] is determined from the range tables of F. Hubert et al. Annales de Physiques 5 (1980), p.1 (open symbols) and from ranges calculated using the ATIMA code (full symbol).

F. Hubert *et al.*

$$1.0\text{mm Si: } E = 19.772 + 1.18791 \cdot Z - 0.00606377 \cdot Z^2$$

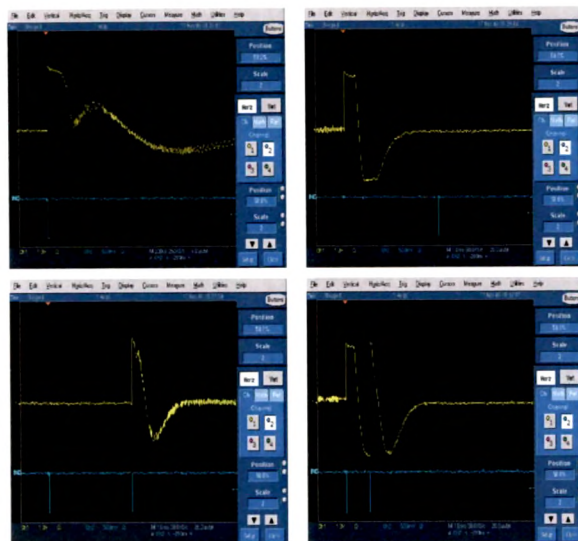
$$0.5\text{mm Si: } E = 13.738 + 0.73188 \cdot Z - 0.00417978 \cdot Z^2$$

ATIMA

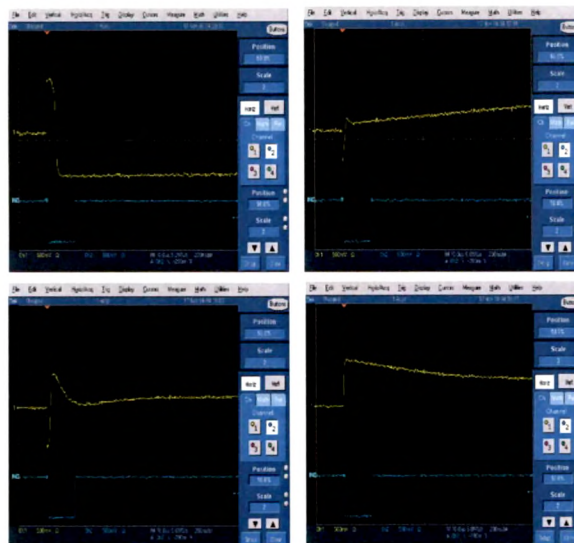
$$1.0\text{mm Si: } E = 20.803 + 1.02507 \cdot Z - 0.00611181 \cdot Z^2$$

$$0.5\text{mm Si: } E = 14.487 + 0.62831 \cdot Z - 0.00411604 \cdot Z^2$$

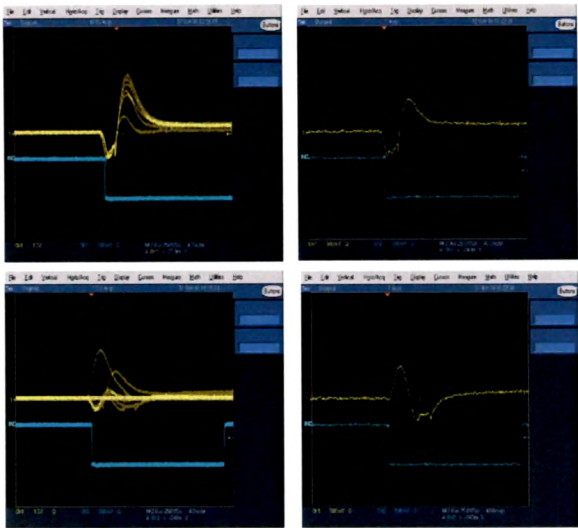
B.6 Pre-Amplifier Signals Measured with MPR-32 (lin)



B.7 Pre-Amplifier Signals Measured with MPR-32 (log)



B.8 Amplifier Signals Measured together with MPR-32 (log)



B.9 Decay Scheme of ^{207}Bi

