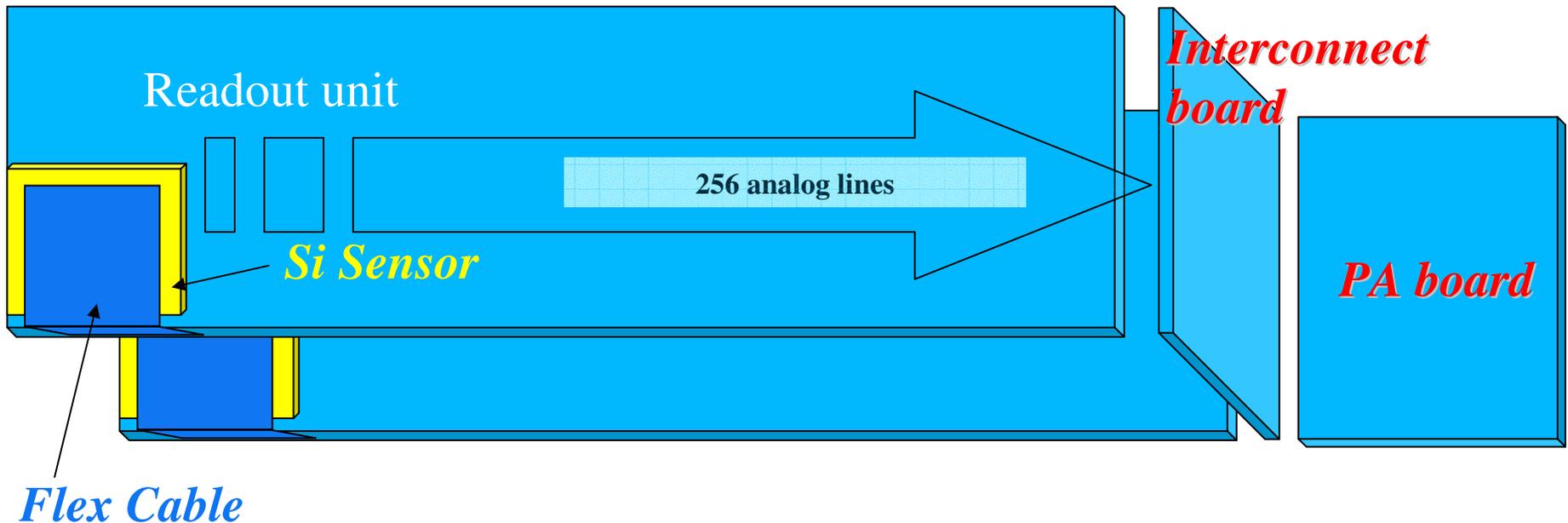


NCC signal packaging

-This is the calorimeter – all pads in the subtower are contributing to signal;

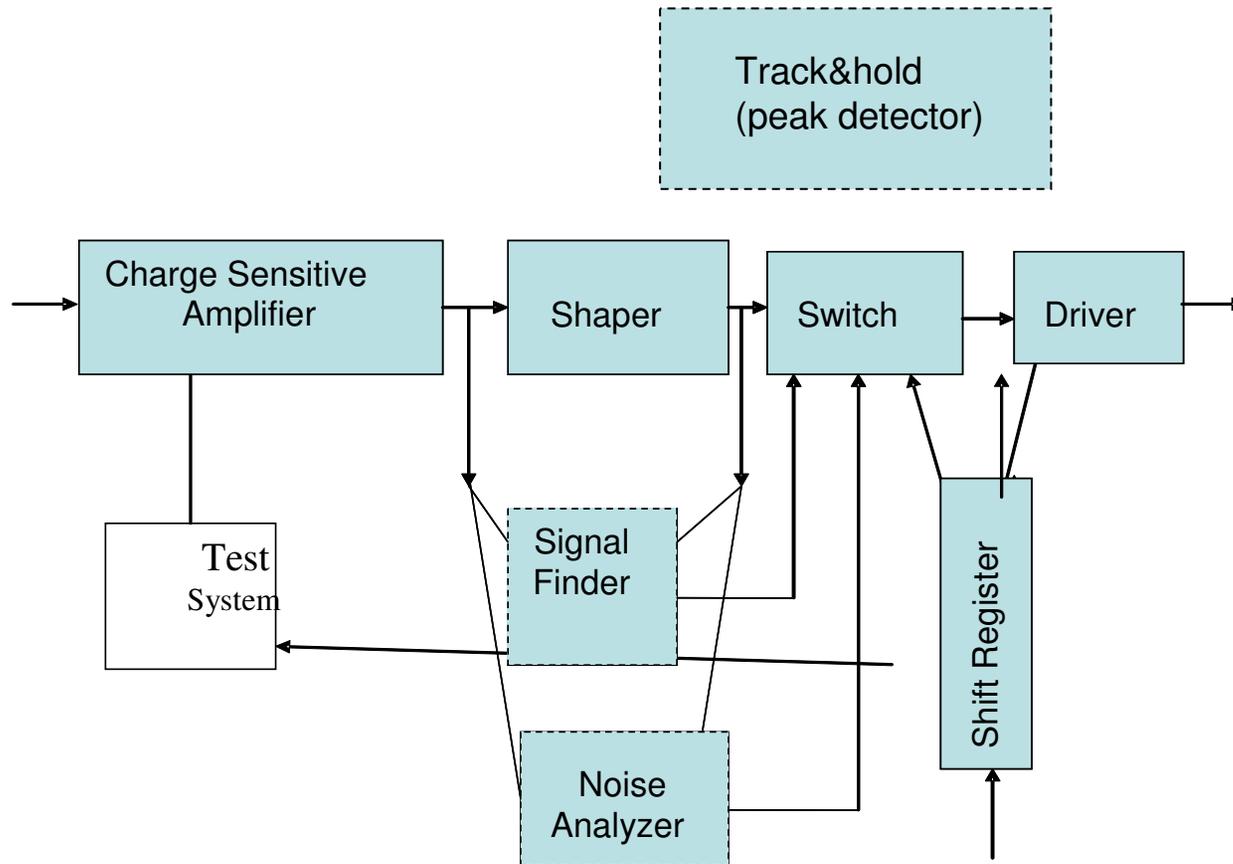
-Noise budget is set by physics: better is an enemy of the good;



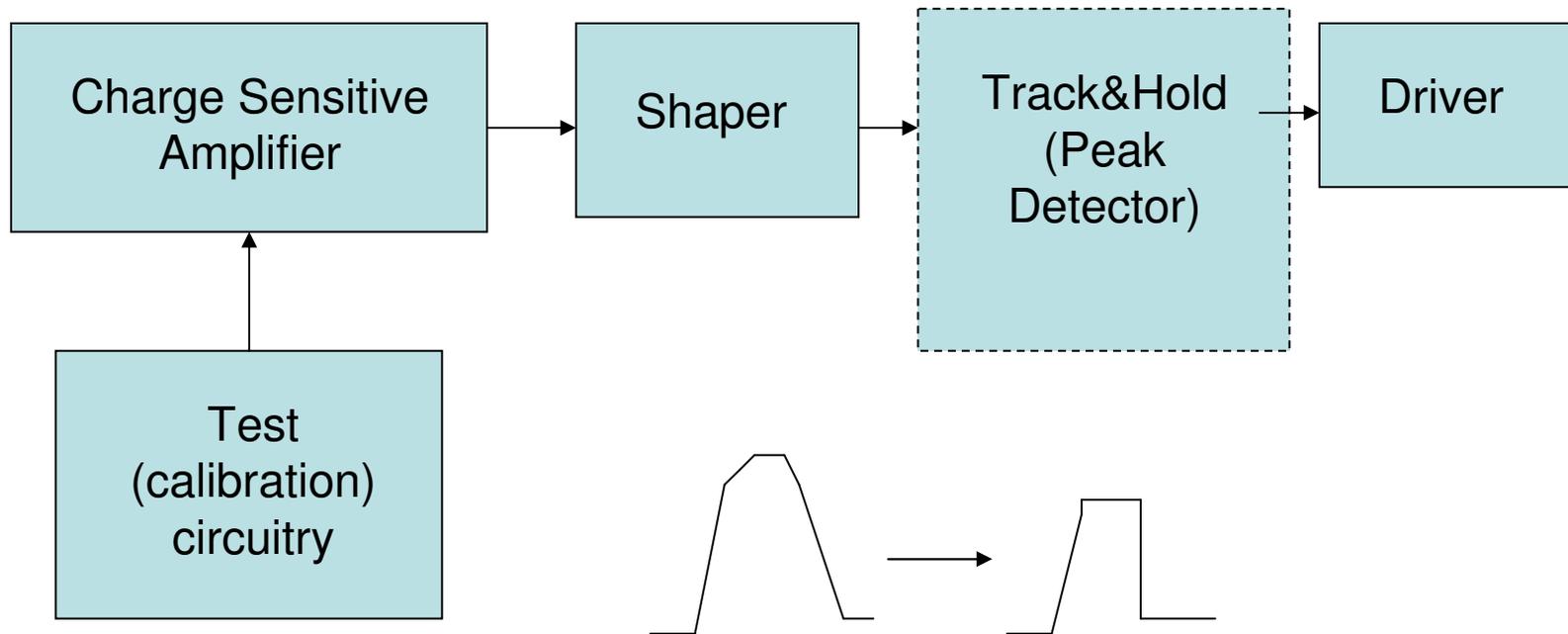
Requirements

- Tower / individual readout
- Minimal signal – 10 (1) mips
- Noise (48000e / 15000e)
- Speed – 300 ns (peak time 150ns)
- Mip/bit -10 000 /12
- Individual channel / summator
- Maximal signal 40pC
- Consumption
- Protection
- Switching
- Open loop gain

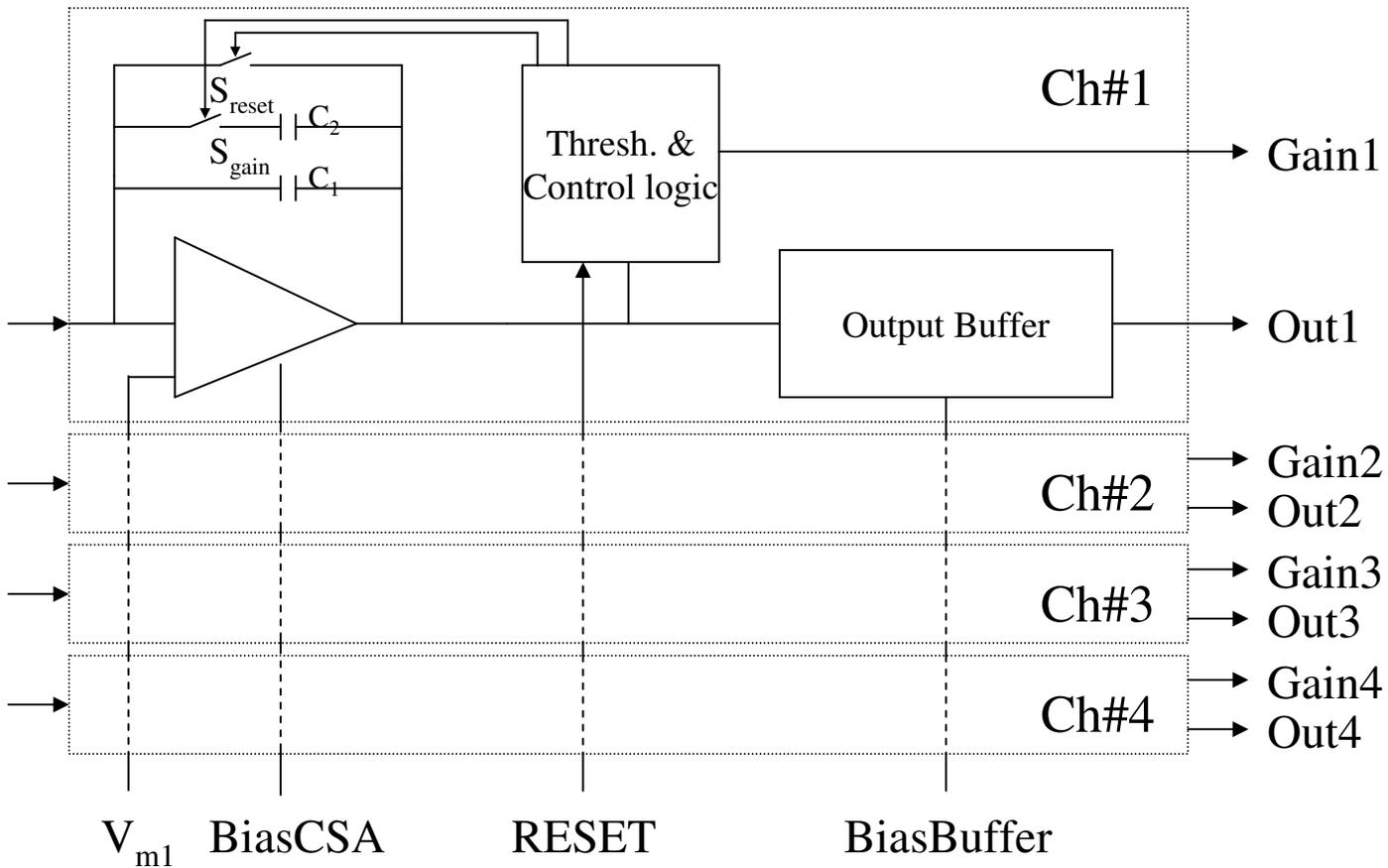
One cell FEE chip



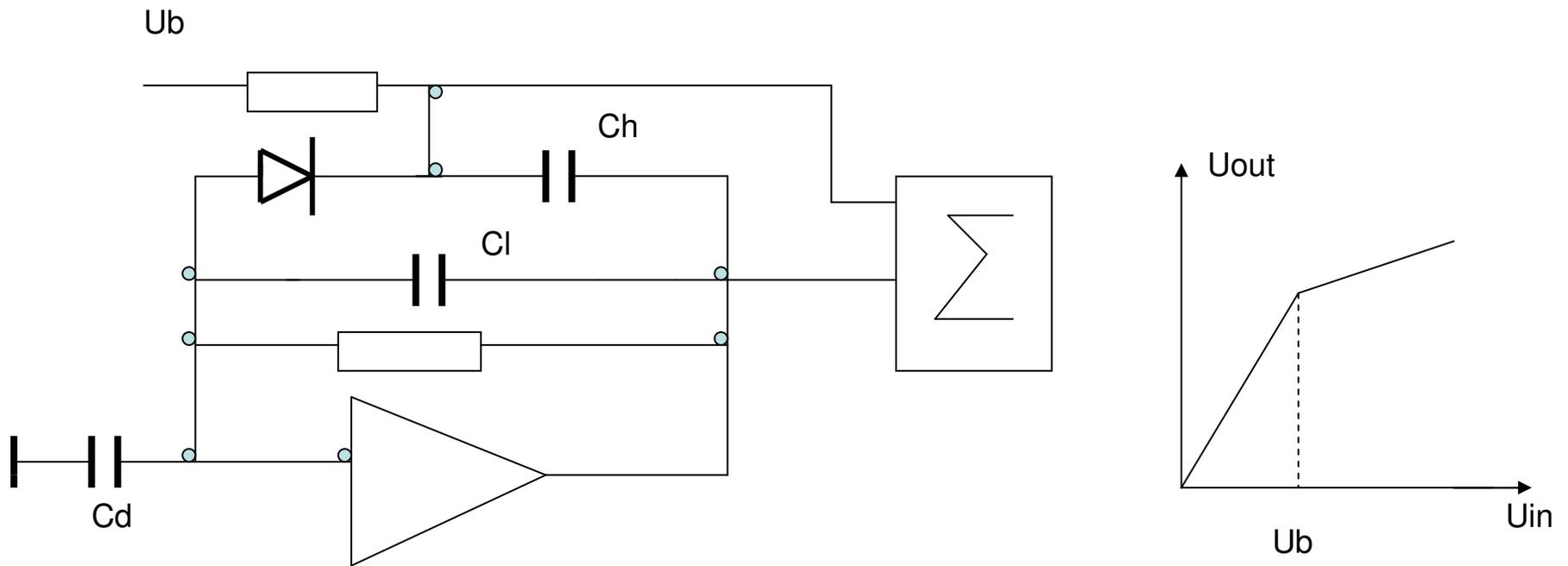
FEE chip (tower)



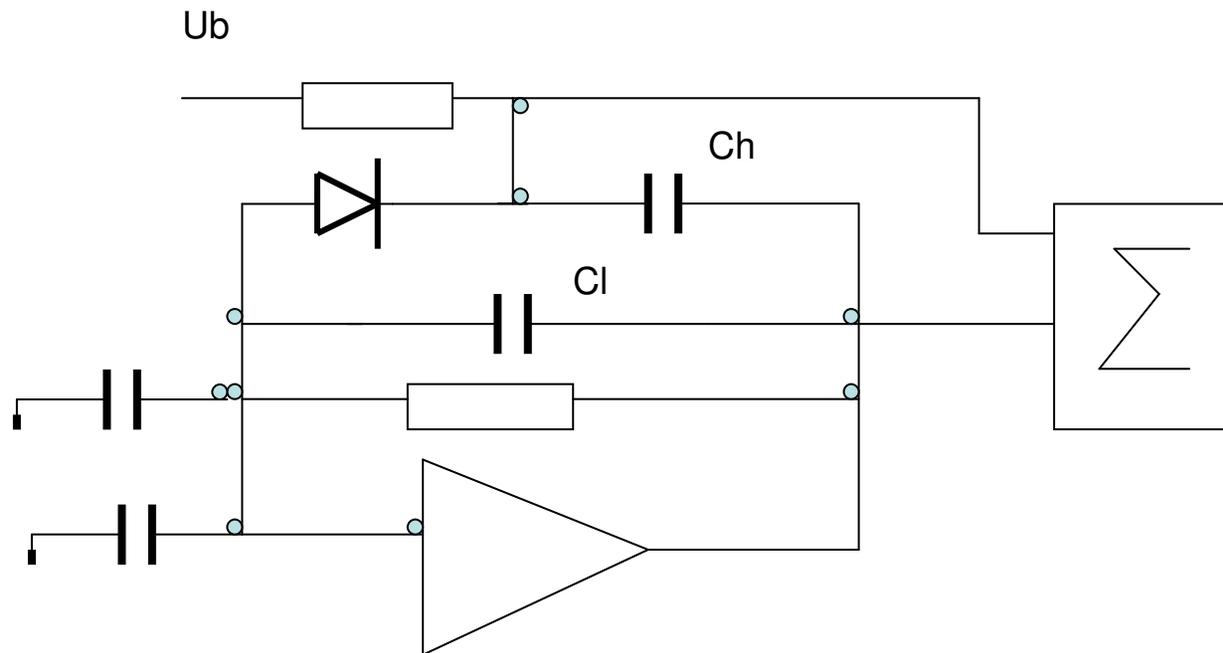
Trieste CSA



Charge sensitive amplifier



Summator



Summator

