

Key Parameter Requirements for Strip FE TOAST:

Analog:

- Shaping time longer than PASTA (~40 ns) suggested
- Propose solution with 2 shapings selectable with switch: one short (~50 ns) and one long (100..200ns, the longer the better)
- dynamic range: 10 MIPs = 40 fC sufficient
- single or double threshold. Range adjustable in not too coarse steps between 0..~5 fC
- drain current of M1 may be decreased wrt PASTA. Penalty on noise small → Jonny

Digital:

- ToT resolution ≥ 8 bits over full range
- Dead time for max ToT: ~1us
- Possibility to implement clock recovery from data link? This would spare the provision of separate clock lines

All other parameters same as PASTA specifications