

## Timing

	<u>t (ns)</u>	<u>Σ (ns)</u>
• max drift time	1100	
• cable delays (40m)	200	1300
• QT analysis	150 ?	1450
• delay in shift register (write/read)	50	1500
• coarse track segment finding	100	1600
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→ L1 trigger		
• collect data + data transmission	125	1725
• trigger evaluation	200	1925
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→ Track Segment Refinement		
• read output buffer and	100	100
• decode combinations, get z values	25	125
• build track segments	12.5	137.5
• validation in SRAM	25	162.5
• write in FIFO	12.5	175
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## Conclusion

- Coarse track segment finding is fast
  - start 2nd coarse finding after L1 KEEP?
    - ⇒ saves resources (buffer)
    - ⇒ no simplifications necessary
- Resources for track segment finding
  - ≈ 80 ESBs      80% of APEX 20 KE 400
  - ≈ 10000 LE      60%      "