International Institute of Information Technology Bangalore

Micron – IIITB Presentation

Date: March 19th, 2024

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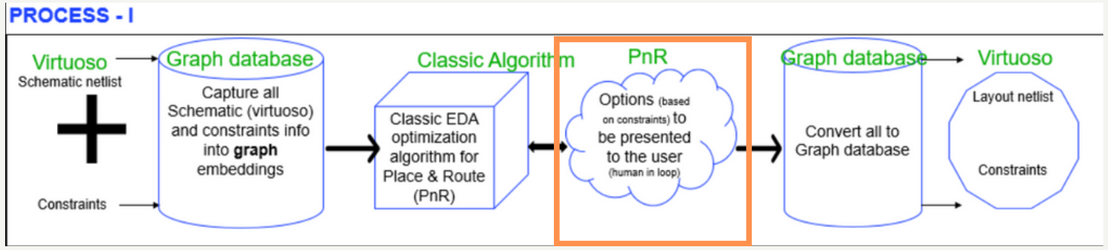
Agenda

- Routing Algorithms
- ALIGN Dataset flow for larger number of MACROs

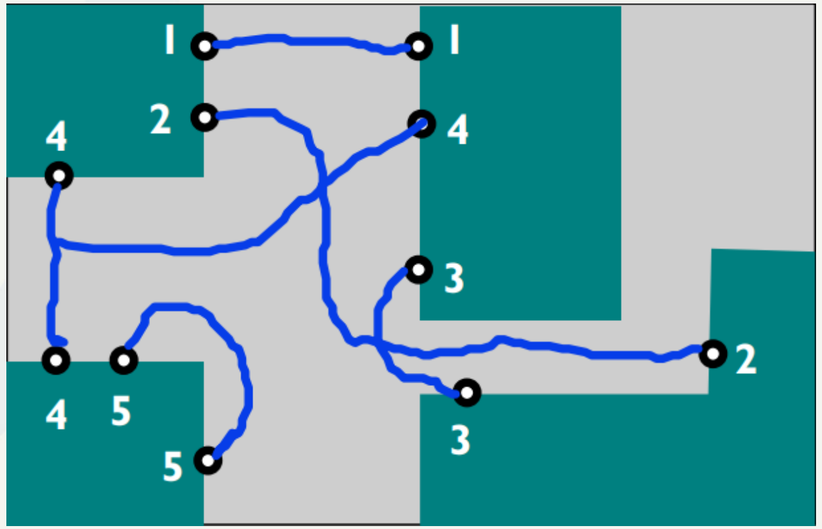
Routing Algorithms

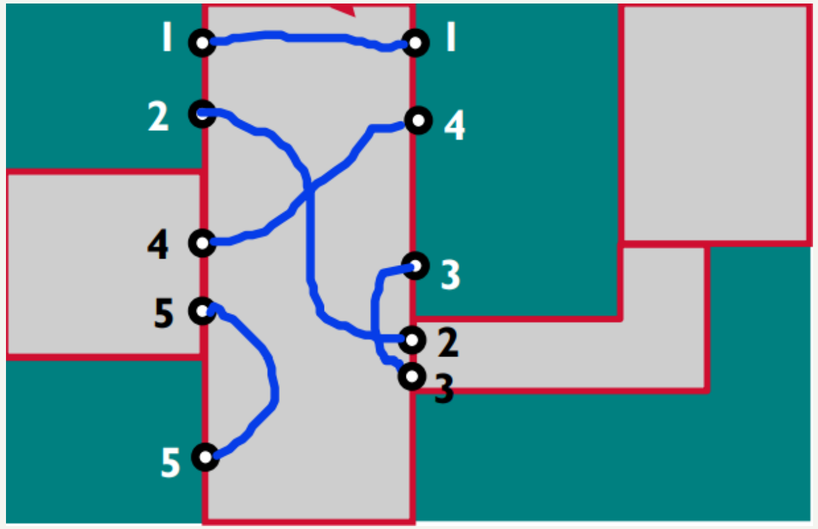


- Routing typically done in two stages:
  - Global Routing
  - Detailed Routing

Routing Algorithms

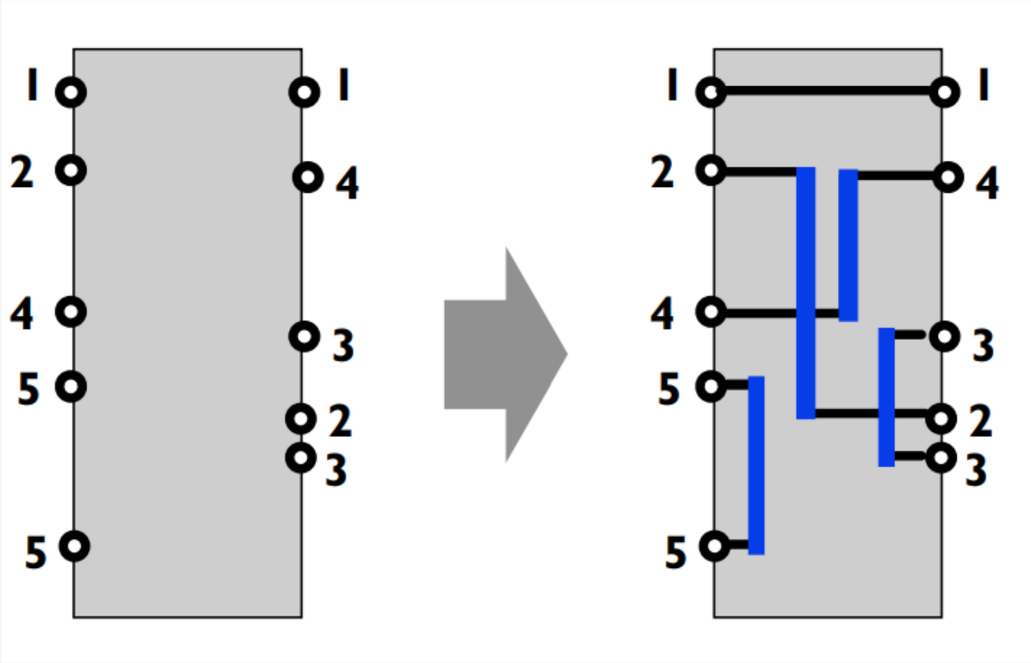
- Global Routing :
  - Chop up chip into big regions.
  - Decide through which region the wires will go.



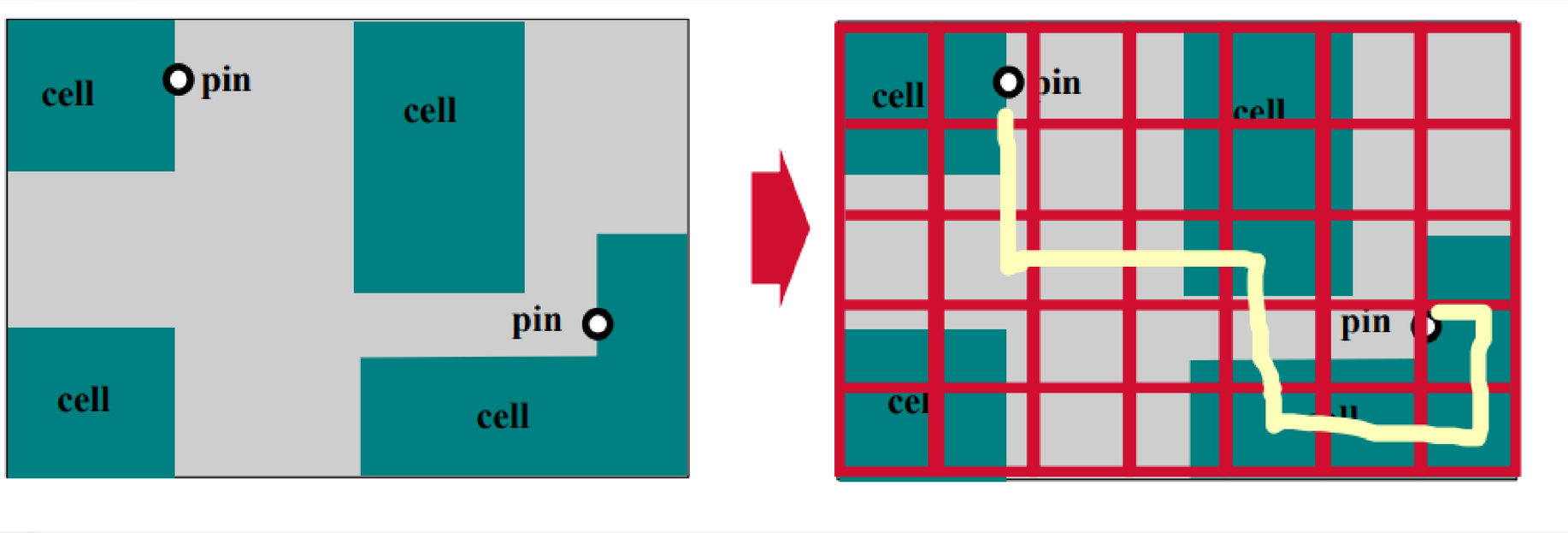


Routing Algorithms

- Detailed Routing:
  - Exactly put down the actual wires in the regions

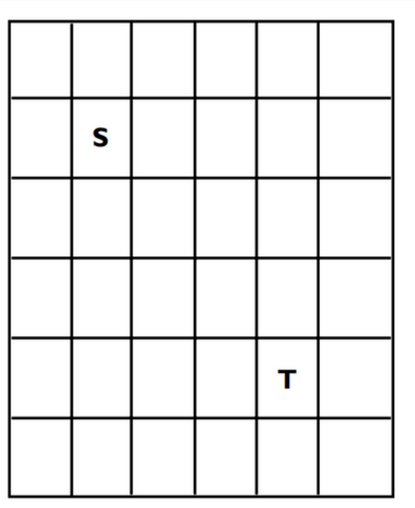


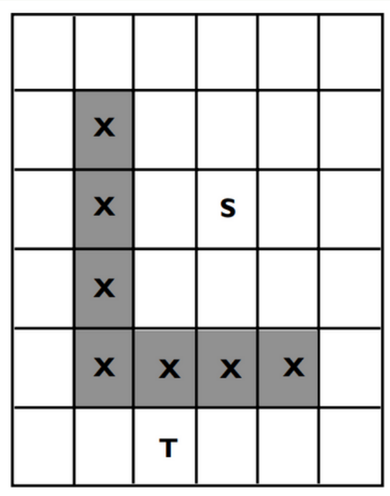
Routing Algorithms



Routing Algorithms

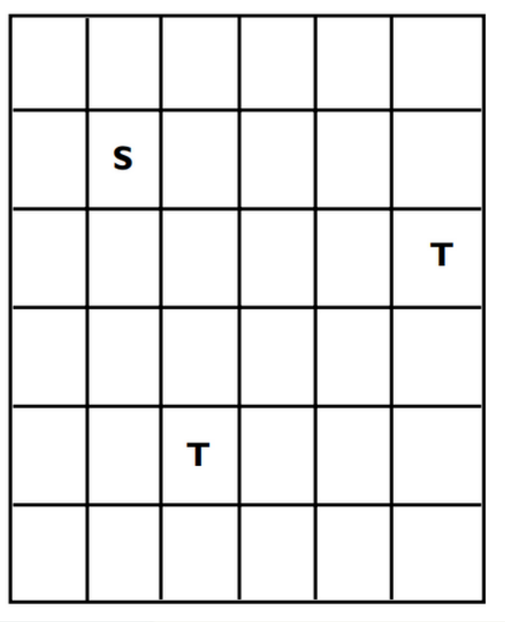
- Maze Routing for solving:
  - Uses Lee’s Algorithm for finding shortest paths between two points in grid.

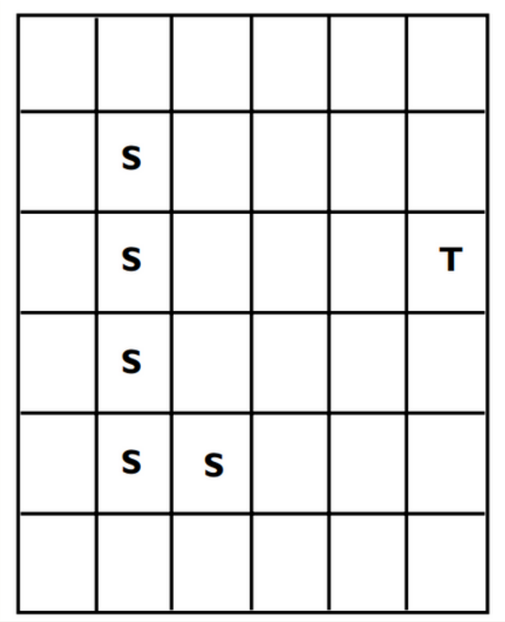


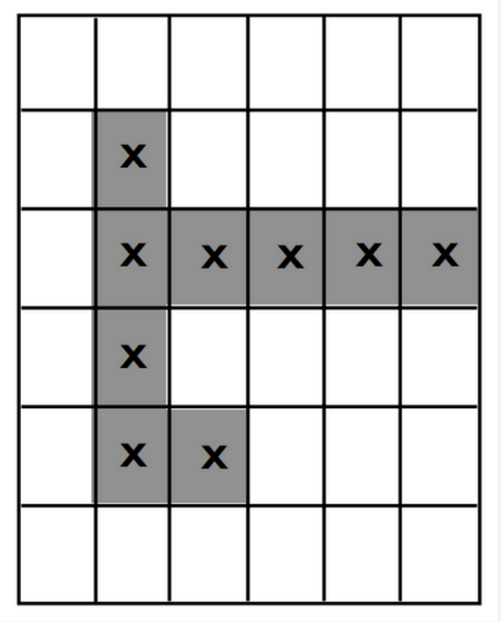


Routing Algorithms

- Expand -> Backtrace -> Cleanup

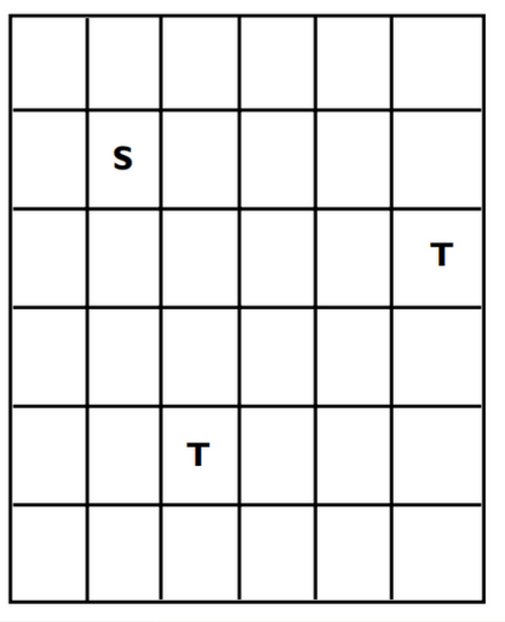


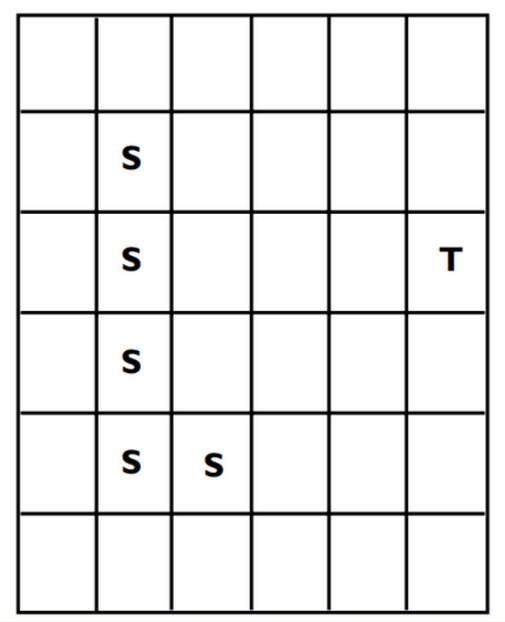


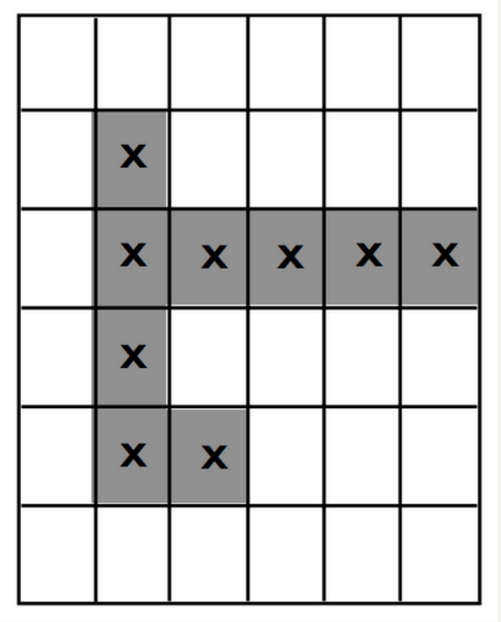


Routing Algorithms

- Expand -> Backtrace -> Cleanup







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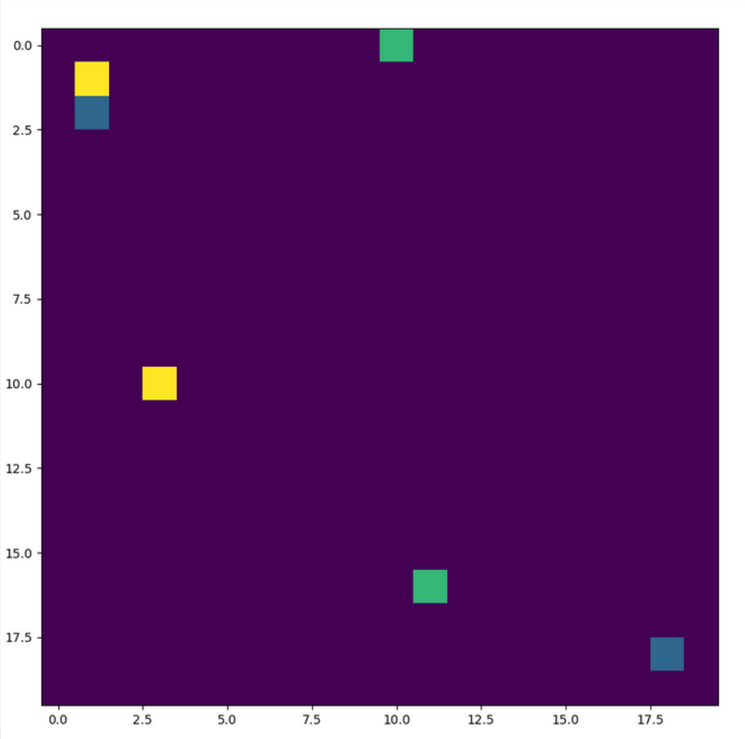

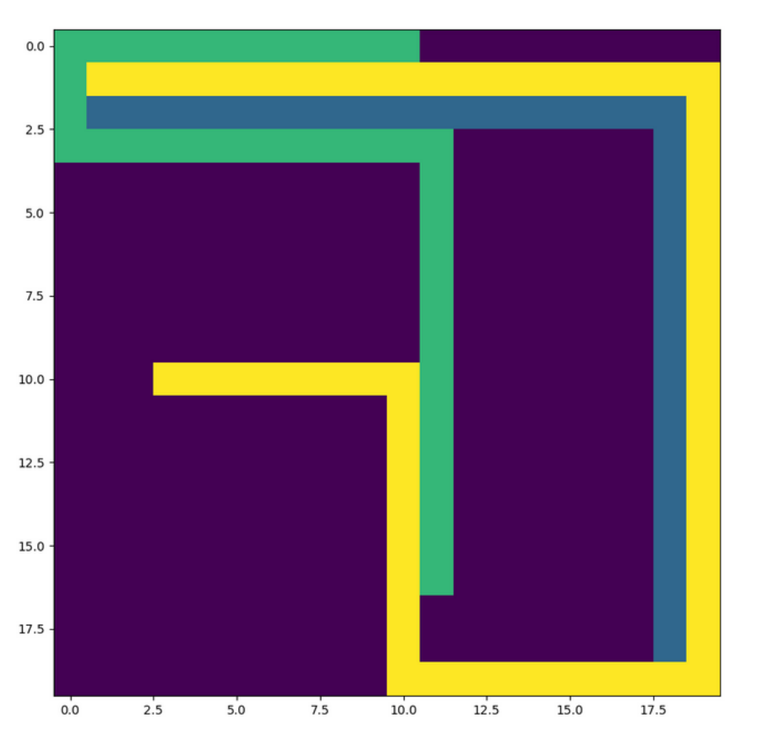

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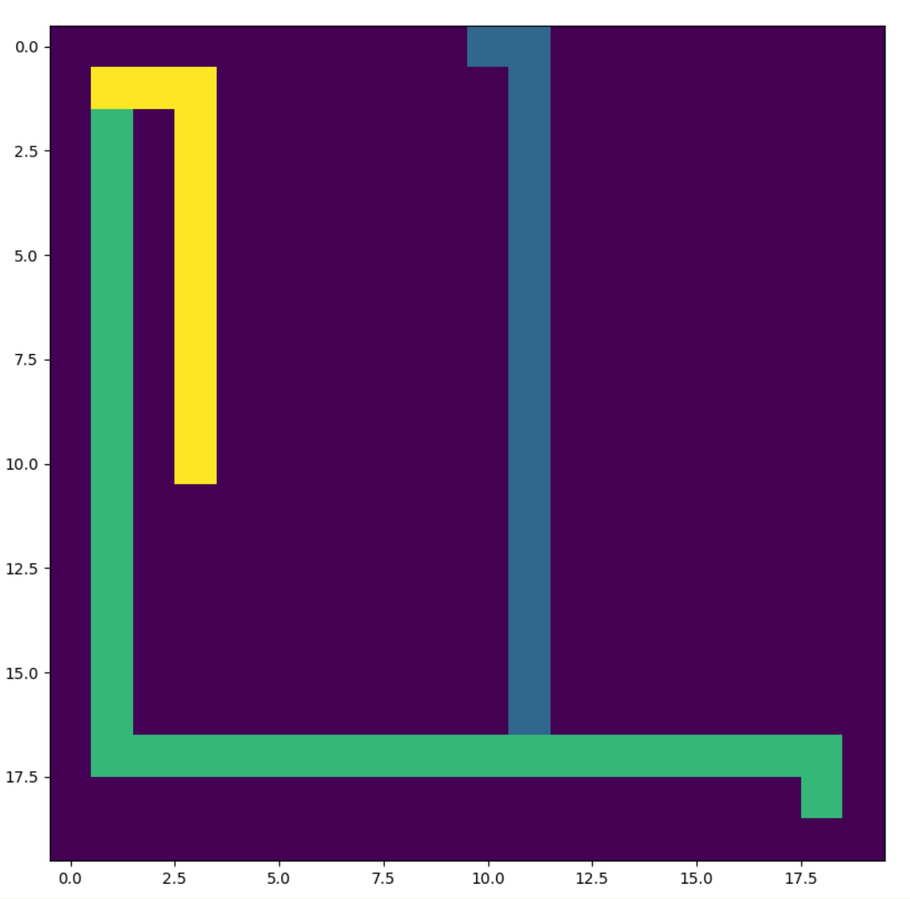

Summary of overall Progress

- We explored the routing algorithms.
- Explored the ALIGN dataset for dummy MACROs and Larger dataset Generation.

Any specific request to Micron

None for now