

Update on Ara

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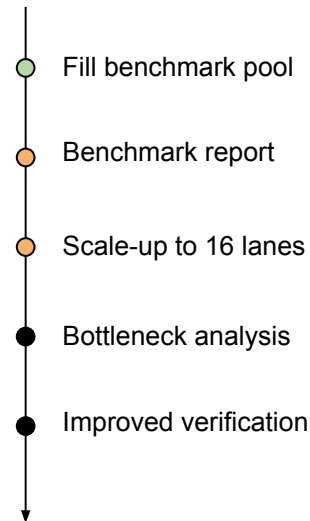
Summary

- **Software**

- Performance summary on GitHub
- Gather performance data + Report

- **Hardware (RTL + Backend)**

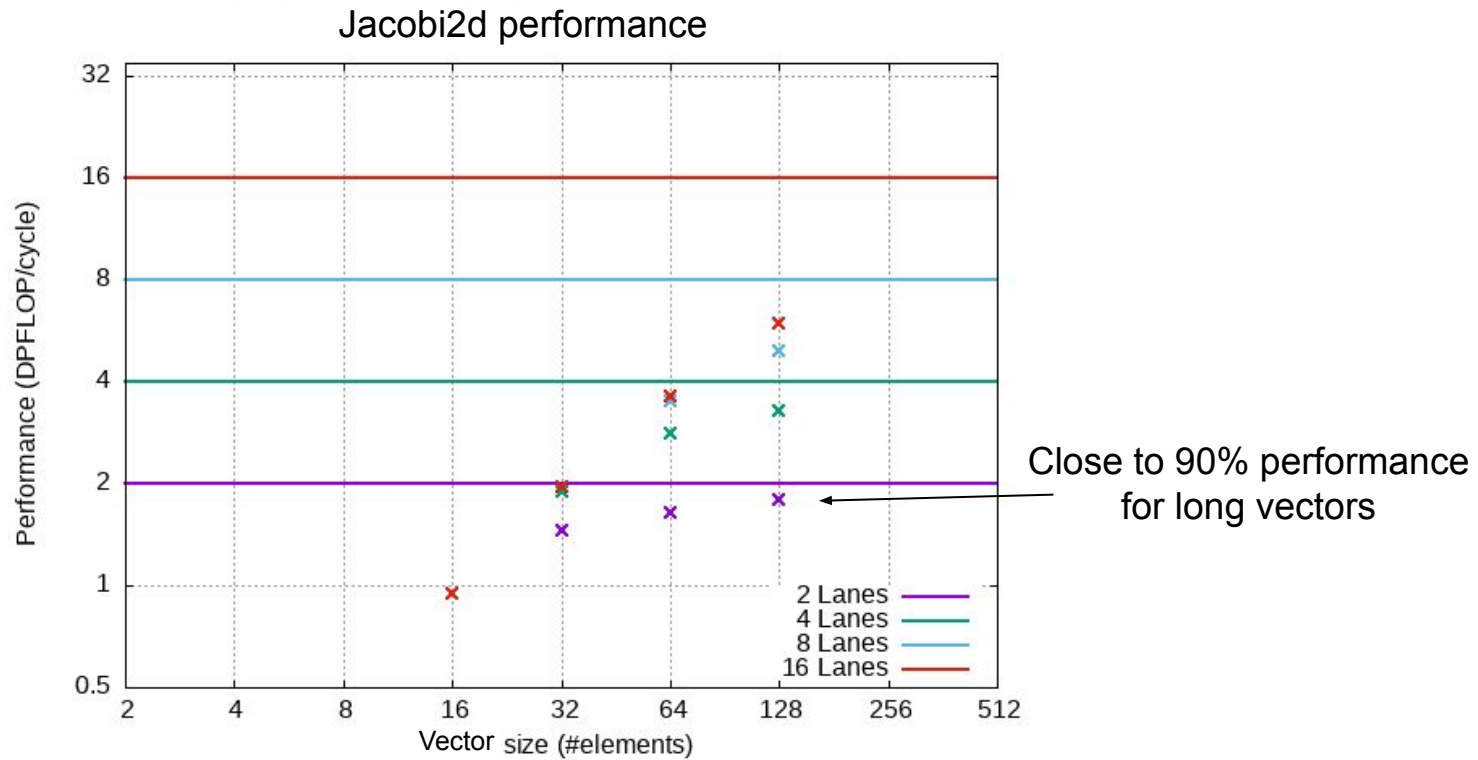
- Scale to 8 lanes
- Bug Fixing



Software

- **Software**
 - Performance summary on GitHub
- Example: Jacobi2d
 - Always **computation bound**

Software

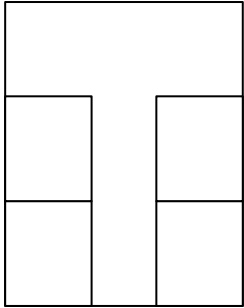


Hardware

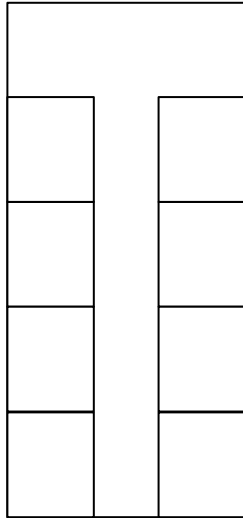
- **Scale up to 8 lanes**
 - Cannot close timing with hierarchical flow
- Critical convoluted paths
 - From main sequencer to lanes
- Different parallel trials:
 - Flat-system flow
 - Different floorplan shapes

Hardware

Hier - 4 Lanes



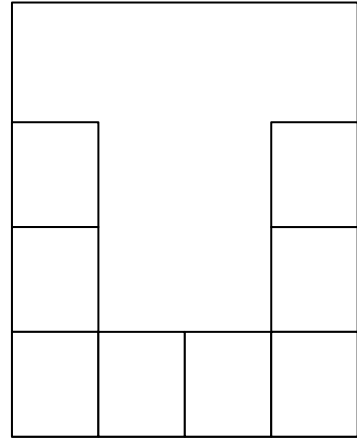
Hier - 8 Lanes



Flat - 8 Lanes



Hier - 8 Lanes



Further

- **Software**

- Performance summary on GitHub
- Gather performance data + Report

- **Hardware (RTL + Backend)**

- Close timing with 8 lanes
- Repeat with 16 lanes

