## FPGA Implementation (1A)

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## Based on

## **Implementation Steps**

- Translate
- Map
- Place & Route
- Generate Program File

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- Translate  $(.ngc \rightarrow .ngd)$
- Map  $(.ngd \rightarrow .ncd)$
- Place & Route  $(.ncd \rightarrow .ncd)$
- Generate Program File (.ncd → .bit)

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- Translate Report
- Floor plan design
- Post-translation simulation model



- Mapping report
- Post-mapping static timing
- Post-mapping floor plan design
- Post-mapping simulation model

- Place-and-route report
- Clock region report
- Asynchronous delay report
- Pad report

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## References

- [1] ftp://ftp.geoinfo.tuwien.ac.at/navratil/HaskellTutorial.pdf
- [2] https://www.umiacs.umd.edu/~hal/docs/daume02yaht.pdf