Tiny Tapeout

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What is TinyTapeout

- A multi project chip platform that exist to make manufacturing ASIC designs easier and cheaper.

- Use of open source tools and process design kits means that no restrictive licenses are required.

- All required software is run on cloud server meaning that no software installation is required.

- Tiny Tapeout chips consists of designs by multiple people

Who & Where?

Key people
- Matt Venn
  - founder of Tiny Tapeout
- Uri Shaked
  - Co founder
  - Wokwi integration and tooling

Key partners
- Educational
  - SwissChips Initiative
- Foundries
  - Chipfoundry (former Efabless)
  - IHP
  - GlobalFoundries

How?

Languages and tools

- Wokwi
  - Visual tool for design
- Verilog
  - HDL
- OpenLane (LibreLane)
  - RTL to GDS
- PDKs
  - sky130A, ihp-sg13g2 and gfmchu180d
- Tools are run in GitHub's servers

Restrictions and licenses

- Apache license 2.0
  - Open-source under the license
- No restrictions

Scale

- Multi-repo ecosystem
  - Huge amount of code across all components

How easy is it to get started?

- Clear walk though guides on
    - Getting started
    - Tesing
    - GitHub actions for GDS synthesis
- Clear guides on using wokwi
    - Easy to use since it runs in browser