

ECE 497: Special Project

Weekly Report

Week 01

Alexander Lukens Karl Hallsby

Illinois Institute of Technology

February 2, 2021

Work We Did

- ▶ Set up Virtual machines to have similar environments.
- ▶ Clone the ChipYard repository.
- ▶ Build the toolchains required.
- ▶ Followed documentation's example on how to generate a generic RISC-V chip.
- ▶ Used Verilator to simulate the default chip design.
 - ▶ Ran all tests (`make run-asm-tests`)
 - ▶ Ran all benchmarks (`make run-bmark-tests`)
 - ▶ The default chip design passed all tests and benchmarks successfully.



Alon Amid et al. “Chipyard: Integrated Design, Simulation, and Implementation Framework for Custom SoCs.” In: *IEEE Micro* 40.4 (2020), pp. 10–21. ISSN: 1937-4143. DOI: [10.1109/MM.2020.2996616](https://doi.org/10.1109/MM.2020.2996616).