

Chipyard

<https://github.com/ucb-bar/chipyard>

“Chipyard is an open source framework for agile development of Chisel-based systems-on-chip. It will allow you to leverage the Chisel HDL, Rocket Chip SoC generator, and other projects to produce a RISC-V SoC with everything from MMIO-mapped peripherals to custom accelerators.

Chipyard contains:

- *processor cores*
- *accelerators (Hwacha, Gemmini, NVDLA)*
- *memory systems*
- *additional peripherals and tooling to help create a full featured SoC.*

Chipyard supports multiple concurrent flows of agile hardware development, including:

- *software RTL simulation (register-transfer level)*
- *FPGA-accelerated simulation (FireSim)*
- *automated VLSI flows (Hammer)*
- *software workload generation for bare-metal and Linux-based systems (FireMarshal). ”*