

## Traditional Approach

design.scala

firrtl compiler

Verilog

Verilator

Toggle

Line

~~Custom~~

Custom  
Report

Com-  
mercial  
Simulator

Toggle

Line

FSM

~~Custom~~

+ More

Custom  
Report

## Our Modular Approach

design.scala

firrtl compiler

Toggle

Line

FSM

Custom

instrumentation passes

firrtl IR

Verilog

Firesim (FPGA)

Firrtl Interpreter

Commercial Sim

Verilator

Yosys (Formal)

Toggle

Line

FSM

Custom

report generators