## SOCGEN

## A design for reuse environment

Free opensourced toolkit and libraries for creating SoC designs
Available on opencores.org

IP-Xact based toolflow promoting easy exchange of ip Correct by construction design methodology Separate design view for each toolflow Easy to retarget designs into different processes Builds verilog files from ip-xact descriptions Prevents name collisions from modules and 'macros Packages each component into single library file Eliminates search paths Supports IP-Xact bus definitions

Icarus verilog simulations
Code coverage using covered
Rtl checking using verilator
Synthesys using Xilinx webpack
Waveform viewing using gtkwave
Finite state machines with fizzim
Control and status register generator