Commercially Supported RISC-V Simulation and Platform Development Tools

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Who are Imperas?

- Leading independent commercial simulation vendor, established 10 years
  - Solutions for small single core controller users all the way to high end 64bit MP Arm, MIPS architectural licensees
  - Single licenses to enterprise wide regression farms
  - Formed Open Virtual Platforms (OVP) to drive industry
  - Oxford, UK HQ, Calif. US Sales, Distributors RoW
- Focus on embedded software development utilizing simulation
  - models, simulators, tools, methodologies, solutions

What we provide for Embedded Software Developer

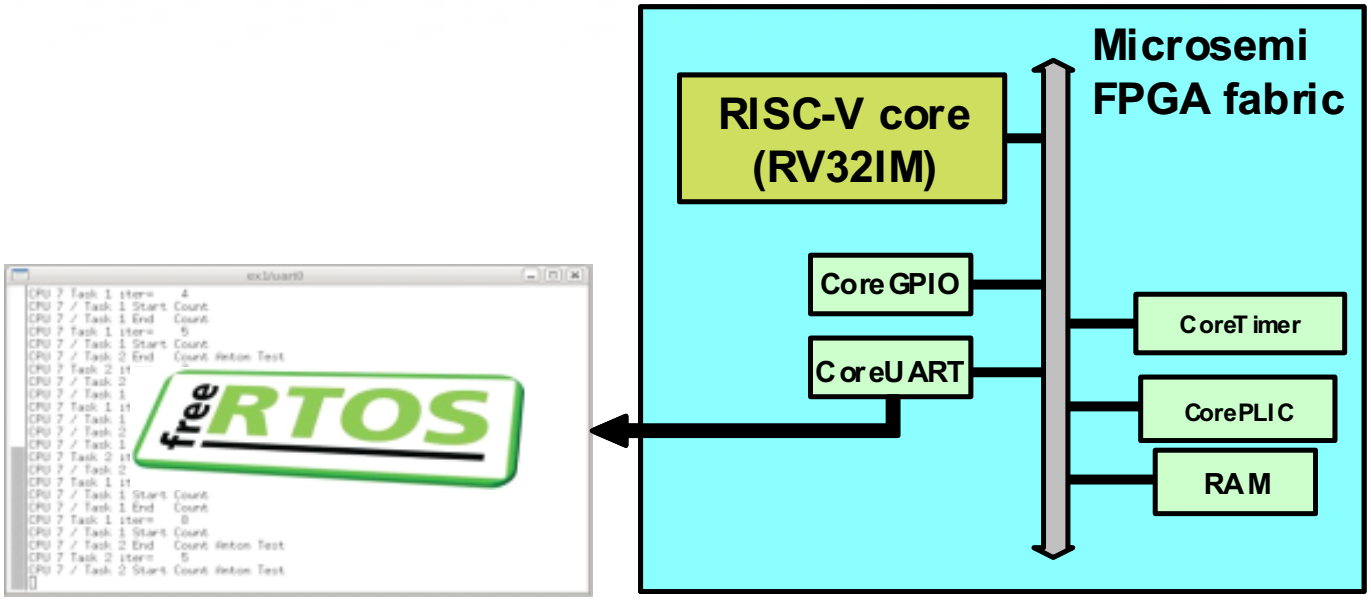
- Fast Processor Models (200+) for different vendors/ISA (10+)
- High performance IA Simulator
  - integrateable into 3rd party & test environments
- Tools for non-intrusive C Application profiling and line coverage
- GUI, Debugger - multi-processor debugger
  - Eclipse based, extended for hetero MP, programmers view
  - Source code level, instruction, platform
- ISS and Extendable Platform Kits for flexibility and quick start
- Variety of extendable reference models of standard platforms running various operating systems (FreeRTOS, Linux, …)
  - Includes over 200 peripheral component models of standard parts (Ethernet, USB, CAN, …) to easily create own platforms
- OS-aware tools for porting and bring up of operating systems, hypervisors, drivers
- Simulator designed to be used in regression test and Continuous Integration / Continuous Test environments

What do we offer for RISC-V processor developers

- Commercially supported models, simulator, tools focused on RISC-V
- Highest performance RISC-V simulator: 25+ X faster than Spike
- NEW! All 32/64bit RISC-V CPU features implemented in simulator, currently 12 variant models, 6 vendor core models
- CPU models easily user extendable using standard tool features adding customer specific registers, instructions, behaviors
- CPU Model Code Coverage tool
- CPU Instruction Coverage tool
- NEW! CPU Cycle Approximate simulation using CPU cycle timing estimation
- CPU performance simulator interface e.g. to Gem5
- Interfaces for use with 3rd party simulators, RTL testbenches for DV
- NEW! Imperas RISC-V processor verification tools/suite
- NEW! OEM of Imperas commercially supported simulator and vendor specific models, platforms

Imperas and Microsemi collaborate on RISC-V simulation models and tools

- Mi-V Imperas FreeRTOS Extendable Platform Kit



Thank you!

For more information about the leading commercial simulation, models, and tools for RISC-V designs:

www.imperas.com

www.OVPworld.org