











# Revolutionizing Embedded Software Development

**Imperas Newsletter: March 2018** 

"Silicon without software is just sand."



**EVENTS** 



#### **DATE 2018**

<u>DATE (Design, Automation & Test in Europe) 2018</u>, March 19–23, in Dresden, Germany, will feature two presentations based on Imperas virtual platform technology:

"Early Evaluation of Multicore Systems Soft Error Reliability Using Virtual Platforms" by Felipe Rocha da Rosa of Universidad Federal Rio Grande Sud.

"<u>Virtual Prototype Makani: Analyzing the Usage of Power Management Techniques and Extra-functional Properties by Using Virtual Prototyping</u>" by Sören Schreiner, OFFIS – Institute for Information Technology.

Read more here.

**Embedded World 2018** 



At the February Embedded World Exhibition & Conference 2018 in Germany, Imperas demonstrated virtual platforms solutions in the RISC-V Foundation booth, featuring technology to accelerate embedded software development and test. Imperas also presented two co-authored papers:

- <u>Virtual Platform Environment for the Bring Up and Test of a Secure</u>
   <u>Many-Core RTOS (Real Time Operating System)</u>
- <u>Cycle-Approximate Timing Simulation of RISC-V Processors</u>



#### **Automotive Testing Expo in Korea**

Imperas distribution partner Coontec presented Imperas virtual platform solutions for automotive software debug, test and verification, including fault simulation and RISC-V platform demos, at the Automotive Testing Expo in Seoul, Korea, March, 2018.

Read more here.

NEWS





## RISC-V RV64GC High-Performance Extendable Platform Kit For Fast Linux Execution Released by Imperas

A new Imperas virtual platform, the RISC-V RV64GC Linux Extendable Platform Kit (EPK), was specifically designed to run Linux at close-to-operational performance, and can boot Linux in under five seconds on a standard PC, so applications can execute at reasonable performance levels without the need for an actual RISC-V hardware device. A superior solution for early software development and RISC-V hardware validation Click here to view a video demonstrating Linux booting on the EPK. Read more.

## Imperas Appoints Kevin McDermott Vice President of Marketing

Imperas' new vice president of marketing, Kevin McDermott, will expand corporate growth, increasing strategic presence in IoT, automotive,





security and RISC-V applications. He is chartered with high-value market segmentation and analysis for penetration and sales acceleration, as well as product marketing, pricing and packaging, demand generation, ecosystem partnerships, and overseeing corporate communications and analyst relations.

Read more.

### Ashling and Imperas Partner to Extend the RISC-V Ecosystem

As leaders in the RISC-V initiative, both Ashling Systems and Imperas believe that the RISC-V community and market benefits from an expanded ecosystem, a turnkey software solution, and one-stop shopping for RISC-V development tools. Hence, they have formed an alliance and partner to provide integrated tools and solutions for RISC-V software development. Technology aspects of this alliance include the integration of Imperas' high-performance virtual platforms, simulation engines and models into Ashling's own RiscFree™ IDE and tools offering. On the business side, Ashling will promote, sell and support this new, comprehensive, turnkey solution spanning the solutions of both companies.

Read more.



### Magillem Partners with Imperas A winning combination in delivering value to system developers

Since 2015, Magillem and Imperas have partnered to provide a unique virtual prototyping solution set, fully based on the IEEE standards IP-XACT and SystemC. Imperas delivers virtual platforms / virtual prototypes spanning ultra-fast simulation, advanced debug solutions, and a wide variety of processor and peripheral models via the OVP initiative, as open source. Imperas combines high-performance models with powerful simulation, debug and test tooling to perform architectural analysis, early software development; and more comprehensive embedded software test, analysis and optimization across many processor cores and the full spectrum of operational scenarios. Thanks to this partnership, Magillem offers a complete front-end design, verification and reuse methodology flow from SystemC to RTL simulation, including software simulation and debug. Imperas processor and

peripheral models are packaged in IP-XACT and assembled in the Magillem tool suite.

Read more.

**VIDEOS** 



### **Imperas at Embedded World 2018**

Rich Nass, EVP of Editorial at OpenSystems Media, interviews Larry Lapides, VP of Sales at Imperas, at Embedded World.

Click here to view the video.

#### **OVPsim Release News**

OVP: Fast Simulation, Free open source models, Public APIs: Open Virtual Platforms.



A new Imperas and OVP release became available March 2018. The <u>Open Virtual Platforms</u> portal is one of the most exciting open source software developments in the embedded software world since GNU created GDB.

• For embedded software developers, virtual platforms are increasingly important, especially for multi-core designs.

The resources on this portal can significantly accelerate your development and test. The next release of OVPsim is expected to be available in May 2018.

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