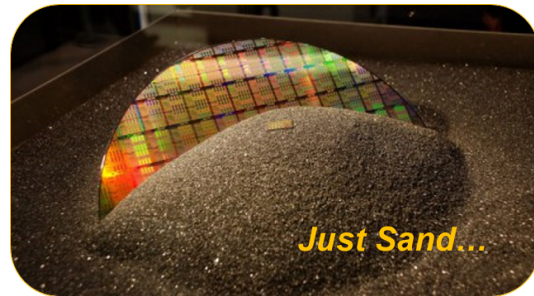# imperas

Revolutionizing Embedded Software Development

Imperas Newsletter: July 2015

"Silicon without software is just sand."

Updating you on what's new in the embedded software revolution.

Just Sand...

CEO View: Simon Davidmann

DAC 2015 in San Francisco was well attended, with 4393 conference attendees, up over last year. Interest was high in Imperas virtual platforms for software development, both at our demo booth and at tutorials. If you missed DAC, please contact larryl@imperas.com for a webinar overview and demo, or to arrange a deeper tutorial.

- DEMO: Imperas virtual platform based embedded software debug, analysis and verification demos feature the full line of Open Virtual Platforms (OVP) models of ARM processors, as well as IP and cores from Altera, Imagination Technologies / MIPS, opencores, PowerPC, Renesas, Xilinx, and more.
- TUTORIALS: Imperas Software, with partners Altera and Posedge Software, deliver tutorials on "Linux Porting and Bring Up, and Linux Driver Development" featuring virtual platforms.

The Imperas team looks forward to helping you deploy virtual platforms and virtual prototyping technology for faster, higher quality, more predictable embedded software development.


Imperas Fast Processor Models of ARM Cores

Fast Processor Models of ARM Cores Released by Imperas with Changes to OVP ARM Core Model Licensing Terms.

Imperas recently announced the release of Open Virtual Platforms™ (OVP™) Fast Processor Models for popular ARM® cores to accelerate embedded software development for multi-core ARM-based designs. Cores include: Cortex®-A17, Cortex®-M0, Cortex®-M0+, and Cortex®-

M1. Also announced are changes to the terms of licensing of the OVP ARM Models.

New Extendable Platform Kits™ (EPKs™) of ARM-based devices are available from Imperas, working together with the M*SDK™ tools, to help accelerate embedded software development, debug and test. EPKs are virtual platforms (simulation models), including processor models plus peripheral models necessary to boot an operating system (OS) or run bare metal applications. The platform and peripheral models included in the EPKs are open source, so that users can easily add new models to the platform as well as modify the existing peripheral models. The example OS and/or applications are also included.

Read more here.
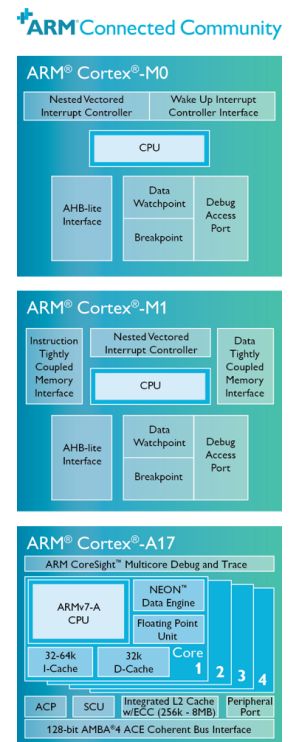
New Video on Imperas with Simon Davidmann

View a new video interview with Imperas CEO Simon Davidmann, by EDA Café.

All about Imperas: Simon discusses what we do, with a technology overview, and why you need virtual platforms!

Watch the brief video here!

See more videos and demos here!

Imagination Technologies blog: OS bring up using virtual platforms

Larry Lapides, VP of sales at Imperas, discusses OS bring up on MIPS using virtual platforms.

"Linux has become the general purpose operating system of choice for embedded systems, and is almost always supported for high end SoCs developed by semiconductor vendors. These SoCs now have multicore processors, and run symmetric multiprocessor (SMP) Linux. Most vendors start with the MIPS Linux distribution, then customize it for the specific SoC (requiring device tree changes), including the necessary drivers for the peripherals on the SoC as well as supporting other customizations and unique features. While the MIPS Linux distribution is a great starting point, that does not make customization and bring up an easy task.

To put it another way: Just because you get to the Linux prompt doesn't mean everything is working."

Read more here.

Previous blogs:

- [Security, MIPS VZ instructions and virtual platforms](#)
- [New MIPS models from Imperas shown at Embedded World 2015](#)

A Fish Fry, with Simon Davidmann

[Virtual Platforms and You: Embedded Software Development with Virtual Platforms](#)

Amelia Dalton of EE Journal interviews Simon Davidmann on new trends in embedded software development. "In this week's Fish Fry, we take a closer look at virtual platform-based methodology for embedded software development with Simon Davidmann (CEO - Imperas). Simon and I discuss the advantages of the Open Virtual Platform Consortium. and how virtual platforms can speed up your design process."

[Listen to this short audio interview here.](#)

Ed Sperling says "SoC Integration Headaches Grow"

[Ed Sperling of Semiconductor Engineering writes about SoC integration headaches.](#)

"Every chip has in-house and commercial IP, mixed signal components and a slew of tools. What's the best way to put them together, and how do you wade through the mountains of data?"

[Read more here.](#)

"What is a System Now?" Asks Ann Steffora-Mutschler

[Ann Steffora-Mutschler of Semiconductor Engineering writes about systems today](#).

"As designs become part of connected networks, so do the requirements for what's needed to make it work properly."

[Read more here.](#)

OVPsim Release News

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

The [Open Virtual Platforms™ (OVP™)](#) 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 will be increasingly important, especially for multi-core designs. The resources on this portal can significantly accelerate your development and test..
- Explore what is new at OVPworld!

The current OVPsim release is 20150205.3 (May 2015)

- Please check the release notes on OVPworld.org for more details.
- The next release of OVPsim is expected to be available in mid-August.

Website	LinkedIn	Email