

## **The Tinker's Toolbox - Tom De Schutter of Synopsys on Transaction-Level Models**

Submitted by Guest (not verified) on Mon, 12/12/2011 - 10:01am



Hosted by Alix Paultre, the Tinker's Toolbox is the Advantage Design Group's web-based interview show where we talk about the latest technology, components, and design issues for the electronic design engineering community.



In this podcast we talk to Tom De Schutter, Senior Product Marketing Manager, System Level Solutions at Synopsys about transaction-level model (TLM) technology. Transaction-level models raise designer productivity by increasing the level of abstraction at which they design. TLMs are predominantly used in virtual prototypes which allow engineers to accelerate their software design schedules by up to nine months and significantly improve the productivity of their software development, hardware/software integration, and system validation tasks.

[Right-click to download the podcast](#) [1]

Here is a link to the podcast in case the play button is inoperative: [Synopsys Interview](#) [1]

Here is a press release from the company on their technology:

Synopsys and ARM today announced a licensing agreement enabling Synopsys to distribute ARM's Fast Models and create models of ARM Cortex Series processors. Designers will be able to accelerate embedded software development for ARM technology-based designs by up to nine months by creating virtual prototypes using

ARM models with Synopsys' DesignWare TLM, SystemC TLM Libraries and Virtualizer tool set. ARM Fast Models and other ARM transaction-level models (TLMs) are listed on the newly launched [TLMCentral](#) [2] web portal.

Introducing

# TLMcentral

Open & Free

First industry-wide portal to aggregate available transaction-level models

>600 Models

Models of most common IP blocks and interfaces for wireless, consumer and automotive apps

Community Supported

Supported by leading IP vendors, tool providers, service companies and universities

Methodology Information

Offers model developers, architects and SW engineers an infrastructure for news, forums and blogs

"The combination of ARM Fast Models, ARM software tools and Synopsys' solution for virtual prototyping delivers a powerful capability to developers of ARM technology-based SoCs," said John Cornish, Executive Vice President, System Design Division, ARM. "Synopsys' ability to integrate ARM Fast Models has already provided great benefits to ARM partners who use Synopsys' technology to accelerate software development. The new agreement includes the latest generation of ARM and Synopsys products, and enhances hardware/software performance validation for joint customers."

Combining ARM processor models with Synopsys' [Virtualizer](#) [3] tool set and broad portfolio of transaction-level models enables design teams to rapidly create and deploy virtual prototypes. The agreement allows Synopsys to distribute [ARM Fast Models](#) [4] of Cortex processors that ARM has validated against its processor validation suite. This includes modeling of advanced ARM technologies, such as TrustZone® and Vector Floating Point (VFP). In addition to the Virtualizer tool set's advanced debug and analysis capabilities, designers can also take advantage of the performance and early availability of these models. This allows them to accelerate virtual prototype development, enabling software design to start up to 12 months before the first silicon is available.

Synopsys' technology for developing fast-timed models of ARM processors provides designers with solutions early in the design cycle that are orders of magnitude

faster than RTL simulation or emulation. Synopsys-developed fast-timed models offer the timing accuracy needed for comprehensive system performance optimization. They also support speeds suitable for executing complex software applications, including those that run on multicore platforms.

"SoC designers are increasingly turning to multicore implementations to meet their performance objectives, which makes developing and testing software a more complex, effort-intensive task," said Joachim Kunkel, senior vice president and general manager for IP & systems at Synopsys. "This agreement with ARM immediately extends our solution for fast and accurate system-level simulation, making Synopsys the leading supplier of virtual prototyping tools, models and services for the latest generation of ARM technology-based designs. This offering enables our mutual customers to start software development earlier and dramatically boost their design productivity."

## Availability

The ARM Fast Models for Cortex processors are available now from Synopsys. Customers interested in fast-timed models can contact Synopsys immediately. Fast Models and other TLMs from ARM and Synopsys are listed on [www.TLMCentral.com](http://www.TLMCentral.com) [2], the first industry-wide source for transaction-level model information. For more information on Synopsys' Virtual Prototyping Solution, including models, tools and services, visit: [www.synopsys.com/virtualprototyping](http://www.synopsys.com/virtualprototyping) [5].

## Source URL (retrieved on 10/21/2014 - 2:31am):

<http://www.ecnmag.com/podcasts/2011/12/tinkers-toolbox-tom-de-schutter-synopsys-transaction-level-models>

## Links:

- [1] <http://www.ecnmag.com/sites/ecnmag.com/files/legacyfiles/ECN/Multimedia/Audio/2011/12/synopsis.MP3>
- [2] <http://www.tlmcentral.com/>
- [3] <http://www.synopsys.com/Systems/VirtualPrototyping/Pages/Virtualizer.aspx>
- [4] <http://www.arm.com/FastModels>
- [5] <http://www.synopsys.com/virtualprototyping>