

First Industry-Wide Web Portal for Transaction-Level Model Access Welcomes Model Developers and Users

TLMCentral Lists More Than 600 System-Level Models to Speed Creation of Virtual Prototypes

MOUNTAIN VIEW, Calif., September 29, 2011—Synopsys, Inc. (Nasdaq: SNPS), a world leader in software and IP used in the design, verification and manufacture of electronic components and systems, today announced the launch of [TLMCentral](#), the first industry-wide web portal for developers and users of transaction-level model (TLM) technology. TLMCentral aggregates information about free and commercial system-level models of common system-on-chip (SoC) components from leading semiconductor IP vendors, tool providers, service companies and universities. TLMCentral is an open portal that will ease and accelerate the development of virtual prototypes across the industry. It is available at no cost to users and providers of transaction-level models.

What users can find at www.TLMCentral.com:

- An initial listing of more than 600 system-level models of common SoC building blocks such as processor, interface and interconnect IP.
- Modeling support from experts around the world through a broad community of leading IP vendors, tool providers, service companies, consultants and universities.
- A centralized online resource with intuitive search functionality to find relevant models as well as industry news, forums and blogs.

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. Transaction-level modeling has also contributed to significant productivity gains in architecture design and SoC verification, and the models aggregated on TLMCentral can be applied to those use cases as well.

"TLMCentral is aligned with ARM's strategy to participate in industry initiatives that accelerate product development cycles and further increase the rapid pace of innovation around the ARM architecture," said Lance Howarth, executive vice president of marketing, ARM. "By listing ARM Fast Models on TLMCentral, we want to enable designers to efficiently source the transactional models and support they need to build virtual prototypes more quickly and start software development earlier."

"TI believes that the TLMCentral initiative has the potential to address a significant gap in the virtual platform ecosystem by enabling a supply of high quality interoperable models," Amit Nene, engineering manager, Texas Instruments. "TI has invested in and benefited from the use of virtual platforms and it would be great to be able to leverage such a repository to shrink time-to-market."

Click [here](#) to see additional quotes from companies who have joined the TLMCentral community.

Escalating software content in semiconductor and electronic products is driving the adoption of virtual prototyping, which enables software development to start earlier and be completed with less effort than traditional methods. Until now, virtual prototype developers lacked a centralized resource for finding TLMs available from third-parties, often re-creating models that had already been developed. TLMCentral greatly improves the efficiency of developing virtual prototypes by providing an online infrastructure for aggregating free and commercial system-level models from across the industry, including more than 600 models at launch.

Using an intuitive search interface, engineers can rapidly find models at varying levels of speed and accuracy that are available for their design blocks. These models are contributed by leading IP vendors around the world including ARM, Arteris, CEVA, MIPS, Sonics, Synopsys, Tensilica and Vivante; leading service providers including HCL Technologies and Kasura; and leading research institutes including Industrial Technology Research Institute (ITRI) and RWTH Aachen University. In addition, TLMCentral offers industry news, forums and blogs to connect the TLM community.

"The embedded software market has historically benefited from open industry efforts like TLMCentral," commented Chris Rommel, vice president, Embedded Software & Hardware, VDC. "To be successful, an industry-wide effort needs to focus not just on the models themselves, but also transaction-level modeling methodology and community participation. We think the portal's interactive features such as the forums and initial support from various vendors are a great start in that direction."

"With the OSCI TLM-2.0 standard widely accepted by the industry, the introduction of an open portal takes an important step to

ease the development, promotion and adoption of models based on our standard,” said Eric Lish, chairman of the Open SystemC Initiative. “We welcome this new collaboration between model creators and users to further develop and improve the TLM ecosystem.”

“TLMCentral represents an important milestone for the system-level community and with over 600 models already referenced, the portal is off to a strong start,” said Joachim Kunkel, senior vice president and general manager for IP and systems at Synopsys. “TLMCentral’s unique combination of instant access to models, information and expertise brings immediate value to anyone looking to accelerate their virtual prototype development or promote their models.”

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) is a world leader in electronic design automation (EDA), supplying the global electronics market with the software, intellectual property (IP) and services used in semiconductor design, verification and manufacturing. Synopsys’ comprehensive, integrated portfolio of implementation, verification, IP, manufacturing and field-programmable gate array (FPGA) solutions helps address the key challenges designers and manufacturers face today, such as power and yield management, system-to-silicon verification and time-to-results. These technology-leading solutions help give Synopsys customers a competitive edge in bringing the best products to market quickly while reducing costs and schedule risk. Synopsys is headquartered in Mountain View, California, and has approximately 70 offices located throughout North America, Europe, Japan, Asia and India. Visit Synopsys online at <https://www.synopsys.com>.

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