Synopsys Releases Version 2016.12 of the RSoft Photonic System Design Suite

Latest Release Speeds Simulation of Long-Haul Optical Transmission Systems and Photonic Integrated Circuits

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Highlights:

- Adds Gaussian noise model for faster long-haul optical fiber simulation
- Supports AIM Photonics Process Design Kit for photonic integrated circuit design
- Provides native 64-bit support for faster MATLAB co-simulations

Synopsys, Inc. (Nasdaq: SNPS) today announced the latest release of its RSoft™ Photonic System Design Suite, the company's industry-leading software for the design of optical communication systems and photonic integrated circuits (PICs) at the signal propagation level. Version 2016.12 of the RSoft Photonic System Design Suite includes important enhancements to its optical fiber and PIC simulation capabilities.

Gaussian Noise Model for Long-Haul Optical Fiber Simulation

In the RSoft OptSim[™] tool, a new MATLAB-based Gaussian noise (GN) model provides significant speed gains for long-haul optical fiber simulation. The GN model accounts for fiber nonlinearity in uncompensated optical transmission systems with speed and accuracy and saves time compared to traditional split-step optical fiber simulation methods.

AIM Photonics Process Design Kit

The RSoft OptSim Circuit tool now supports the American Institute for Manufacturing Integrated Photonics (AIM Photonics) Process Design Kit (PDK). AIM Photonics, an industry-driven public-private consortium, is creating a national PIC manufacturing infrastructure and, as part of this initiative, is planning several multi-project wafer (MPW) runs in 2017 that can benefit from a PDK comprising silicon photonic passive and active components. OptSim Circuit's support for the AIM Photonics PDK brings PIC designers a step closer to fabrication through AIM Photonics MPW run facilities.

"The inclusion of the AIM Photonics PDK library in RSoft OptSim Circuit enhances the software's capabilities to help PIC designers create, simulate and optimize hierarchical schematics quickly and reliably, and use layout tools to generate masks that are ready for fabrication," said George Bayz, vice president and general manager of Synopsys' Optical Solutions Group.

Native 64-Bit Support

The RSoft Photonic System Design Suite now provides native 64-bit support, which enables faster MATLAB co-simulation with RSoft tools as well as overall speed and memory management gains. The upgrade also allows the RSoft tools to take full advantage of continuing hardware and operating system enhancements.

About Synopsys RSoft Products

Synopsys' RSoft products are leading solutions in photonic design software and serve several industries including optical communication, optoelectronics and semiconductor manufacturing. RSoft products provide a full range of design, optimization and planning tools for optical communications, as well as solutions for optoelectronics components and subsystems. For more information, visit http://optics.synopsys.com/rsoft.

About Synopsys

Synopsys, Inc. (Nasdaq: SNPS) is the Silicon to Software[™] partner for innovative companies developing the electronic products and software applications we rely on every day. As the world's 15th largest software company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and is also growing its leadership in software security and quality solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest security and quality, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

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