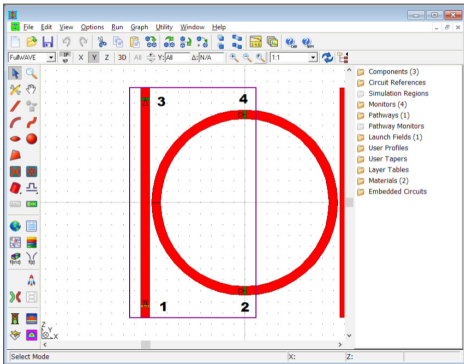


What's New in the RSoft Photonic Component Design Suite

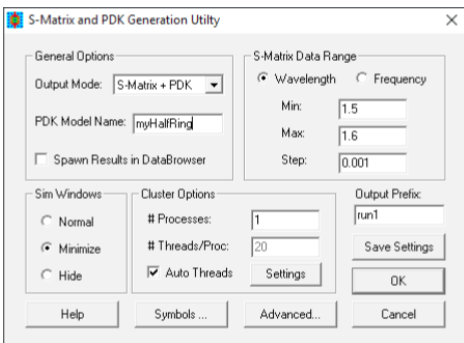


Solutions for the Design of Passive and Active Photonic Devices

The RSoft™ Photonic Component Design Suite provides complete solutions for the design of photonic devices and components used in optical communications, optoelectronics and semiconductor manufacturing. Highly accurate algorithms, including FDTD and beam propagation methods, reduce product time-to-market and development costs. The latest release includes the following new features.

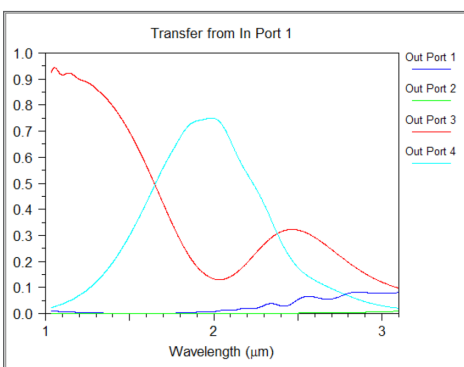
S-Matrix/PDK Generation Utility

The new S-Matrix/PDK Generation Utility automates the interface between the RSoft component tools, the RSoft OptSim™ Circuit tool and mask layout tools. The utility creates the S-matrix of a photonic component using the RSoft FullWAVE™, BeamPROP™ and ModePROP™ tools and exports it to OptSim Circuit to verify its performance in a photonic integrated circuit (PIC) or system. The final design can then be easily exported to mask layout tools to create an optical process design kit (PDK). The interface allows designers to efficiently create PICs from basic building elements and accurately test PIC performance prior to fabrication.



Expanded Effective Index Method

The effective index method (EIM) implementation has been expanded in the RSoft component tools. EIM is a sophisticated method for reducing 3D waveguide structures, such as silicon photonics components, into equivalent 2D structures for extremely fast, accurate performance simulations. EIM can increase simulation speeds by 100x or more.



Improved RSoft FullWAVE Pulsed and Broadband Simulation

This feature allows engineers to accurately simulate the spectral response of photonic devices over a wide wavelength, or spectral, range with just a single simulation. It is especially useful for analyzing resonant devices, such as ring resonators.

RSoft Sub-Cell Meshing

Expanded documentation and examples demonstrate how the RSoft tools' proprietary sub-cell meshing capabilities can significantly improve the accuracy and speed of photonic component simulations.

For more information or to start your free 30-day evaluation, please contact Synopsys' Optical Solutions Group at (626) 795-9101, visit synopsys.com/optical-solutions/rsoft or send an email to optics@synopsys.com.