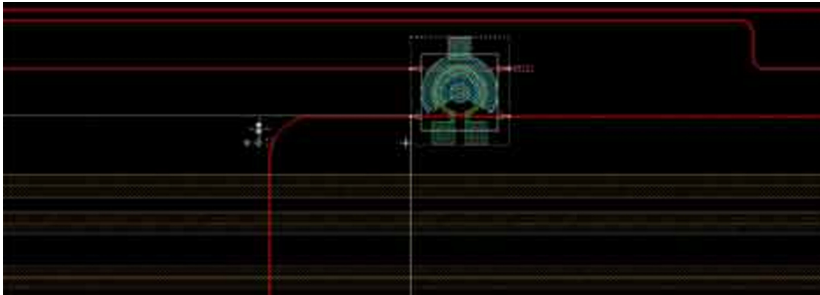


L-Edit Photonics



L-Edit Photonics is a comprehensive photonics physical design environment. It is based on the layout editor widely-used for both IC and MEMS design.

Layout-Centric Design Flow

L-Edit Photonics provides significant productivity improvement with a layout-centric design flow. With this, designers can do all of their work directly in the layout editor. When the design is at a point that simulation needs to be run, a netlist can be created directly from L-Edit Photonics.

This layout-centric design flow removes the need to create a schematic. It saves the designer significant time in the design process. The layout is the golden design database. When the design is completed, a netlist is created. The resulting netlist supports all of our OpenDoor™ photonic simulation partners. It also supports Mentor's transistor level and mixed-mode simulators if the design contains both electrical and optical components.

Python Script Driven Photonics Design Flow

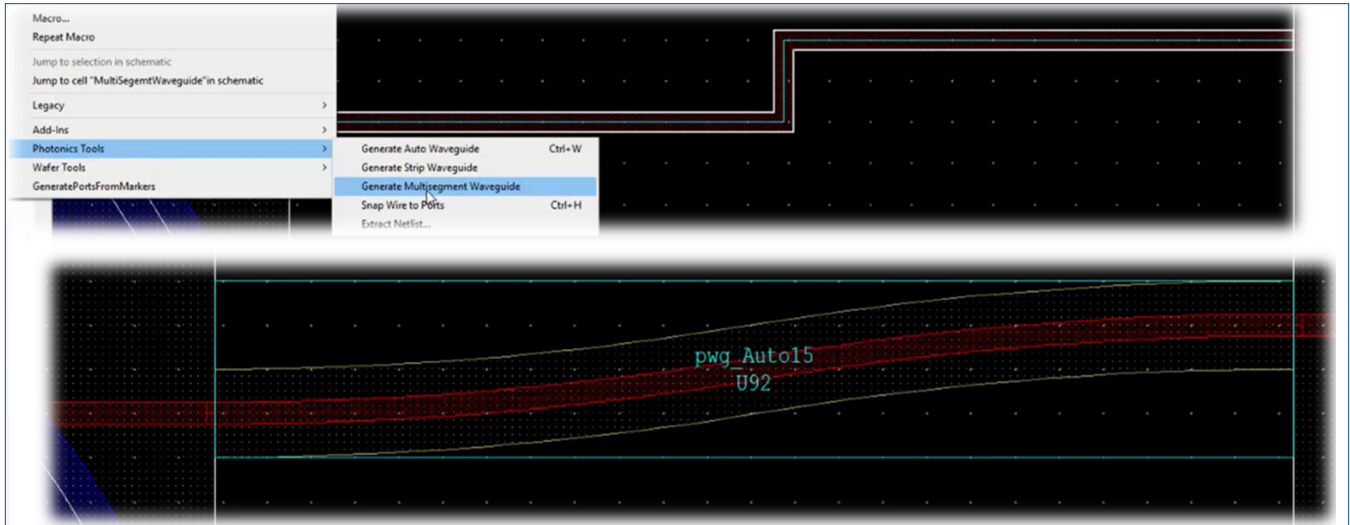
L-Edit Photonics supports a Python script driven design methodology. The design's implementation can be described in a Python script. L-Edit Photonics reads the Python script and creates the layout accordingly based on the commands in the script.

Photonic Design Creation

Creating a photonic layout is simple with L-Edit Photonics. First the designer places the photonic components. Then the waveguides are created to connect those components. Multiple waveguide types are supported: striped, ribbed and multi-segmented. Also, the waveguide can be edited to create a waveguide of an exact length.

FEATURES AND BENEFITS:

- Supports production-level photonic design
- Layout-centric flow with built in netlisting
- Drag & drop or Python scripted methodology
- Waveguide generation & editing:
 - Waveguide editing: length, width radius & type
 - Crossing insertion & tapering where needed
 - Simulation netlist creation
- PDKs available from multiple photonic foundries
- Supports multiple photonics simulators
- Complete, hierarchical physical layout editor
- Native on OpenAccess
- Standard interface to Calibre® physical verification tools
- Object snapping for quick, accurate layout
- Platform independence with Windows® and Linux™ support
- Ease of use: intuitive and quick learning curve



Creating a waveguide in L-Edit Photonics is a two step process. First, create an orthogonal route that connects the two components. Then, by pressing a hot key, that route can be converted into a waveguide with the appropriate curvatures, based on the process.

When two waveguides cross, the waveguides are cut back and a crossing cell is automatically inserted.

Electric components can also be placed manually and interconnected as needed to connect to heaters in the photonic PCells and to the outside electrical world.

Integrations to Calibre

L-Edit Photonics launches Calibre Interactive™ to drive the physical verification. Calibre tools that designers can launch directly are:

- Calibre nmDRC™ for design rule checking
- Calibre RVE™ to view the results and highlight nets and devices with cross probing to L-Edit Photonics

Interoperable with Other EDA Flows

L-Edit Photonics is built on OpenAccess. So, design data can be interchanged with any other layout tool that supports OpenAccess.

Foundry Support

L-Edit Photonics supports Mentor-formatted PDKs and the industry-standard, interoperable iPDK. PDKs are available from multiple photonic foundries.

Designers can also create their own components or create their own PDK.

Requirements

L-Edit Photonics is supported on both Windows and Linux.

For the latest product information, contact us at: www.mentor.com/TannerEDA, (800) 547-3000

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