DESIGN WORKSHOP TECHNOLOGIES

Comprehensive true all-angle Layout Software

Major Product Features

- Full-featured layout editor

- True all-angle edit

- Hierarchical database

- Native support for manufacturing standards

- Convenient choice of options for layout verification and manufacturing data preparation. Purchase only the capabilities required.

- Extended capabilities for MEMS and Photonics

- Complete Boolean operators and derived layers that are distortion free due to superior algorithms
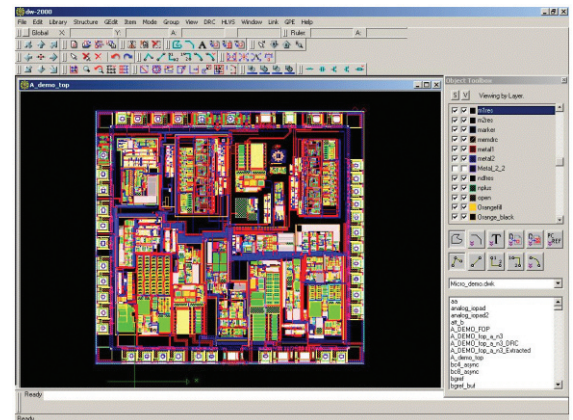
Physical design is all about maximizing the manufacturable functionality on a single substrate. Increasingly, this requires the ability to design, validate and integrate unconventional devices in diverse manufacturing mediums.

Design Workshop Technologies' dw-2000™ software is a powerful layout creation platform. It supports layout engineers in designing manhattan and complex, curve linear micro devices. For nearly two decades, dw-2000 has provided layout engineers with a proven product used in the physical design of microelectronic, RF, MEMS and photonic structures.

As a full-featured layout editor, dw-2000 software is complemented by intuitive modules for verification, simulation, and manufacturing data preparation support. This open, adaptable platform can be customized to better fit specific industry needs and to integrate within evolving design flows.
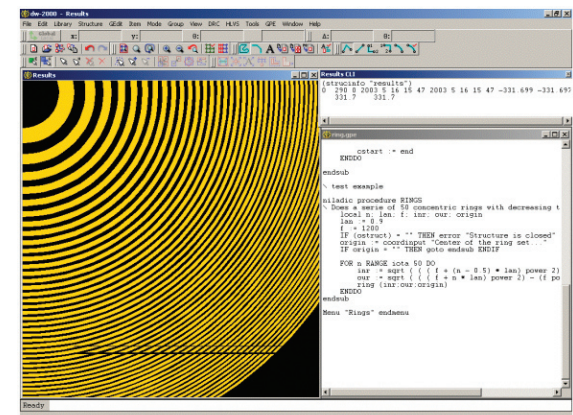
Productivity for layout

dw-2000 supports layout designers with powerful editing capabilities ranging from traditional polygon editing to parameterized hierarchical device creation. A powerful boolean engine quickly generates new derived layers and resizing operations even for complex shapes. The user has full control over multiple editing modes: edit-in-place, instance specific and multi-context editing. dw-2000 fully supports the GDSII data standard, thus simplifying data transfers.

"…In research and development, a physical layout tool must be able to quickly turnaround designs, (and) be extensible to interface with a wide variety of tools (mask writers, direct-write electron beam lithography, external mask vendors)…"

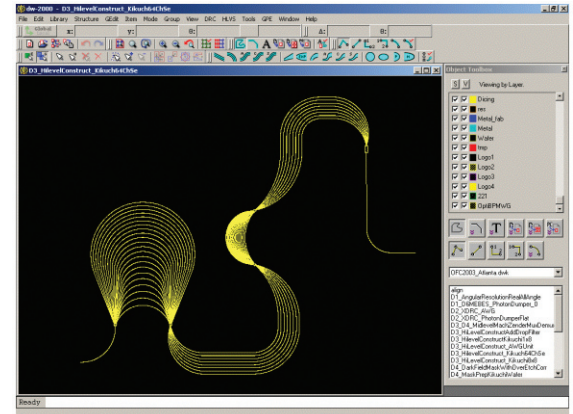Agere Systems

Proven precision

To adapt to the relentless minimization of feature sizes and maximization of design complexity, an expandable, accurate layout tool is a necessity. *Design Workshop Technologies*' dw-2000™ uses a 64-bit coordinate system and eight digit precision for angles. Native support of GDSII and ebeam equipment precludes data distortions.

Layout Editor *Highlights*

- Edit in-place
- Multi-context editing
- 64-bit coordinate system
- 1E-8 degree accuracy
- DRC error navigation utilities
- Integrated GPE editor and compiler

"…I think what sets DW aside from most competitors is the extremely powerful programming language, which provides immense extendibility…"
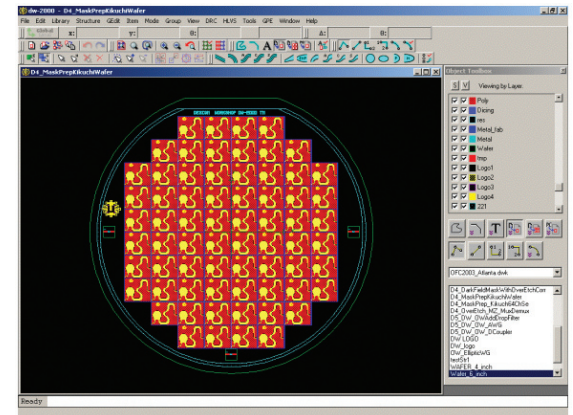
Richard J Bojko
Seagate Technology

Support of the unconventional

AWG and other planar light circuits place additional demands upon layout editor and device generators. Support for complex curve linear structures must be an intrinsic part of the software – dw-2000's true all-angle capabilities are provided by architectural design. This comprehensive support extends from polygon editing, through verification, to manufacturing data preparation.

Open, extensible platform

dw-2000 is designed as an open and adaptable layout platform. The GPE (graphical programming environment) language provides a powerful feature: GPE scripting enables users to customize their work environment, encapsulate work flows and create meta commands to extend overall functionality. GPE commands are accessible in every option of *Design Workshop Technologies*' dw-2000™.

And more …

The dw-2000 product line can be expanded by selecting from a rich suite of options designed to assist with layout verification, layout analysis, and manufacturing data "hand-off". Design Workshop Technologies also supplies intellectual property (IP) support, professional consulting services and software modules that facilitate the rapid transfer of new layout skills, to quickly prototype and deploy protected IP.