MAX and MAX-LS
Layout System

- **50X Faster**
- **Production Proven Database Handles Any Size Design**
- **Real-Time Interactive DRC and Connectivity Tracing**
- **Cross-probing between Layout and Schematic**
- **Schematic-Driven Layout (with MAX-LS)**

MAX - The Intelligent Layout Environment

MAX is much more than a layout tool; it is an intelligent IC layout environment. MAX includes interactive cross-probing between layout and schematic. Automatic generation of layout from schematics (a feature of MAX-LS) provides true schematic-driven layout. And, with real-time interactive DRC, MAX shows you any DRC errors right on the layout! No memorizing design rules or counting grids.

All of this means layout design is now easy and very fast, and cells are DRC clean. Automatic connectivity tracing (from any layout source) allows you to easily see how things are connected. No extraction is required.

MAX is the fastest Layout System on the planet. In recent benchmarks, MAX has proven to be 50X faster in displaying physical layout data. It can handle the largest IC design databases - in the billions of devices.

MAX is great for viewing and editing the results of Place & Route tools. When loading your entire chip before tapeout, MAX makes the previously slow and torturous process of reviewing the entire design, the results of LVS and DRC checks, and any last minute changes, quick and simple.

MAX is equally at home with all aspects of physical design, from creating cells for a library, to interacting with place-and-route activities at the block-level, to assembling

an entire chip. Powerful enough to handle the largest of chips, it's easy enough to use that designers will enjoy the view into the physical world that it offers.
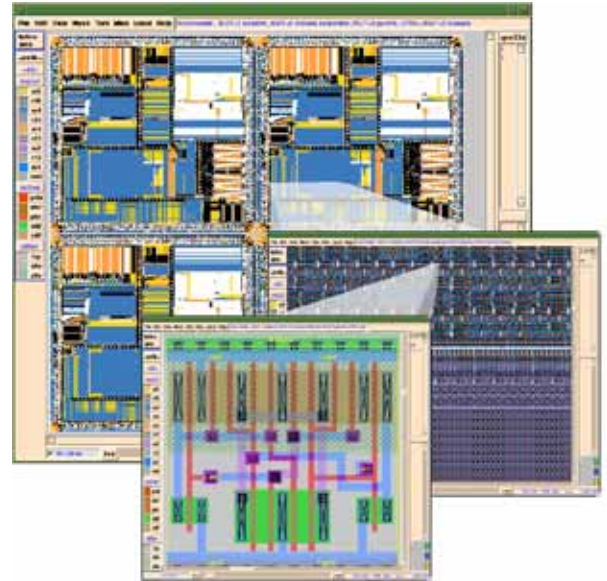

Figure 1.
MAX Layout Environment - View and Edit Your Largest Designs.

View and Edit Full Chips Down to Full-custom Cells

MAX is for Physical Design Teams who need to view, manipulate, and understand what is going on with their place-and-route process.

MAX is for Integration Teams who need to efficiently manipulate large amounts of data during assembly and perform back-end analyses.

MAX has a number of features that make it the best choice for doing IC layout for high-performance, fast time-to-market designs.

MAX-LS - The Tool for Real

Micro Magic Inc.

Layout Designers

MAX-LS is a Layout System from Micro Magic that incorporates our best tools for IC Physical Layout of leaf cells, large blocks and complete SoC products, and adds schematic driven layout.

MAX-LS has all of the capabilities of regular MAX, plus a schematic viewer and layout generator.

MAX-LS is ideal for full custom IC Layout Designers who are working on the largest, fastest state-of-the-art digital or analog IC designs. MAX-LS provides a complete environment to receive information from
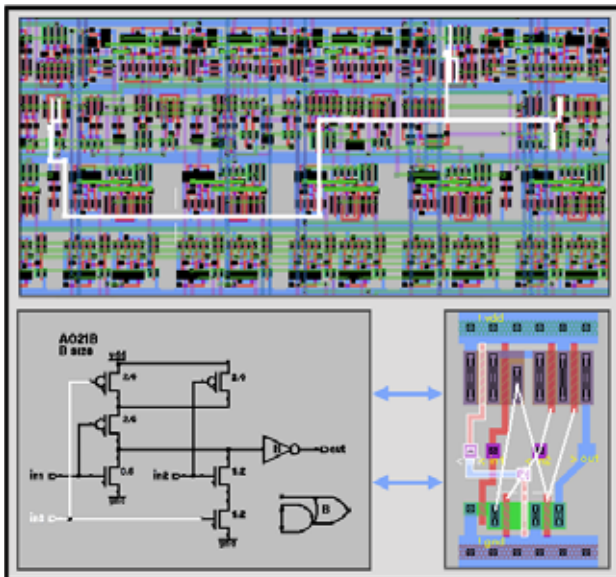

Figure 2.
Schematic driven layout generation, cross-probing between layout and schematic, interactive connectivity tracing and real-time DRC.

design engineering as well as containing all technology information from a specific foundry. Your physical layout process will go faster using MAX-LS.

MAX-LS provides all the capabilities necessary for layout designers to accomplish their mission.

MAX-LS features true Schematic-Driven Layout

Design, offering the ability to interactively generate layout that is DRC- and LVS-correct with devices automatically sized.

Based on your schematic, MAX-LS can generate every transistor, show flylines as to how they should be connected, and cross-probe between schematic and layout. This gives the layout designer complete control, yet assures rapid physical design development.

MAX and MAX-LS have complete programming interfaces via Tcl/Tk, and a well-documented API. Whether you need full-custom layout, cell-assembly, chip-assembly or the ability to write your own generators, MAX and MAX-LS are the tools to choose for your physical design needs.

MAX and MAX-LS Features:

- Fastest Schematic Driven Layout System for any size IC.

- Only IC Layout Product that combines real-time DRC, interactive cell layout generation, and cross-probing between schematic and layout.

- Continuous, real-time DRC feedback means mask designers don't need to waste time learning new design rules.

- Interactive wiring tool with flylines for connectivity tracing.

- All-angle capability.

- Complete Tcl/Tk programming interface and a complete API.

- Interfaces to industry standard DRC and LVS tools.

- Offers superior ease of learning and use.

- Reads/Writes GDSII format.

- Optimized for large databases.

- Complete on-line documentation and tutorial.

- Available on LINUX platforms.

MMI Micro Magic Inc.

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