

## Cadabra

Library developers are facing increasing challenges at 65 nm and 45 nm nodes, including increasing design rule complexity, time-to-market pressures, library richness, and late design rule changes. Manual layout is becoming increasingly impractical and expensive. Cadabra® offers a fully automated tool for the creation of standard-cell layouts from SPICE netlists, and for migration of existing standard-cell layouts to new design rules or architectures. With easy-to-use graphical interfaces and results that rival handcrafted techniques, Cadabra is the market leader in automated standard-cell layout.

With advanced manufacturing processes, the number of design rules that must be enforced for each layer is increasing rapidly. Moreover, many of the newer design rules are complex rules that are difficult to visualize, forcing manual layout designers into an iterative flow of layout, design rule checking and correction. Cadabra supports a wide range of advanced rules, including common run and/or width-dependant rules, edge-length rules, and table-based rules.

### *Key benefits*

- ``Cadabra is key to meeting time-to-market requirements and removing the library from the critical path to access a new process technology
- ``Optimized for parallel batch processing on a network of computers to allow rapid turnaround time and can interface with many popular job management systems
- ``Library richness accommodates need for different design goals (high speed, low power, etc)
- ``Synthesis tools benefit from Cadabra's richer selection of functions and drive strengths
- ``Cadabra's migration technology allows design rule changes to be incorporated quickly and easily, even in layouts which have been manually optimized.

<http://www.synopsys.com/Tools/Documents/Product-Guide.pdf>