DATASHEET

CADENCE OrCAD PCB PLACE AND ROUTE

To stay competitive in today's market, engineers must take a PCB design from engineering through manufacturing with shorter design cycles, tighter project goals and faster time to market. To be successful, designers need a set of powerful, intuitive, and integrated tools that work seamlessly across the entire PCB design flow.

Cadence OrCAD PCB place-and-route technology is available in the following products:

- Cadence OrCAD PCB Designer Basics
- Cadence OrCAD PCB Designer
- Cadence OrCAD PCB Designer with PSpice

Cadence® OrCAD® personal productivity tools technologies (including Cadence PSpice® and OrCAD Capture) have a long history of addressing these requirements. Available as standalone products or in comprehensive suites, OrCAD technologies allow designers to take products from conception to final output. The powerful, tightly integrated PCB design technologies include design capture, librarian tools, PCB editing/routing, and analog/signal integrity simulators. Easy-to-use and intuitive, they offer exceptional value and future-proof scalability to the Cadence Allegro® series of PCB design products.

Cadence® OrCAD® PCB design solutions contain everything needed to take a PCB design from concept to production. A fully integrated design flow includes constraint manager, design capture, component tools, a PCB editor, and an auto/interactive router as well as interfaces for manufacturing and mechanical CAD. A common database architecture, use model, and library offer fully scalable PCB solutions for both Cadence OrCAD and Allegro® products, giving engineers the ability to grow and expand as their designs and design challenges increase in complexity.

Cadence OrCAD PCB Editor is an easy-to-use PCB layout editing tool for creating simple to complex PCBs. Based on production-proven Allegro PCB technology, OrCAD PCB Editor offers a wide array of powerful features to speed designs from placement and routing through to manufacturing. Included in the OrCAD PCB Designer Basics, OrCAD

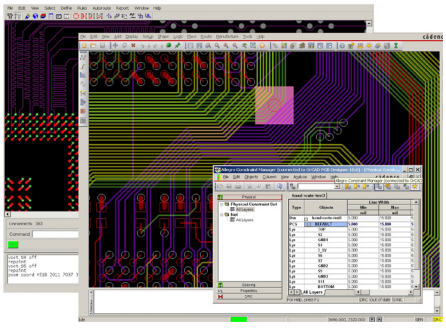

Figure 1: The OrCAD PCB Designer suite provides a complete place and route environment including interactive and automatic routing, cross-probing,

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PCB Designer, and OrCAD PCB Designer with PSpice® suites, OrCAD PCB Editor increases productivity, shortens design cycles, and helps engineers quickly ramp up to volume production.

BENEFITS

- Offers a proven, scalable, easy-to-use PCB editing and routing solution that grows as needed
- Tight, front-to-back application integration increases productivity and ensures data integrity
- A comprehensive feature set and a seamless PCB design environment delivers a complete solution to take a design from concept to production
- Automatic and interactive etch editing deliver intelligent automation to maintain user control while maximizing routing productivity
- Dynamic Shapes technology offers real-time copper pour plowing/healing to eliminate manual/error-prone voiding and rework

FEATURES

PCB EDITING TECHNOLOGY

At the heart of the OrCAD PCB Designer suites is OrCAD PCB Editor, an interactive environment for creating and editing simple to complex, multi-layer PCBs. The extensive feature set addresses a wide range of today's design and manufacturability challenges. OrCAD PCB Editor provides a powerful and flexible set of floorplanning tools and shape-based

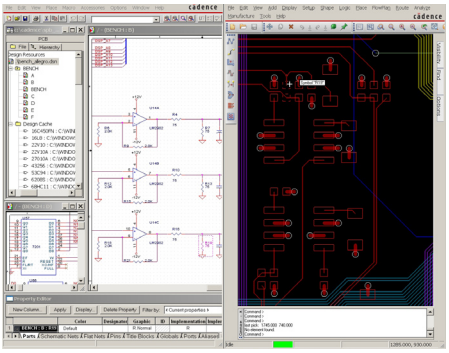

Figure 2: Tight product integration provides cross-probing and accurate data passing between OrCAD Capture and OrCAD PCB Editor.

shove/hug interactive etch creation/editing. Interactive, shape-based, any-angle, push/shove routing allows users to quickly solve interconnect challenges. Dynamic shape capability offers real-time copper pour plowing/healing functionality during placement and routing iterations.

AUTOMATIC AND INTERACTIVE ROUTING

OrCAD PCB Designer and OrCAD PCB Designer with PSpice both include SPECCTRA® for OrCAD, the market-leading PCB solution for automatic and interactive interconnect routing. Designed to handle routing challenges from simple designs to high-density PCBs requiring complex design rules, SPECCTRA for OrCAD uses powerful shape-based algorithms to make the most efficient use of the routing area. The results are increased completion rates, higher productivity, and shorter design cycle times. SPECCTRA for OrCAD provides two powerful tools for interconnect routing: a route editor and an autorouter. Both can route up to six signal layers concurrently, with no restriction on the number of components, component pins, or nets.

The OrCAD product line is supported by a worldwide network of Cadence Channel Partners. For sales, technical support, and training inquiries, please visit the global Cadence Channel Partner listing to find a partner in your region.

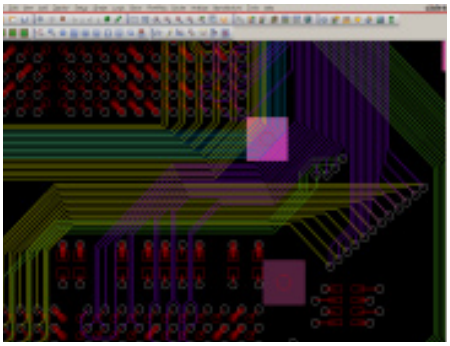

Figure 4: OrCAD PCB Editor provides a powerful environment for floorplanning and auto/interactive interconnect routing.

SALES, TECHNICAL SUPPORT, AND TRAINING

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For a complete list of authorized Cadence Channel Partners, visit **www.cadence.com/partners/channel_partner/index.aspx.**

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