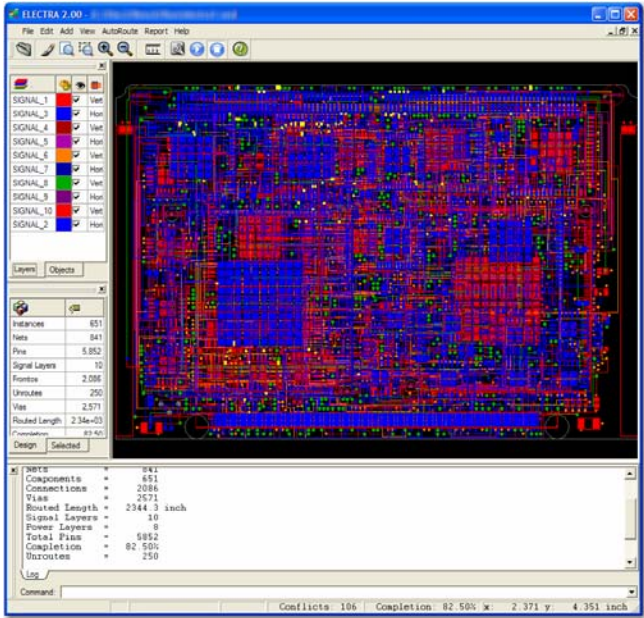


ELECTRA Product Datasheet

- Adaptive Shape-Based Autorouting technology
- Multi-pass conflict reduction algorithm
- DSN format support
- Advanced Rules constraints
- Reasonable Cost of ownership
- Windows ME/NT/XP/Vista
- Linux



Shape-based Technology

ELECTRA™ is a new generation of Shape-Based Autorouting software for PC boards. By contrast with traditional gridded maze autorouters, a shape-based approach allows for more efficient use of routing area and is more suited to handle complex design rules requirements of high density SMD or through holes boards and achieve the highest route completion rates.

Adaptive Autorouting

ELECTRA uses a multi-pass cost-based conflict reduction algorithm to find a routing solution adapting to the natural flow of the nets. Adaptive routing

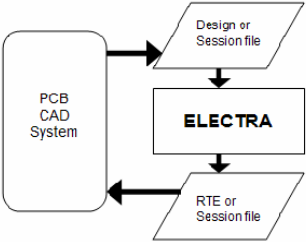
algorithm is the only proven approach to reach high completion rate on today's complex PCBs. ELECTRA provides immediate feedback on the routing progress and conflict reduction rate.

CAD System Plug-in

ELECTRA supports industry standard format by reading design file (DSN). Routing results are saved into standard route file format (RTE) or session file (SES). ELECTRA is designed to plug into an existing PCB CAD system environment that is supporting DSN file format such as Protel, P-CAD and other popular CAD systems including Cadsoft Eagle.

FEATURES

- Gridless routing of up to 256 layers
- Wire and Clearance rule by layer, net class & net
- Via rule by net class & net
- Vias under SMD pads
- Area rules
- SMD escape fanout control
- Routes SMDs on both sides
- Memory routing pass
- Blind/buried/staggered vias
- Split Plane/Grounded Planes support
- Customizable cost factors
- Post-route cleanup optimization
- Batch routing option
- Scriptable routing strategy (DO file)



Advanced Rules Support

ELECTRA is driven by layout rules. Each net can have its own minimum clearance and wiring constraints. Net class and nets can be constrained to be routed on specific layers and use different rules for each of the layers. Different via type can be assigned to net classes, these could be used for example for power and ground current carrying requirements. The autorouter

finds a solution that simultaneously respects all defined rules.

Product Configurations

ELECTRA is available and upgradable in four different configurations with unlimited number of pins:

- ELECTRA 2L - for single and double sided boards

- ELECTRA 4L - for designs having a maximum of four signal layers
- ELECTRA 6L - for designs having a maximum of six signal layers
- ELECTRA UL - for designs having a maximum of 256 layers. Note: Floating license version of ELECTRA UL is also available.

Features summary for ELECTRA version 2

- Extending rules hierarchy

PCB < Layer < Class < Class_layer < Net < Net_layer < Area

- Rules-by-Area (width and clearance by region)
 - Especially useful around BGAs and fine SMDs
 - Interactive region editor to define area, width and clearance

- Router Strategy Dialog

- New Graphical User Interface

- Layer/Object panel visibility control
- Design stats panel
- Mouse wheel for easy zoom in/out
- Interactive net selection
- Distance measuring ruler

- Report of routing via styles

- Improved layout display

- Polygon outline and blind/buried via display

- Reset and restart

- Try different routing strategies with a reset command that deletes all routing

- Simplified and robust licensing

- For node-locked licenses, Site and MID codes are now unaffected by changes to BIOS, MB and OS
- Hassle-free floating license setup

- Updated User Guide and new Tech Tips section

