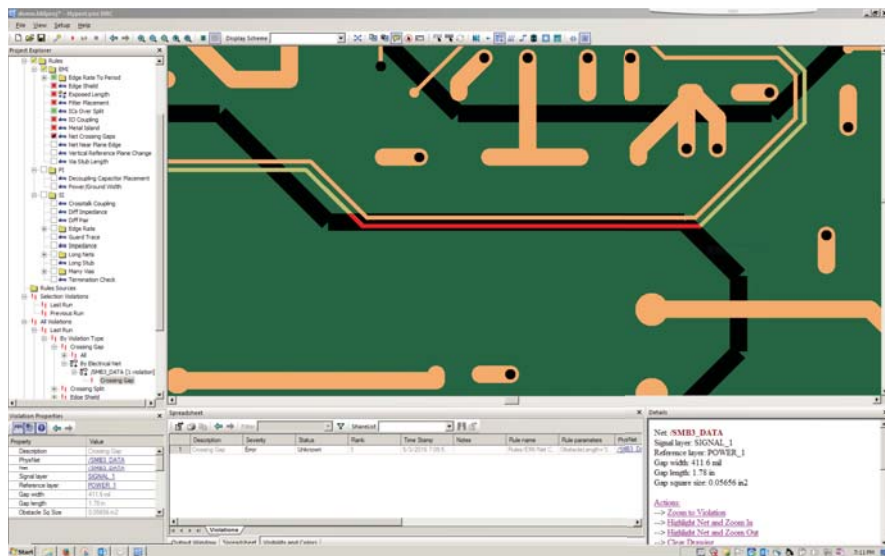




Advanced DRC Option For PADS Professional



MAJOR BENEFITS:

- Quickly identify problems with Electromagnetic Interference (EMI), Signal Integrity (SI) and Power Integrity (PI) with 23 built-in checks
- Efficient design rule checking using an advanced geometric engine
- Easy to set up and use
- Run custom DRC rules

Perform design rule checks on boards for Electro-Magnetic Interference, Signal Integrity and Power Integrity issues with PADS Professional Advanced DRC option. Running custom rules expands and extends DRCs in-built capability.

OVERVIEW

The Advanced DRC option for PADS® Professional provides a customizable and powerful electrical rule checker for PCB designs. Instead of traditional PCB checks, such as trace-to-trace spacing, or trace-to-board-edge boundary, Advanced DRC includes a comprehensive rule set that identifies layout oversights that frequently cause EMI, SI or PI issues.

Advanced DRC can also run custom rules, ones supplied by other users or provided by external companies.

23 Built-In DRCs

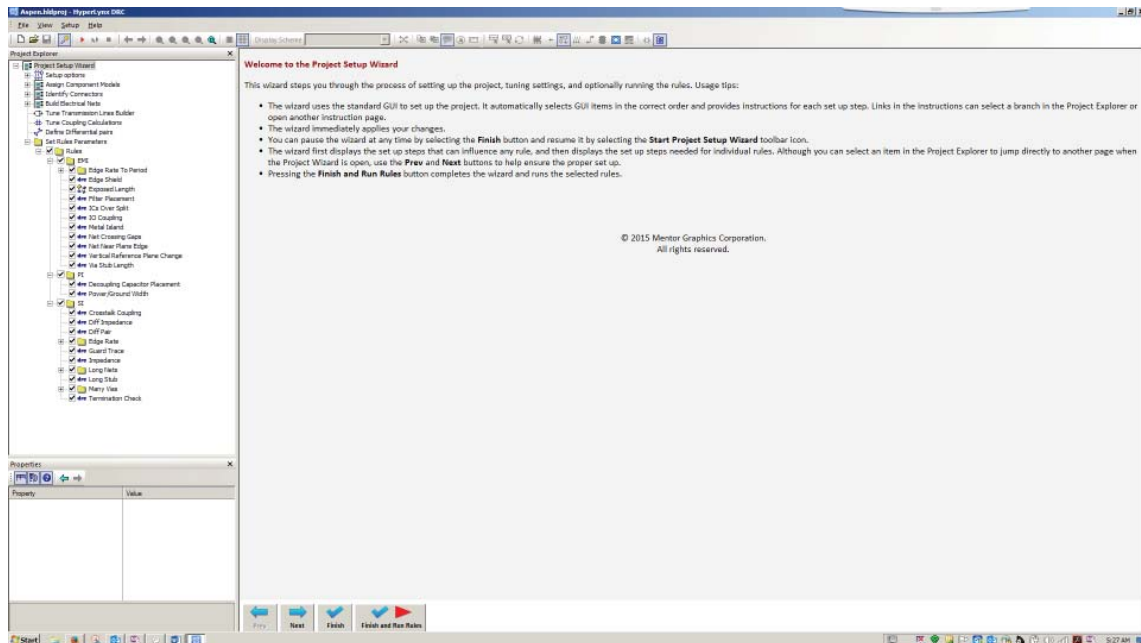
The PADS Professional Advanced DRC option includes standard checks for items related to Electromagnetic Interference (EMI), Signal Integrity (SI) and Power Integrity (PI). Many of the checks look for common or hard-to-find items that cannot be simulated easily, such as traces crossing splits, reference plane changes, issues with trace shielding, and excessive number of vias. The table at the bottom of the page lists the 23 DRCs.

By identifying issues at the layout phase, errors can be caught and fixed prior to board release. Electrical rule violations identified by Advanced DRC can also guide you

to areas that can be investigated with more in-depth SI/PI/3D tools.

Easy Setup and Navigation

The Advanced DRC option for PADS Professional is designed for ease of use. A built-in Setup Wizard will have you running design checks on your board in no time. Items such as electrical model assignment, connector definition, power/ground net definition, specifying discrete components, and electrical net definition are all prompted for in the Setup Wizard. Most of this information is already set up in the Constraint Manager in PADS Professional or in the PCB data, so it is easily transferred to the Advanced DRC environment.



Simple wizard-based user interface with check-list based selection of DRCs to run, and ability to filter and view violations by DRC type, electrical net, physical net or component.

23 Design Rule Checks

EMI:

- Edge Rate to Period
- Edge Shield
- Exposed Length
- Filter Placement
- ICs over Split
- IO Coupling
- Metal Island
- Net Crossing Gaps

- Net Near Plane Edge
- Vertical Reference Plane Change
- Via Stub Length

PI:

- Decoupling Capacitor Placement
- Power/Ground Width

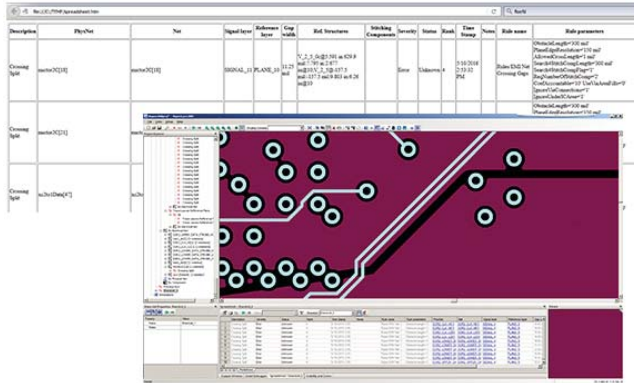
SI:

- Crosstalk Coupling
- Differential Impedance

- Differential Pair
- Edge Rate (Medium/High)
- Guard Trace
- Impedance
- Long Nets
- Long Stub
- Many Vias
- Termination Check

Error Reports

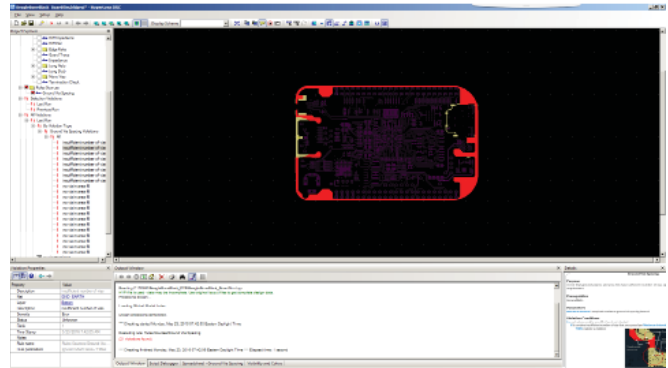
From the violation listing, you can select errors for viewing in the Advanced DRC. In addition, HTML Sharelist reports (containing violation details, and coordinates) can be generated for broader team review.



Errors and violations are clearly listed and can be exported into detailed reports.

Running Custom Rules

Advanced DRC also supports executing custom design rule checks. Your projects might involve work with IC providers that have specific design requirements. By loading externally supplied custom rules, Advanced DRC's functionality can be extended to support proprietary busses, interfaces and specific layout topologies.



Run externally supplied custom rules to add new DRC capabilities.

For the latest product information, call us or visit: www.pads.com

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