

**doctar** design object compare tool and reporter

# DOCTAR™ Design Compare Tool

*DOCTAR Identifies what's changed in your PCB Design...*

- Pins: added, deleted or moved to a new x/y location, renamed, renumbered
- Components: added, deleted, rotated, renamed or moved to a new x/y location, values and tolerances changed
- Etch Lengths: etch length changes sorted from longest to shortest
- Test points: added, deleted or moved to a new x/y location, assigned to new net, multiple testpoints on a net, single pin nets, testpoints too close to a deleted probe location

*...anytime your design changes!*

## Ensure Design Data Integrity from Design through Manufacturing

Anytime a design is revised, you and your engineering team need to know what's changed because a even a small change can have a big impact on application performance, product scheduling, and fixture costs. Unintended design changes can lead to production delays, costly retooling and even product cancellation.

The **DOCTAR** design compare tool compares two designs and tells you exactly what's changed quickly and comprehensively in clear, easy-to-understand reports, so you will know:

- Did all intended changes get implemented?
- Were only those changes made?
- Did anything else on this board change?

**DOCTAR** helps you answer important questions such as "Were any critical signal etch lengths changed?" or "Will our test fixtures still work with the new board rev?"

**DOCTAR** automates the time-consuming and often manual process of reviewing hardware design changes, and helps you get products to market faster.

### Use DOCTAR for:

- Hardware Design Reviews
- Validating designs converted across CAD platforms
- ECO documentation and compliance reporting
- Verifying changes made by outside service bureaus

### Who uses DOCTAR?

- Printed Circuit Board Designers
- Sustaining Engineers
- Manufacturing Engineers
- Hardware Engineers
- Project Managers
- NPI Engineers
- Test Engineers

**DOCTAR** is used worldwide at leading electronics manufacturers, Service Bureaus, Test and Fixture Houses, including:

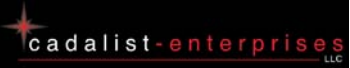
- Cisco Systems
- Juniper Networks
- Alcatel
- RVSI
- Intel
- Adtran
- Acme Packets
- Thales
- NASA
- Conexant
- Testing House
- Voltaire

*"I am assembling a list of changes to send to the PCB manufacturer so they can quote us on how much it will cost to revise the board. I was manually going through my changes, so having a way to quickly find adds/deletes/changes is great."*

Kevin Bulgrien, Hardware Engineer, Vertex RSI

Run **DOCTAR** against your own designs. Download a free, fully functional, limited-time demo of the **DOCTAR** software.

[www.nordcad.dk](http://www.nordcad.dk)



## Supported CAD Environments

DOCTAR supports a wide variety of PCB schematic and layout netlist file formats including:

- Cadence Allegro
- Concept Concept
- Cadence OrCAD
- Mentor BoardStation
- Mentor Expedition
- Mentor Viewlogic
- Mentor PADS-PowerPCB
- Altium P-CAD 2002
- Altium Protel
- GenRad GenCAD

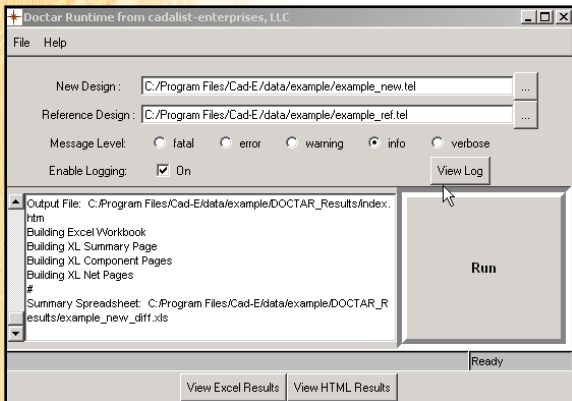


Figure 1: DOCTAR's simple user interface

## DOCTAR Software Key Features

- Fast and Easy to Use** Install and start comparing designs in less than 5 minutes. Runs under Windows NT, 2000 and XP.
- No Training Required** Simple, straightforward Windows GUI user-interface. Command-line interface (CLI) available for automated processing.
- Intelligent Change Reports** Design changes are reported clearly in HTML and Microsoft Excel formats.
- Easy Documentation** DOCTAR report data can be easily cut & paste into ECO documentation and product compliance reporting.
- World-Class Tech Support** cadalist-enterprises and its partners provide prompt, professional technical support for all users worldwide.

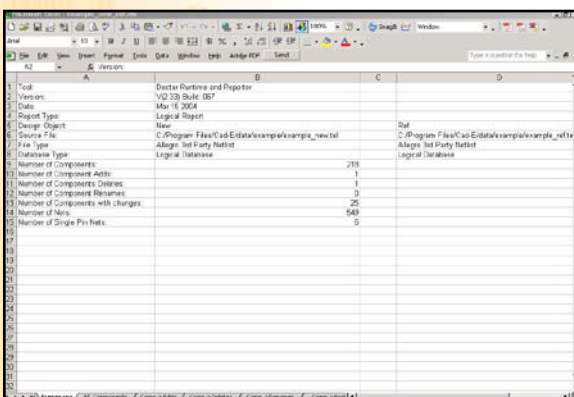


Figure 2: DOCTAR Change Report - EXCEL Format

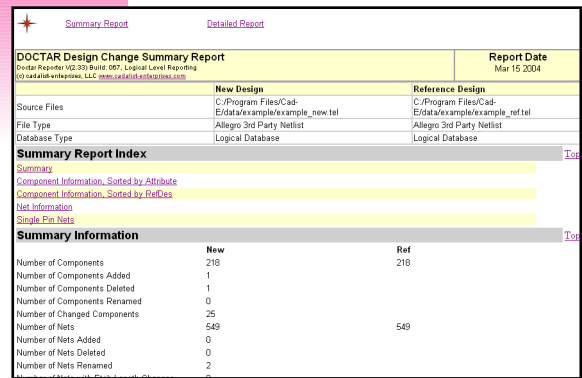


Figure 3: DOCTAR Change Report - HTML Format

## Speed up Your Design Reviews to Save Time and Money!

Why tie up your best engineers with manual design reviews? DOCTAR's automated compare routines run quickly and consistently identify changes easily overlooked by bleary-eyed engineers.

*"On the very first job we ran, DOCTAR caught 3 changes that had been missed on a previously ECO'd schematic. If we had re-spun that board without those changes, it would have caused big problems in production, not to mention the loss of time and the cost of fabricating thousands of boards over again. I am really glad we ran DOCTAR."*

Roger Curry, Design Manager, Adtran Inc.

## Get Your Products to Market Faster

Design changes can be signed off and implemented more quickly when clear, accurate change data is provided to the responsible engineer on a timely basis.

## Improve Quality Control

DOCTAR reduces the error-prone nature of identifying hardware changes. Because it allows faster design reviews at all points in the design cycle, it reduces rework caused by unintended design changes that slip through to downstream processes.

*"The DOCTAR tool contributes significantly to our sense of security in second round layouts. It detects both design and schematic mistakes by reporting changes between revisions and helps to isolate only the desired ones. We have established better quality control on the outputs (netlists and BOM's) that represent our designs."*

David Ophir, Board Design Engineer, Voltaire

For more information about the DOCTAR Design Compare Software Tool, please contact your authorized cadalist-enterprises local representative:

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