Introduction

Improving communication between multidisciplinary teams is a key way companies can maintain a competitive edge and promote design quality. Where PCB designs are outsourced, this becomes even more important.

In a typical scenario, Electronic Designers want to pass back comments while reviewing the design. Or, once a product has been assembled, Mechanical Engineers need to communicate an issue affecting manufacturing.

All too often, reading comments on a printout is a frustrating exercise: comments can be illegible, incomplete, or even forgotten. This can lead to a disorganized review process or, worse still, unnecessary errors creeping into designs.

By incorporating markers and comments alongside the design CADSTAR can help overcome these issues, making it easy for engineers to communicate between different departments or companies.

“Redlining” is a historical term that describes the process of marking up a blueprint or a plan; but it is still as relevant as ever.

CADSTAR Redlining allows you to quickly mark-up designs during review and make it easy to communicate design issues. These markers can be added to the CADSTAR design without changing the actual PCB or Schematic.

The Redlining marker is a simple item defined by a circular shape and can support the addition of descriptive text, color and line thickness.

TOP FEATURES AND BENEFITS

- Review Schematic and PCB designs
- Improved communication of changes between electrical and mechanical design
- View and mark-up functionality
- Add text remarks to the original design
- Search, jump and trace remarks
- Active Redlining Report
- Check/Uncheck remarks
- Last modified indication
- Redlining support in Variant designs
- Tooltips

Redlining markup showing comments in the item properties workspace window.
In CADSTAR, all Redlining data is saved in the design for future use. To enable a user to review proposed design changes, an active Redlining Report makes it easy to locate the information needed. Then it is easy to navigate to the Redline markers in the design.

Check/Uncheck
The user can check/uncheck Redlining markups, either in the item properties window or in the active Redlining report. The last user to add or modify the Redlining marker is tracked.

When a design is loaded, a check will be performed automatically on any unchecked Redlining markers and advice given to run the Redlining report.

Redlining items can be added in a PCB design to any existing layer. There is no need to modify the layer stack. Redlining markers will have a text field (comments) which can be set even at variant level.

A tooltip for each marker will be the default text set on the marker.

Redlining is a new item in the Colours Dialog and can be made visible/invisible and the preferred color can be set. Redlining markers will be seen in print documents if visible, but excluded from manufacturing drawings.

Redlining is an add-on product to Design Viewer (Standard and Plus), as well as CADSTAR Design Editor for both Schematic and PCB design.