

Release Notes for SKILLCAD

http://skillcad.com/download_tool.html

New for release v4.3D

• Enhancements and Bug Fixes

- 1) Improved the Coloring function for Virtuoso MPT mode
- 2) **Color By Search:** Added search by Window
- 3) **busConnect:** Fixed a bug when starting bus having more wires than ending bus
- 4) **Bridge:** added an option to avoid tracing entire net when fixing short of a single metal layer.
- 5) **Quick Label/pin:** improved the speed when placing tens of thousands pins and print the progress in CIW
- 6) **FillVia:** added an option to control the direction of rectangle vias. Removed the ignore invisible layer option (always ignore invisible metal layers, users can set this in layer palette)
- 7) **CMOS XView:** added **line distance** command button in the form
- 8) **Layer Generation.**

New for release v4.3C1

• Enhancements and Bug Fixes

- 9) Improved the Coloring function for Virtuoso MPT mode
- 10) **Color By Search:** Added search by Window
- 11) **busConnect:** Fixed a bug when starting bus having more wires than ending bus
- 12) **Bridge:** added an option to avoid tracing entire net when fixing short of a single metal layer.
- 13) **Quick Label/pin:** improved the speed when placing tens of thousands pins and print the progress in CIW
- 14) **FillVia:** added an option to control the direction of rectangle vias. Removed the ignore invisible layer option (always ignore invisible metal layers, users can set this in layer palette)
- 15) **CMOS XView:** added **line distance** command button in the form
- 16) **Layer Generation:** added options to highlight two groups of the shapes

New for release v4.3B1

• New Functions

1) **Color By Select** – This is a new tool in the QuickColor tool group. Color the selected group of metals and vias.

New for release v4.3B

• New Functions

New tools in the LASA (Layout Automation Suite Advanced) module

1) **DotConnector** – Used to route device arrays by a single click on the device source or drain. The tool finds all the sources or drains in the device row that are on the same net and connects them up with appropriate vias, and according to the information on the nearest WSP track pattern or the nearest routing grid (if not in a WSP region).

2) **LineConnector** – Similar to the dot connector, but the desired range of connections are specified by drawing a line across the sources and drains.

Note: The previous two commands, DotConnector and LineConnector, are especially useful in routing device arrays. They can also be used in digital routing and at any time when there is connectivity on the devices and metals, and the connections can be made with straight-line routing.

3) **QuickColor** – This is a collection of coloring tools that can be used in the Cadence coloring environment, or with custom, in-house coloring schemes. In all tools both the metal and the connected via stack are colored. The tools in this group are:

Color By Click – click on an individual metal or via and the metal and coloring metal is added to the metal and via.

Color By Line – draw a line across a metal bus or group or shapes and coloring will be added.

Color By Search – search for uncolored shapes and/or vias and color them while stepping through the results.

Color By WSP – adds coloring to all routing shapes in a WSP region.

These are all new applications in the LASA (Advanced Node) add-on module. This module does not require additional settings in the SKILLCAD rule file. The tools in the new module can be used as soon as the new SKILLCAD version is installed, and the new license is activated.

• Enhancements and Bug Fixes

1) **Bus Adjust, Bus Move, Bus Stretch, etc.** – an issue was fixed where, if you had an instance (cell) created that contained only metals and vias, the tools would recognize this instance as a via cell and move it with the metals.

New for release v4.3A

• New Functions

1) **Edit Note** – (In “Label Functions”) A new function to edit multi-line labels (notes). In a previous release the multi-line editing was in the Quick Note function. Now it has been enhanced and is its own function.

2) **Zoom To Coord** – (In “Kits”) A new function to zoom to coordinates input in the CIW, or to a point in the layout window designated by a mouse click.

• Enhancements and Bug Fixes

1) **Shield River Router** – (In “V-Editor”) This has been improved for tandem and parallel shield routing.

2) **CMOS Xview** – (On the “SKILLCAD” pull-down menu) This has been improved for the FinFet process with poly and diffusion local interconnect layers.

3) **Pin Placer/Browser** – (In “Pin Functions”) Improved functionality. Now when the label orientation is set to “As is”, the command will keep the label’s relative location in the pin fig, after snapping the pin to the

prBoundary. Also the “Place On Selected Shapes/Insts” has been improved to place pins on rectangular shapes.

4) **Rename Pin** – (In “Pin Functions”) Fixed a bug that occurred in replacing the prefix of pin names. The function has also been improved to update the pin name when the original pin name is the same as the terminal name.

5) **SegJumper** – This has been improved to use the default width/space settings for different rule categories, defined in the SKILLCAD setup file.

6) **Promote Pin** – (in “Pin Functions”) This has been improved to handle pins with no specified access direction property.

7) **Setup (User Interface)** – An improvement to the metal layer rule setup. Now the default “Copy From” metal layer will be the metal layer, one layer below the current metal layer, instead of always defaulting to “Metal 1” (first metal).

8) **Routing / via related commands, in general** – fixed a bug to avoid an infinite loop situation, when calculating the via parameters.

- 9) **MPP Ring and Fill Via** – These have been improved to handle different contact settings in the Rule Categories, defined in the Setup file. Also improved the form to display the field labels better in IC6.1.8.
- 10) **Draw Slot Path and Convert To Slot Path** – Improvements to the grid snapping, while keeping 45-degree edges.