New Features/Enhancements in VisualCAM 16.2

IPC-2581 SUPPORT

WISE Software has joined the newly formed IPC-2581 Consortium founded by Cadence and other industry leaders to help promote this format.

WISE Software invested in the development of IPC-2581 support early and released its first products with import/export of IPC-2581 in late 2005, the year following the official release of the specification. And in early 2006 WISE Software began shipping VisualCAM with IPC-2581 support at no extra cost to help promote the adoption of the IPC-2581 specification. WISE Software remains committed in its support for IPC-2581.

WISE Software is working with Cadence and the Consortium to ensure a smooth transfer of IPC-2581 data between VisualCAM and the various industry producers and consumers of PCB design data.

This release supports amendment 1 of the IPC-2581 format specification and has successfully imported existing consortium test files.

GenCAD SUPPORT

New in this release is the ability to import GenCAD files, a common format within the assembly sector.

Our initial support of the GenCAD format was to export only and was only available in the top of the line VisualCAM product. But now, starting with this release, we are including GenCAD import support within our entire product line, excluding the base Viewer, at no extra cost.

COMPOSITE TO LAYER

The Composite to Layer command has been completely redesigned for this release. This function converts a composite of layers into a single, standard layer containing only positive data. You can also use this function to convert a single, mixed polarity layer into a layer with only positive data. The conversion is now performed in such a manner as to maintain as much unaltered trace and pad data as possible while removing all clear data and, when the source is a multilayer composite, placing all the data on a single layer. The conversion may be performed using one of three methods, either specified by the user or determined by an analysis of the data. The functionality of the previous version of the command has been retained in a new command, Layer to Polygons, see below.

LAYER TO POLYGONS

This function converts any layer, whether it is a composite, mixed polarity, or no polarity, into a single graphic layer containing only positive raster polygons, possibly with voids.

DESIGN COMPARE

The Design Compare command compares the contents of two designs, layer by layer, and reports any differences found. The design open at the time the command is invoked is compared against another design that you specify using a file browser. The results of the analysis are then viewable in both designs using the Analysis tab of the Navigator.

NEW MACRO LANGUAGE COMMANDS

This release brings more new commands to our powerful Macro language. In no particular order they include:

- COMPOSITE2LAYER
- PANELIZEMERGEDATA
- GETFIRSTLAYERSET
- GETNEXTLAYERSET

WINDOWS OPERATING SYSTEM COMPATIBILITY

WISE Software has always been committed to insuring the highest level of compatibility with the Windows™ operating system. For this release we have made the necessary changes to our installation process to ensure that VisualCAM is being placed properly within the 2008 R2 environment. This includes making sure that all necessary drivers, for components like hardware keys and FlexLM™, have been updated and tested for compatibility.

OTHER ENHANCEMENTS AND FIXES

The following are several of the many general enhancements and fixes available in this release.

- Improved internal polygon processing engine for accuracy, speed, robustness.
- Updated to the latest Flexnet Publisher 11.10.
- Hole Chart Modify – now able to completely disable automatic updates.
- Optimize Solder Mask no longer produces undesirable mask to trace errors against negative data.
- Aperture translation problem fixed in ODB++ import and export.
- Create Mill From results improved for specific data layouts.
- License manager now properly switches from user node to node-locked.
- Silkscreen polarity issue in this dataset fixed.
- Stitched break tabs no longer recalculate length when a fixed length has been specified.
- Import ODB++ with EDA option problem with this dataset fixed.
- Corrected problem fixing starved thermal errors after opening older database.

- Fixed problem adding new shape after stencil tools run.
- Fixed incorrect "All" option in NC Usage chart.
- Move break tab now initializes select filter to include mill paths.
- Tool lists with the same name but different file extensions now import correctly in import wizard.
- Merge Database now handles mill tabs correctly.
- Homeplate justification problem corrected.
- Advanced Panel Flatten now longer destroys Mill tabs.
- Netlist status is now marked as invalid after changing drill tools' plating status.
- IPC-D-356 import problem reading conductor data in specific IPC-D-356 file corrected.
- "Clear Highlights" on query net dialog now properly clears highlights of raster polygons in all cases.
- Changing the select filter no longer resets the group order mode during use.
- ODB++ import problem loading netlist from specific ODB++ job corrected.
- Macro - Smooth Polygon setting added.
- Macro - Font environment now setup properly when specifying true-type fonts.
- Macro - Tag data as Merged Data for Virtual Panel plus UI access to command via function keys and user menu.
- EXPORTNC macro "outfile" parameter now uses current directory.
- EXPORTGERBER macro command now exports traditional composite layer sets as a single Gerber layer again.
- GETLAYER macro now returns a string for $table when ran on a drill layer.
- Improved speed of COMPOSITE2LAYER macro.