

Release Notes GC-PowerStation v15.1

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New Features

Integrated Stencil Creation

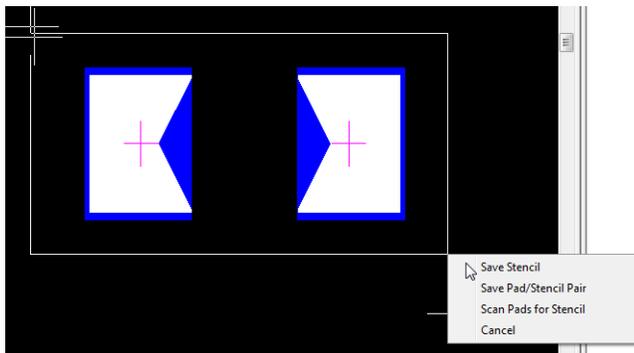
This function gathers common stencil editing functions in one easy to access location. The function takes the pads from a selected layer (usually a Solderpaste layer) and creates two copies (a Footprint layer and a Stencil Created layer) in order to preserve the original data.

The function also creates a user-defined dialog containing various editing tools for modifying the pads as per customer requirement. Functions currently included Scale, HomePlate creation, and C-Pad creation. However, possibly the most useful function is the newly added ability to save a database of stencil modifications and re-use those patterns between jobs.

The bars that are created the first time the function is run are:

General – This bar currently contains two tabs: Advanced Scan and Replace and Scale. Both tabs access currently available functionality and work in the same way. The tolerance field in the General bar is also used throughout the function as the tolerance for scanning and replacing.

Database / Folder – Opening this bar allows the population of the database or file structure with data and the scanning / replacing of patterns using the database. Once both the original pad pattern and the final stencil pattern have been created and positioned correctly with respect to each other, the pair can be saved. The pattern can be saved to any local or network folder or to an SQL database using the exact same file and folder structure. This ensures that stencil patterns can be created locally and then simply copy and pasted to the SQL database as required.



As can be seen from the image above, the Pad / Stencil Pair can be saved directly from UI by creating a selection box while the Shift key is depressed. This allows the original pad pattern and the final stencil pattern to be saved to the database (or file folder) currently in use. The user can create multiple folders to store patterns based on

customer and also can give the pattern a name as per their requirements.

The database can be scanned and matching patterns replaced by selecting the data to be scanned and then hitting the Scan Replace button in the Database / Folder bar.

Advanced Editing – This bar currently contains the Home Plate creation and C-Pad creation functions. These access currently existing functions and work in the same way.

Report – This tab currently lists each pad that is the same on the Footprint layer and the Stencil Created layer. This is intended to allow the user to quickly see which pads have not been modified by the Integrated Stencil Creation function.

One powerful feature about the Integrated Stencil Creation function is that additional bars and tabs can be created to allow user-written plugins to be added.

Jump to Data Center

Dragging a box around data displays the pop-up dialog allowing Zoom In, Select Inside etc. A new function has been added called Jump to Data Center. This function jumps the crosshair to the center of the extents of the selected data.

ODB++ Package Outline

If present, the Package outline is displayed from the ODB++ database. The outline is displayed on a separate layer within the corresponding Part Physical layer. The package outline is created as a custom pad so that the center of the outline can easily be found. If the trace segments are required then the pad can be exploded using the Explode Custom Pad function.

Items Fixed since v14.4

This list is customer reported issues fixed for this release.

#362 Plated status of drill not correctly assigned from ODB++ file. Problem caused by additional spaces within a specific file.

#350 Added additional plugin functionality for Parts in terms of displaying assigned Reference Designator, Part Number and Pin Number.

#338 Loading a DXF or DWG file with a very large radius arc (so large that the center point sits outside our addressable space) now allows the arc to be vectored in order to be able to display. The settings controlling the precision of the vectoring are found by Modifying Format Parameters for the DXF/DWG file.

#314 Contour issue was causing an incorrect image to be generated when exporting RS-274X file at micron precision. Fixed.

#308 Fixed an issue caused by zero length arcs in DWG file. The arcs were incorrectly being interpreted as circle.