

Release GC-PowerPlace v9.1 Notes

Table of Contents

NEW FEATURES	2
ASSEMBLY DOCUMENTATION.....	2
ENHANCED FEATURES	3
BLIND AND BURIED DRILL EDITOR	3
AUTO INTERPRETATION OF ROUNDED RECTANGLE CUSTOMS	3
PCB BUILD LAYER SETTING	3
ON LINE HELP.....	3
ITEMS FIXED SINCE V8.4.2	4

New Features

Assembly Documentation

The ability to create color-coded assembly documentation has been added to the product. Working from a Part layer with reference designators and part numbers, the function will generate assembly documentation based on the following settings:

When the function is run from the Parts menu the user enters:

Job Name

Parts Layer

Reference Layer -- an optional drawing layer to be included in documentation layer.

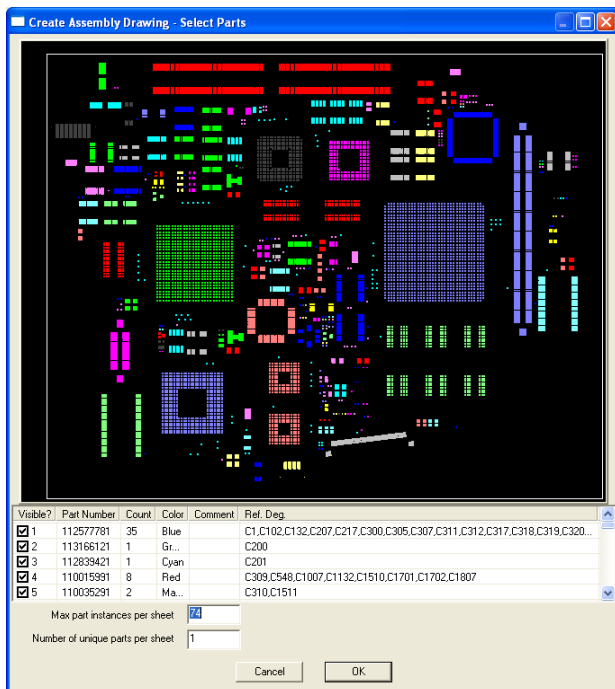
The function will automatically generate a documentation layer showing all of the part locations w/ reference designators; the reference layer simply provides the ability to add additional information.

A setup dialog then appears that allows the user to specify the number of unique part numbers per documentation sheet -- defaulting to 1 -- and maximum parts per page -- defaulting to the maximum part count. The Setup dialog also allows the assignment of colors and comments, which will be included within a table that is displayed on the documentation sheet. It also controls whether or not certain parts are displayed or not.

P1.1, P1.2, P1.3, etc.) If a component is to be included on a documentation sheet, the extents of the component will be graphically represented by a solid box of the assigned color, along with the appropriate reference designator cutting into the solid color box.

(Note: this means that there will automatically be a visual reference generated, without the need to use an existing silkscreen layer, etc.)

Each Documentation Layer/Sheet is assigned a layer type of "Assembly Documentation" and is named 'Part Number xxx/yyy/zzz'. Each layer contains the optional reference layer and the reference designator text, as well as the necessary components. The Job Name and legend are included and are positioned based upon user preference. Documentation layers can be printed out using the current Print functionality, or saved in the GWK format and viewed in GC-Prevue.



Based on the information included within the Setup dialog, the application creates a number of new data layers within a newly created physical layer (i.e. P1 =

Enhanced Features

Blind and Buried Drill Editor

The Blind and Buried Drill Editor has been updated to more clearly allow the assignment of drill layers. The Editor dialog window now expands to show the entire grid whenever possible (if the grid is too large to display on the screen, the window is maximized). A "Print" button has been added to the bottom button row. This function allows the user to select an available printer and layout, and then prints the grid to a single page on the device. The grid is scaled to fit the dimensions of a single page. The job name and date/time of printing are printed at the top of the page.

Auto interpretation of Rounded Rectangle customs

If a custom fits the criteria for a rounded rectangle, the user is asked if they would like to convert this and other customs to rounded rectangles when possible. Any apertures converted are logged to the import log for user review. The code uses a contour comparison between the custom's outline and the outline of a rounded rectangle whose corner radius is determined from an examination of the vectors in the contoured outline of the custom. Note that this code does not currently recognize rounded rectangles with off-angle rotations.

PCB Build layer setting

Activated the "Facing Up," "Facing Down," set of radio controls in the physical layer property page in order.

On Line Help

GraphiCode is in the process of putting all help information onto our website to allow faster and more accurate updating, easier access and reduced product size. Function information is available to all users but additional information is only available to customers with a valid Annual Support Plan. There will be a period of overlap where the Help files are still shipped with the product but all future Help information will be placed on the website.

Items Fixed since v8.4.2

This list is customer reported issues fixed for this release.

- #4336 Fixed a problem causing the Create Home Plates function to fail with this specific dataset.
- #4325 Simplified the handling of complex DPF apertures during output in order to all the reading of these apertures by Genesis software.
- #4320 Streamlined the explosion of complex custom apertures in order to reduce the number of layers generated. This problem appeared to be specific to one CAD system's gerber files.
- #4312 Improved the isolation of rounded rectangles to minimize the number of segments produced in the isolation path and therefore improve the speed of laser stencil cutting machines.
- #4311 Updated the ACE function to correctly recognize additional BGA patterns in all rotations.
- #4303 Loosened the import parameter settings to handle both lower case and upper case aperture macro parameters in RS-274-X where the specification does not explicitly define the format.
- #4282 Modified the Gerber export code to generate the simplest data construction when exporting custom apertures to RS-274-X data.
- #4279 Updated the text contained in the Help About dialog.
- #4277 Added code to auto-recognize, whenever possible, custom and complex shapes in RS-274X data that represent a rounded rectangle shape. When such a shape is found it is automatically converted to a GraphiCode rounded rectangle aperture rather than a custom aperture.
- #4249 Enhanced the Blind and Buried drill interface.