

Release Notes GC-PowerStation v7.1

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Items Fixed since v6.4.4

This list is customer reported issues fixed for this release.

#3862 Gerber import algorithm enhanced to eliminate an incorrectly drawn arc.

#3848 Added GC-Basic function to allow the inversion of a physical layer.

#3846 Added the ability to correctly handle Excellon files containing G84 defined holes upon import. Also, any drill hole defined with the Canned Drill attribute will be handled upon export.

#3843 When the individual data layers within a physical layer are moved to their own physical layer, the new physical layer is now named as the data layer. This behavior is triggered by the 'Move Data to New physical layers'.

#3842 If within a format statement there is a decimal point between the whole and precision values for either the X or Y plane (eg, FSLAX4.4Y4.4), the importer can now parse and read them correctly.

#3839 Remove Inner Unused Pads works on the Physical layer but not on the specific data layer. This issue is now resolved.

#3835 M97 and M98 drilled pads are now correctly located. Previously, the location was one character width off.

#3832 Rewrote conditional statement to decide when to draw black, white and color for polygon entities for printing and print preview algorithms.

#3829 Fixed an issue regarding corrupted GWK files.

#3820 Fixed bug in internal function designed to determine if a set of step and repeat copies is aligned in an evenly spaced array (and thus eligible to be output using the RS274x SR command); function was misreporting when all copies were in x plane.

#3813 Proxy graphics are now ignored during DXF import rather than causing a crash.

#3804 Found and fixed problem with Excellon rout output code, which suppressed output of G85 command for most routs with zero-length.

#3802 Overhaul of the Fix Voids DFM option now works correctly given various layer visibility states off internal layers.

#3798 Fixed a bug causing bad isolation when a negative value was entered with certain custom pads in this dataset.

#3797 Updated the effects of the Step and Repeat output switch for Excellon Drill and Rout.

- For a single image -

If the step and repeat option is turned off then no M25/M01 commands are generated.

If the step and repeat option in the dialog is checked then we bracket the entire image with M25 and M01.

- For panelized images -

If the step and repeat option is turned off then the panelized layers are exploded and the individual entities are included in the Rout file with no M25 and M01 commands.

If the step and repeat option in the dialog is checked: generate the M25 and M01 around the single image data and then generate the appropriate repeat codes.

#3796 Curves with increasing thickness are now vectorized and correctly displayed when contained within a DXF / DWG file.

#3794 Enhanced the LayersCustomize script to allow the changing of layer polarity.

#3791 Enhanced the Remove Buried algorithm to ignore drill holes with the attribute of 'Pilot hole' defined.

#3790 Fix voids now correctly behaves on this dataset.

#3786 Upon un-checking the "Default Output" checkbox in the RS-274X export dialog, user will now be asked if they would like all output file name and layer group fields to be cleared. (Message is skipped if all fields are currently empty.) If Yes, fields are all emptied.

#3785 Improved the installation of merged modules to avoid an MFC42.dll error message during installation of the software.

#3783 Fixed an INI dependency that caused bad results in the Calculate Areas function.

#3782 Inconsistency in the IPC-D-356 output resolved. Previously the accessibility values and the layer values did not match for blind drill layers that emerged on the bottom side of the board. This issue caused a conflict when the IPC file was read by another software package.

#3781 Fixed a side effect issue concerning rounded rectangles. The result was that rounded rectangles with less than all corners rounded, were being incorrectly rotated.

#3779 Fixed problem with internal system color palette function that caused system crash in 256 color mode.

#3776 Resolved an issue with specific datasets where Fix Voids was not correctly fixing voids below 4 mils in size.

#3768 Pads that are shaved by the shaved pad algorithm now have a user defined attribute added following completion of the function.

Attribute Name : GCShavedPad

Attribute Value : T (True) & F (False)

#3767 Fixed an issue with Remove Inner Unused Pads on this dataset. Issue related to Track #3765.

#3766 Updated DFM check for missing Thermal connections to correctly report violations.

#3765 Remove Inner Unused Pads now correctly handles the presence or absence of the drill layer when analyzing specific data layers.

#3764 Fixed an issue with the Contour calculation that caused a netlist short in this dataset.

#3763 Reversed PTrack 3394 work which suppressed drawing of M02 repeats when offset from previous step and repeat is XOYO.

#3757 Gc-Basic measurement syntax issue resulted in application crash. Fixed.

#3755 Overhauled the Calculate Areas function to give consistent results irrespective of resolution chosen.

#3754 Improved the DXF import function to handle information scaled by different values in X and Y.

#3753 We are now ignoring Chinese characters included in the comments section of the Gerber file. There still exists a case where these characters have been saved as an ASCII file and one of the included ASCII characters equates to a character that is used in the specification (a "*" for instance in an RS-274X file). In this case, the import code may still encounter problems.

#3752 Added GC-Basic functionality to retrieve the language of the application.

#3750 During the import of files, if the importer detects that an X and/or Y coordinate is too large to be stored internally, the import process will stop and ask the user if they would like to try the import again, this time applying an offset to all XY values within the file. The offset is equal to the first out-of-bounds value encountered. If Yes, the file import will be attempted again. If the answer is No or Cancel, then the user is presented with a "Do Partial Read?" message box. If the answer is yes, the imported image (if any) as of the first out-of-bounds value is presented to the user.

#3741 Fixed an issue where DFM Missing Pad check incorrectly identified two drills as not having pads.

#3739 Tangential construct issue resolved for netlist extraction on this dataset.

#3737 Implemented the ability for network administrators to remotely install the application.

#3735 Updated the Close Holes DFM check to handle blind and buried via on separate layers.

#3727 Added a user dialog to include or ignore full 360 arcs appearing in a Gerber layer.

#3717 Date strings in NC Rout file were causing problems. Format finder now screens out "AUG0" and "AUG1" when searching potential NC Rout files for occurrences of G0 and/or G1 codes.

#3698 Now storing user selection for "retain file extension" option in registry with other user settings

#3681 Fixed contour issue that resulted in incorrect results for removal of inner layer pads on this specific dataset.

#3680 Updated the rotation algorithm for bottom side components that have already been taught. The rotation of the component now correctly matches the rotation of data for bottom side parts.

#3654 The Copperless drill function now includes slots and routs in its calculation.

#3635 The RS274x import module now traps for the case where too few parameters have been supplied for an aperture definition of type '0' (oblong); instead of crashing the app, the import code now writes an error to the import log and defaults the missing parameter value to the value of the first parameter.

#3620 Feed speed and spindle code are now taken into account when searching for an existing drill to match the user's creation tool specification.

#3619 Automatic file recognition error was due to several occurrences of D-code-like strings within the file; added code to filter out this particular occurrence when it is followed by a floating point value.

#3604 Disabled panelization checking code in RS274x and MDA Fire outputs.

#3490 Custom colors are now saved in the GWK. Implemented a new global GC-Basic function, GetNearestColorIndex, which can be used to retrieve the index (0-255) of the system color most closely matching a user-supplied custom RGB (red,green,blue) color value; also modified the LayerCustomize.gcb script so that the user can specify a valid RGB value for a layer's pad and trace colors instead of specifying one of the named basic colors. (Using color names is still allowed.) See the LayerCustomize.ini sample file for formatting requirements and further instructions.

#3385 Certain DXF polyline constructions are now automatically converted to flashed round pads.

#3374 Each drill hit that comes about as the result of an Excellon M97 or M98 code will have the "drill text" attribute assigned, and will further have a user-defined attribute assigned whose name is either M97 or M98, and whose value is the actual text associated with the command.