

# Release GC-PowerPlace v5.2 Notes

## Table of Contents

- NEW FEATURES .....2**
  - C-LINK DIF 6 OUTPUT .....2
  - JUMP TO INTERSECTION .....2
- ENHANCED FEATURES .....2**
  - OVERHAULED EXCELLON DRILL INPUT AND OUTPUT .....2
  - SUPPORT FOR AUTOCAD 2005 FILES.....2
  - TEXT CREATION .....2
  - OUTPUT PDF EDITOR .....2
  - GC-BASIC FUNCTIONALITY.....2
  - ON LINE HELP .....2
- ITEMS FIXED SINCE V5.1 .....3**

## New Features

### C-Link DIF 6 output

The DigitalTest C-Link DIF format is now supported as an output for GC-PowerPlace with Test.

### Jump to Intersection

The ability to jump to the intersection of two selected traces has been added. The function is found under the Edit > Jump to... menu item. The function works for both straight lines and arc intersections. A message is reported if the two selected traces do not intersect.

## Enhanced Features

### Overhauled Excellon Drill input and output

This release contains a significantly more robust Excellon Drill and Rout output generator. More options are included to allow variation in the formatting of tool tables and location co-ordinates.

The importing of Excellon files has also been overhauled to fix a number of existing bugs (see below for details).

### Support for Autocad 2005 files

The import and export of DXF and DWG files has been updated to provide support for AutoCad 2005 files. The overhaul also includes fixes to many other DXF/DWG file import issues.

### Text Creation

The Text Creation function now allows the user to type multiple lines of text or load in a text file. The function works with both sizeable and fixed size text.

It is also now possible to add multiple line text containing blank lines.

### Output PDF Editor

The output PDF Editor can now be called from within the application rather than as a standalone application. The PDF Editor will be found in the Tools menu and allows the creation and modification of output PDF files. The PDF Editor also contains a help file to guide you through the process.

### GC-Basic functionality

A number of new GC-Basic functions have been added to the product. These new functions are enabling customers to create, adapt and streamline their process flows.

Among the numerous functions added are:

ReorderSingleRoutChamfer()

Export C-Link DIF()

Export Excellon Drill()

CopytoLayer()

### On Line Help

As always the On Line Help has been updated to include these new and enhanced functions. Also, the images used in the Help file are now smaller. This has significantly reduced the size of the help file.

## Items Fixed since v5.1

This list is customer reported issues fixed for this release.

#3135 FAT-F output problem (No copper for pin -) has been resolved. It was caused by an unplated net zero pin boundary issue.

3132 - Very small arcs are no longer vectorized in RS-274X output.

#3126 Problem of deleted drills. The dataset in question had four drills in copy buffer (drills were not selected but were marked as ready to be pasted); tab rout function was deleting buffered items from job before processing, but is now simply removing the buffered status from all items in the job.

#3125 Modified code that copies data from a source drill layer using a different drill table than target layer so that spindle speed and feed values are retained.

#3117 FatF export module was not writing traces/pads from documentation layers to the ':LAYERS' section, but is now doing so; also fixed problem that all documentation layers specified were being lumped together into one layer name in the ':LAYER\_NAMES' section, and changed layer sense of doc layers from TRANSPARENT to TOP so that FabMaster/Assembly Expert will display them after import.

#3114 Fixed a message box mix-up that called the incorrect message when changing a data layer into a drill layer.

#3108 Fixed following problems relating to FAT-F output.

- a) App crashes on output due to copy/paste error in WriteLayersSection of output code;
- b) In same section, ROUND primitives output with zero diameter when diameter is less than min resolution (force to 1);
- c) Typo in WriteLayerNames section (outputting BOT instead of BOTTOM for layer sense of bottom side layers.

#3096 Completed internal work to allow the final strings in some GC-Basic scripts to be translated to Chinese and other languages.

#3082 Clarified the terms Leading and Trailing in the Import dialog. The new text string now reads 'Leading Supp' and 'Trailing Supp'. User misinterpretation of this message caused an issue with Import Results.

#3080 Insertion of text based on an offset value from a known location now working correctly.

#3067 Fixed an instance of the application crashing when trying to import an RS-274X file containing tilde (~) characters.

#3066 Now using FATF 'polygon' primitive type to describe part pin pads drawn with polygon tools; also breaking nested and cut-out polygons down into positive-only polygons before output since FATF poly syntax supports only exterior polygons.

#3061 Fixed issue with mirrored multiple line Text apertures incorrectly offsetting the second line of text after mirroring.

#3060 Better animation of multiple line text addition in non-fixed text mode.

#3059 Fixed a display issue when adding fixed width text to a layer. Previously, scrolling and refreshing the screen during Fixed Text addition caused ghost images to appear.

#3054 Support for G85 slot command added to the Excellon output. The G85 command will be utilized when the Slot Drill attribute is present.

#3052 Problem with representation of custom off angle pads in FATF output has been resolved.

#3047 Fixed issue that resulted in ACE crashing the application with this dataset.

#3040 Created GC-Basic command 'ReorderSingleRoutChamfer' to allow the start point of the rout path for a chamfered path from with GC-Basic. Syntax is similar to ReorderSingleRout.

#3012 Now stripping negative sign from I and J codes when in arc (G74) mode, so we can accurately determine signs based on arc start and end points; also added an import log warning to let user know we encountered negative I and J codes in G74 mode (technically an error) but that we are proceeding with import

#2963 The GC-Basic command CopytoLayer now support attributes.

#2945 Corrected interpretation of drill file format.

#2930 Corrected recognition of embedded drill units in the import file.

#2888 Added functionality to create tool table values explicitly in decimal format.

#2887 Format header is now included in the Excellon output.

#2879 Netlist extraction contour failure fixed.

#2852 Netlist extraction contour failure fixed.

#2815 Corrected a bug that was misinterpreting the Drill diameter from the tool table upon import of the drill file.

#2732 Fixed a bug that incorrectly defined the M25 / M02 step and repeat codes when outputting rout information.

#2713 Added the ability to create Excellon tool table information in decimal values.

#2616 Generation of correct results when loading the two example files.