

# UcamX 2017.10 Release Notes

October 2017

# UcamX

Version 2017.10



# UcamX v2017.10 Release Notes

Commitment to regular updates



Version	Release date	Highlights
2014.12	Dec-14	Workspace GUI, Parallel processing
2015.04	Apr-15	Load balanced sessions, Gerber X2 Input support
2016.01	Jan-16	Background output, Parallelized image compare
2016.06	Jun-16	Maintenance update
2016.12	Dec-16	New insert Arc command, Improved Sieb&Meyer rout import
2017.04	Apr-17	Performanceboost DRC copper-cut-ins, Improved "Select Painted" feature
2017.10	Oct-17	New startup routine, Extended Job Editor View, Optimized Rout Compensation

# UcamX v2017.10 Release Notes

## Overview



- New startup routine
- Optimized Rout Compensation
- Sieb & Meyer import of compensated or uncompensated G32 and G33 commands
- Extended Job Editor View
- New Attribute Removal Tool
- Enhanced Gerber 274X output
- Extension to SEC (Secure Etch Compensation)
- and more ...

# UcamX v2017.10 Release Notes

## New startup routine



The new startup routine simplifies the start of UcamX sessions.

You only need 1 icon and the rest is handled automatically.

If you are not using a license with parallel processing please use the UcamX PP-1 icon.



For users with parallel processing license we created the UcamX PP-Max icon.



Both icons are placed on your desktop during installation.

# UcamX v2017.10 Release Notes

## New startup routine



### If no UcamX is running:

- the icons will start UcamX either in PP1 mode or in the maximally allowed PP mode available in your license.

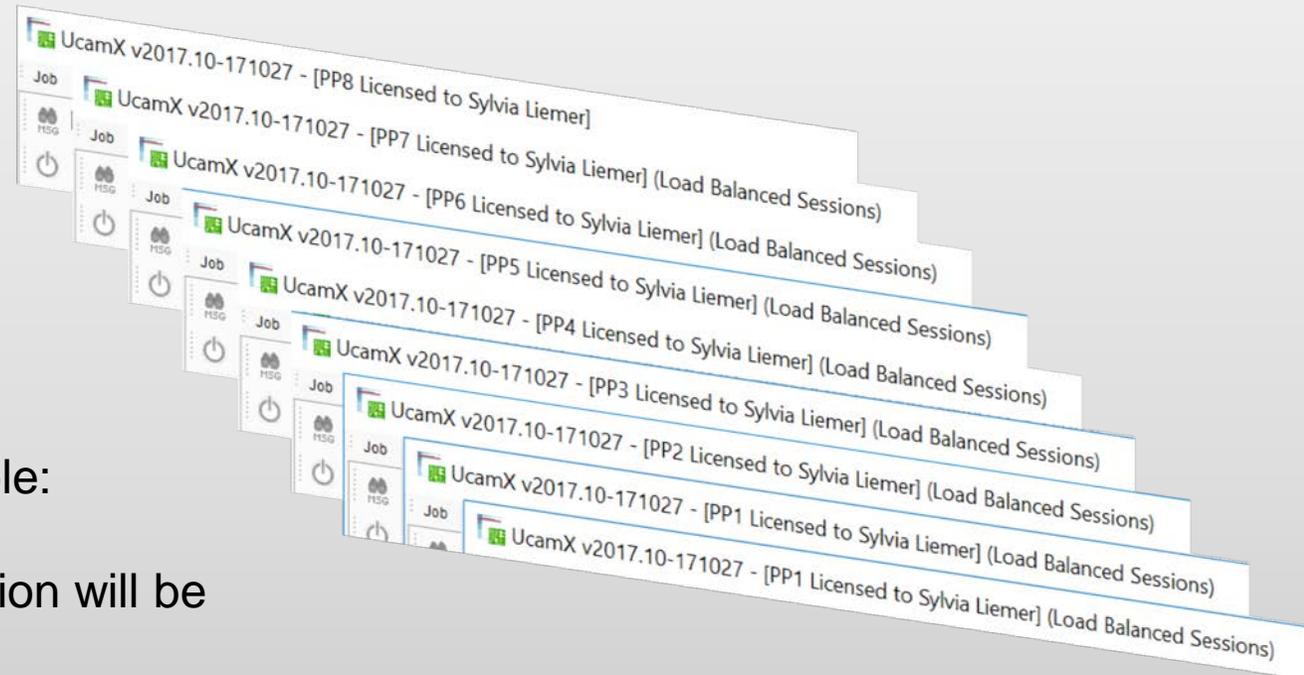
### If an UcamX session is already running:

- an additional UcamX session will be started automatically but no additional license will be allocated.

The number of available PPs in the existing main session will drop by one unit each time an additional UcamX session is started. For example:

PP8 will be reduced to PP7, to PP6 if another session will be opened and so on.

If you reach PP1 or only have started a PP1 it stays a PP1.



# UcamX v2017.10 Release Notes

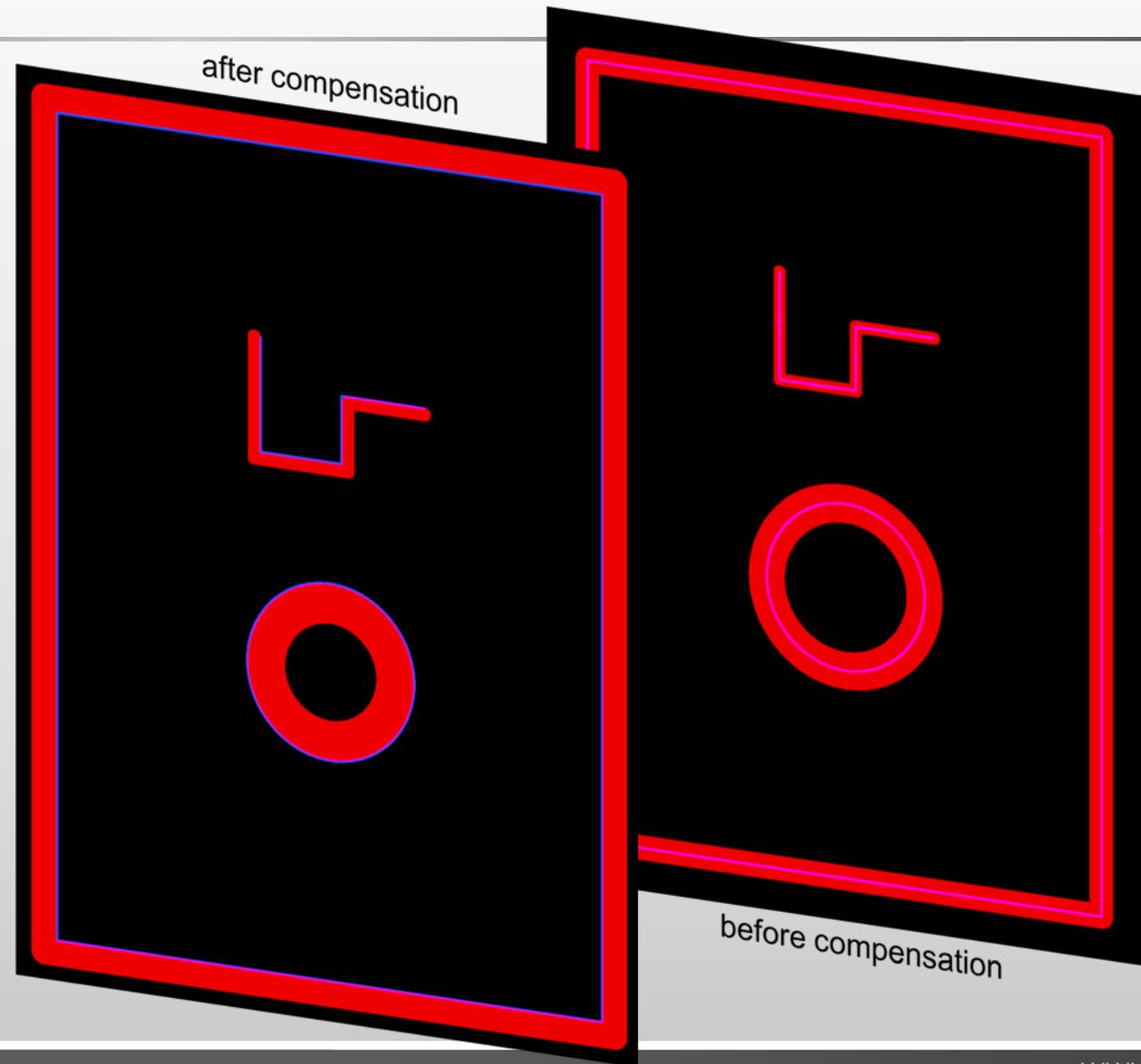
## Optimized rout compensation

Optimized rout compensation is a time-saving enhancement to existing rout functionality.

- No need to individually select each rout diameter before compensating
- No need to specify every compensation value manually

By specifying a compensation value of 0, every object will be compensated by half their diameter.

This allows compensating all routes simultaneously, even when different aperture sizes are used in a rout layer.



# UcamX v2017.10 Release Notes

Excellon2 import of compensated or uncompensated G32 and G33 commands



## The choice is yours now - import of G32 and G33 commands: compensated, uncompensated or as a flash :

The newly introduced ucam.db key excellon2.routed\_circle allows to influence the conversion of Routed Circle Canned Cycle CW (G32) and CCW (G33) during the conversion of excellon2 drill programs :

excellon2.routed\_circle: arc (default)

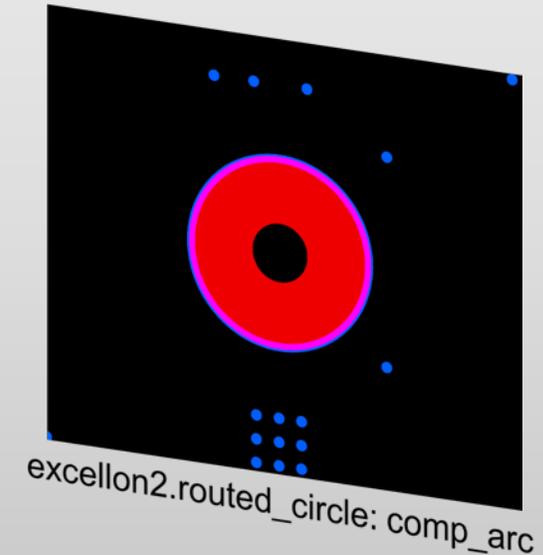
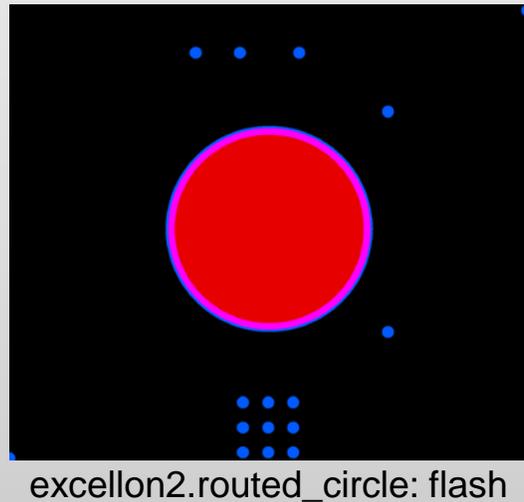
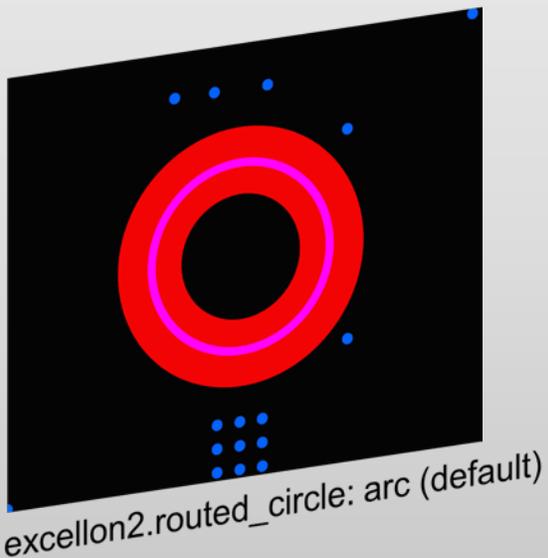
The routed circle arcs are converted in full circle objects -> no compensation on the arc coordinates

excellon2.routed\_circle: comp\_arc

The routed circle arcs are converted in full circle objects -> compensation is applied

excellon2.routed\_circle: flash

The routed circles are converted into a flash with a circular aperture



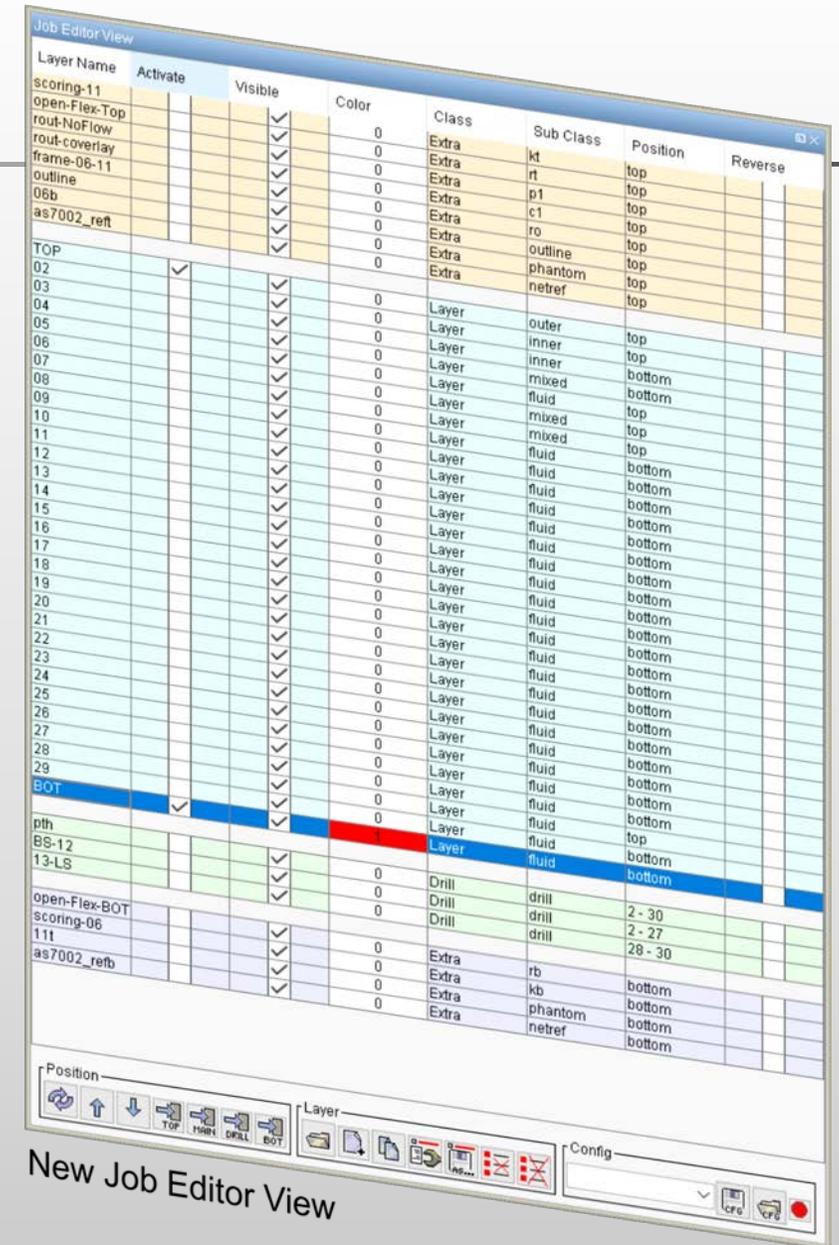


# UcamX v2017.10 Release Notes

## Extended Job Editor View

Job Editor View presents all layers and an extensive list of layer modification functions conveniently in a single, color-coded, table-like dialogue for easier operation.

- Sorting and ordering files by drag and drop.
- All files visible. No need for scrolling up and down.
- Moving files between classes with only one mouseclick even with multiple layers selected.
- Recording, saving and reusing modifications in configuration files for automated modifications.
- Layer modifications like renaming or repositioning without additional windows.
- Switching layer colours (planes) directly in the menu.
- Results of the modifications directly visible in the standard Job View



# UcamX v2017.10 Release Notes

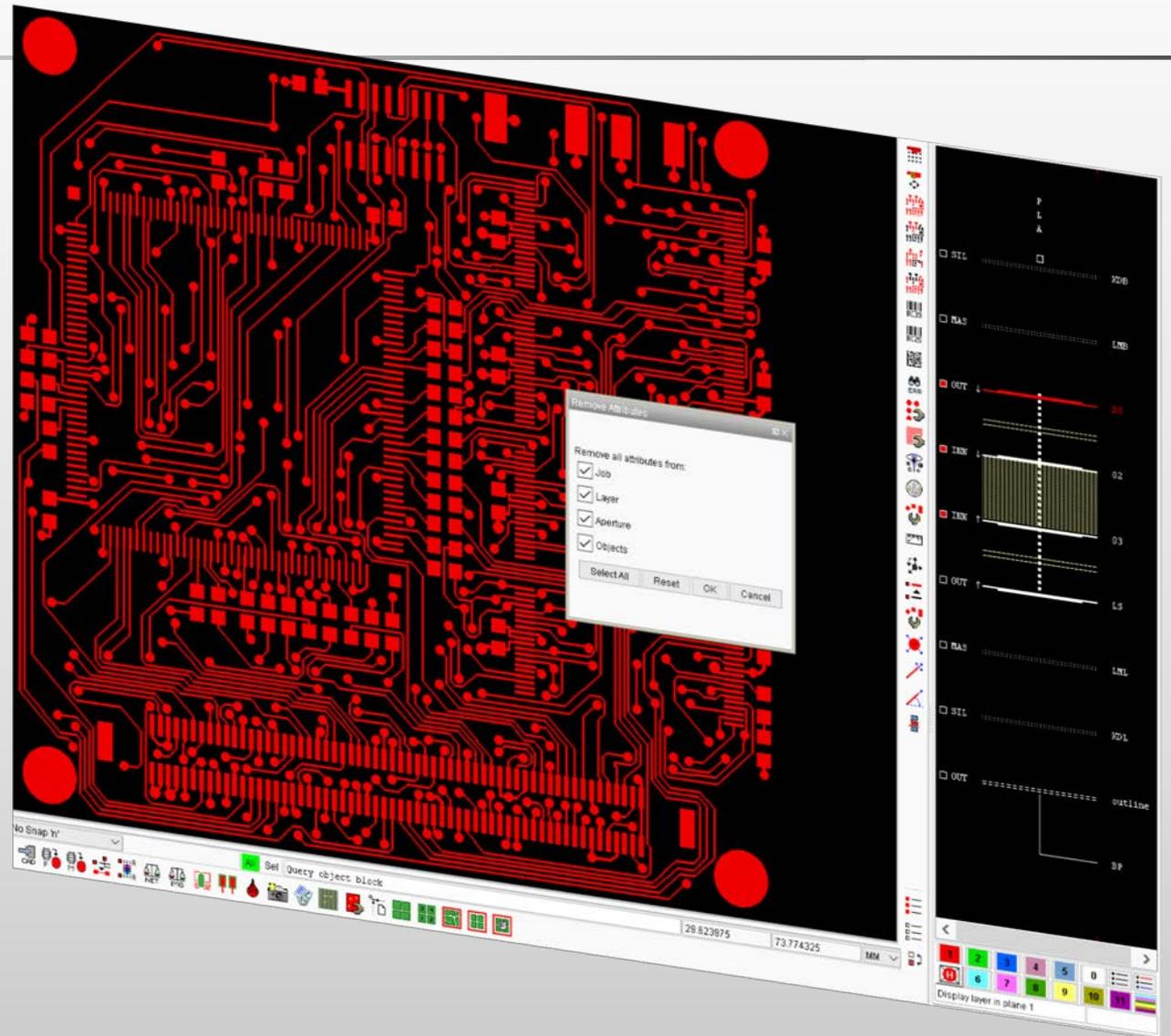
## New Attribute Removal Tool

New menu item "Remove Attributes .." has been added to the Edit menu.

This function allows the removal of attributes level by level or all together at once:

- Job attribute
- Layer attributes
- Aperture attributes
- Object attributes

The function offers a fast way to remove the attributes of the selected level(s) and works on all active layers at the same time.



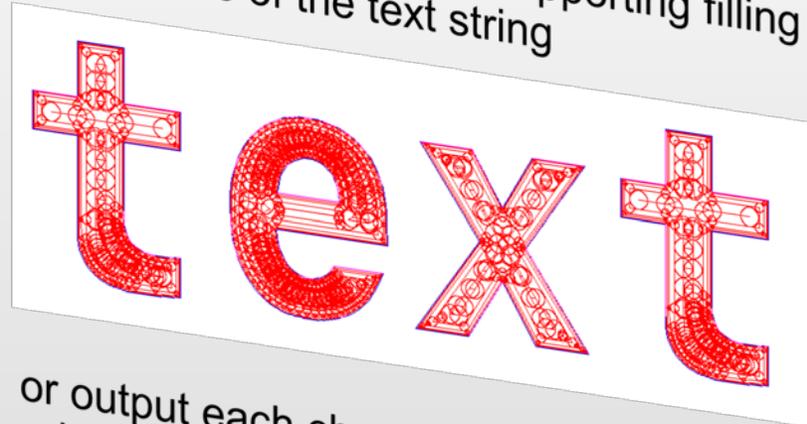
# UcamX v2017.10 Release Notes

## Enhanced Gerber 274X output

Introduction of new option, 274x\*text, in the Cad resource file, influencing the way how DPF Text apertures are converted into Gerber.

```
#  
# How to handle text apertures.  
# If set to 'outline', text is turned into complexes.  
# If set to 'vfill', text is vectorfilled.  
# If not set, 'vfill' is assumed.  
274x*text:    outline  
#
```

The value of 274x\*text is supporting filling with vectors of the text string



or output each character as an outline primitive of a macro definition.



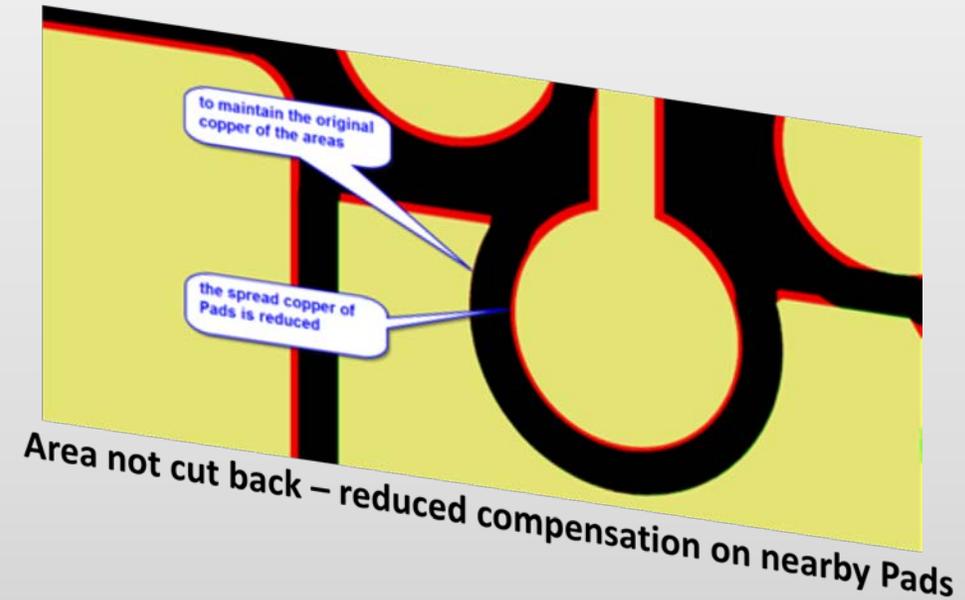
# Secure Etch Compensation (SEC)

## Extension to Secure Etch Compensation



SEC is Ucamco's high-end software module to maximize etch compensation on critical features

Some of the compensation on regions can be sacrificed locally to help achieve maximum compensation on nearby critical features like SMDs or Pads. If allowed, SEC can even cut back some of the region's original copper to create extra space...



As an enhancement to the existing functionality, a user can now specify a minimum copper width value to be taken into account.

# UcamX v2017.10 Release Notes

## Addition to existing SEC (Secure Etch Compensation)



While ensuring the copper clearance based on the value specified in the GUI SEC even checks for copper widths which are too small in the original data and in the data modified by SEC.

You will get 2 additional apertures with different names and the size of the value you defined for „Minimum Copper Width“ in the GUI :

- A) CM\_mincopper                      copper width already too small in the original data
- B) CM\_mincopper\_error              copper width too small after modifications by SEC

SEC (Secure Etch Compensation) is a licensed feature but this addition is free of charge for our customers who already have SEC in their license and a current maintenance contract. Please contact [support@ucamco.com](mailto:support@ucamco.com) to extend your license file.

For more Information on Secure Etch Compensation visit our Homepage  
[https://www.ucamco.com/files/downloads/file/219/flyer\\_ucamx-sec\\_20170629.pdf](https://www.ucamco.com/files/downloads/file/219/flyer_ucamx-sec_20170629.pdf)

# UcamX v2017.10 Release Notes

and more ...



UcamX v2017.10 also offers a large number of code fixes for issues reported by users.

If you are still on an older version of UcamX or still on Ucam, please have a look at the release notes and bug fixes of recent versions.

- [UcamX v2014-12](#)
- [UcamX v2015.04](#)
- [UcamX v2016.01](#)
- [UcamX v2016.06](#)
- [UcamX v2016.12](#)
- [UcamX v2017.04](#)

All Release Notes and code fixes are listed on the [Downloads](#) page of the Ucamco website.

© Copyright Ucamco NV, Gent, Belgium

All rights reserved. This material, information and instructions for use contained herein are the property of Ucamco. The material, information and instructions are provided on an AS IS basis without warranty of any kind. There are no warranties granted or extended by this document. Furthermore Ucamco does not warrant, guarantee or make any representations regarding the use, or the results of the use of the software or the information contained herein. Ucamco shall not be liable for any direct, indirect, consequential or incidental damages arising out of the use or inability to use the software or the information contained herein.

The information contained herein is subject to change without prior notice. Revisions may be issued from time to time to advise of such changes and/or additions.

No part of this document may be reproduced, stored in a data base or retrieval system, or published, in any form or in any way, electronically, mechanically, by print, photo print, microfilm or any other means without prior written permission from Ucamco.

This document supersedes all previous versions.

All product names cited are trademarks or registered trademarks of their respective owners.