UcamX 2017.10 Release Notes

October 2017
UcamX
Version 2017.10
# UcamX v2017.10 Release Notes

## Commitment to regular updates

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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 …
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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.
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 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.
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.
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
Extended Job Editor View

Processing layouts of PCB’s with a high layer count can result in scrolling up and down a lot of times to be able to handle all layers, extra layers and drill layers.

This is time consuming and uncomfortable.

Job Editor View is specifically build for users who often handle such PCB’s with a high layer count, a lot of drill spans and / or many extra layers.

This feature is licensed but free of charge for our customers with a maintenance contract.

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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.
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.
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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.

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.

```
# 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
```
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.
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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 to extend your license file.

For more Information on Secure Etch Compensation visit our Homepage
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.
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