

UcamX v2020.12



Release Overview

Always a step ahead ...

- DPMX Import 
- YELO Copper Adjuster extensions
- Text Updater 
- SEC Horn Compensation 
- Auto Markup extensions
- YELO Legend Adjuster extensions
- YELO Mask Adjuster 
- And more!

DPMX (IPC2581) Input

- Stay on top of data formats multiplicity with the new input option for **IPC-DPMX Input** (formerly known as IPC2581)
- Even large files containing complicated data and describing the most complex printed circuit boards can be imported smoothly
- Industrialized import **is also included in new Integr8tor release**

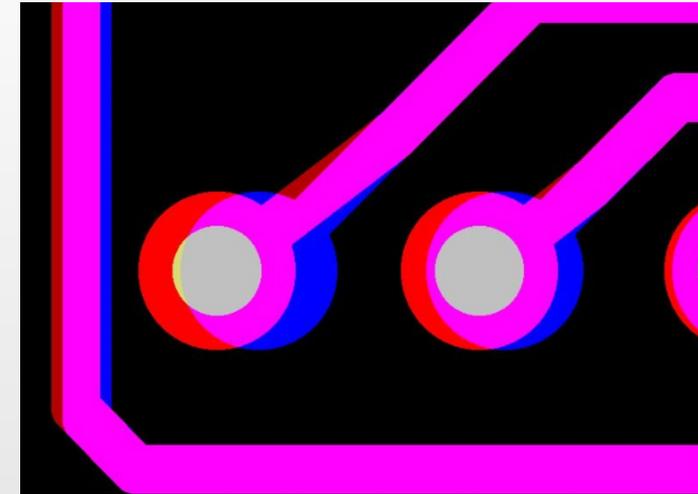
(New option)

Extensions

- New automated adjustment: **Via pad stack Move.** Solve via-hole-clearance-faults by **fully automatic** move of via holes together with their corresponding pad stacks
- **Parallelising** **speeds up** the Copper Adjuster process by about **30% in PP+**

(Additions to existing Copper Adjuster)

Via stack move

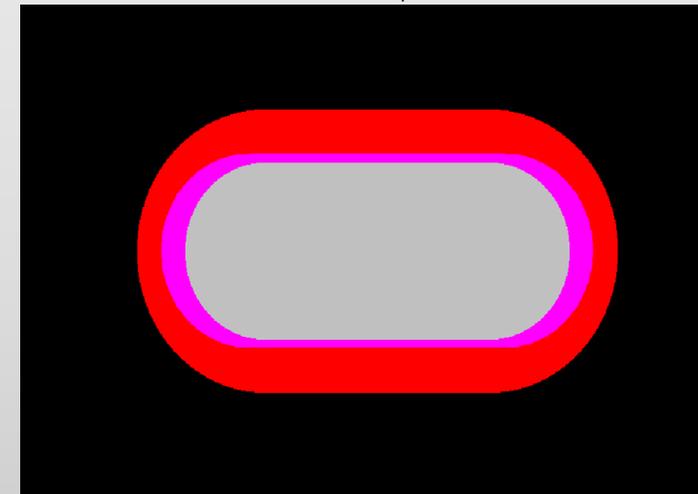


Extensions

- Based on the complexity of the boards **same net spacing (SNS) check** now can run with one general threshold or **more detailed** with different thresholds depending on the type of involved objects
- New automated adjustment: **Repair for plated slots**. Ring violations for plated slots are reported and **automatically repaired**

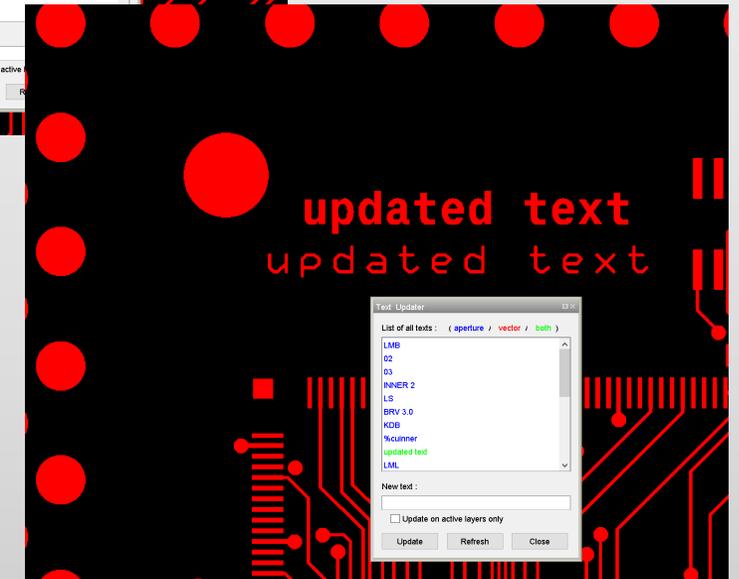
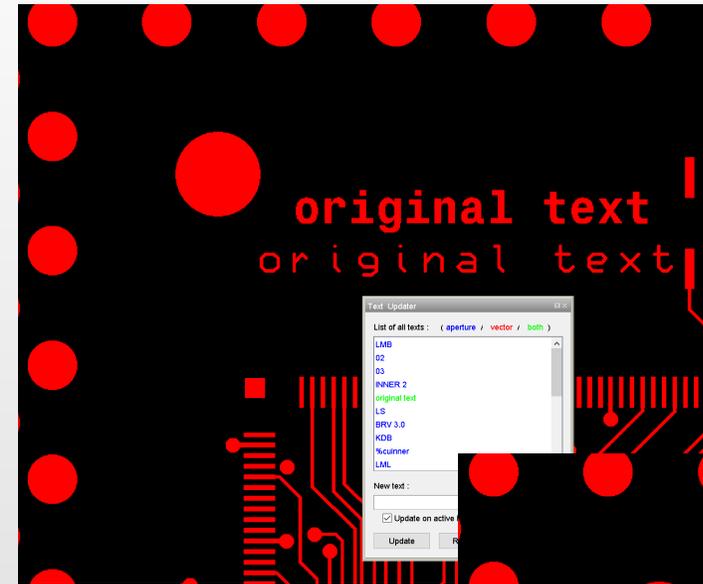
(Additions to existing Copper Adjuster)

Plated slot repair



- A **time-saving** new feature to update aperture and vector text through all layers, selected layers and all block levels

(Free to use if under maintenance)

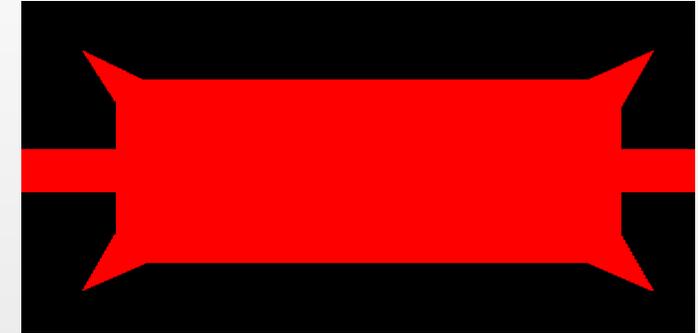


Secure Etch Compensation

- **Horn compensation** prevents underetching on critical SMD corners
- The **automatic process** is implemented in Secure Etch Compensation

(New option)

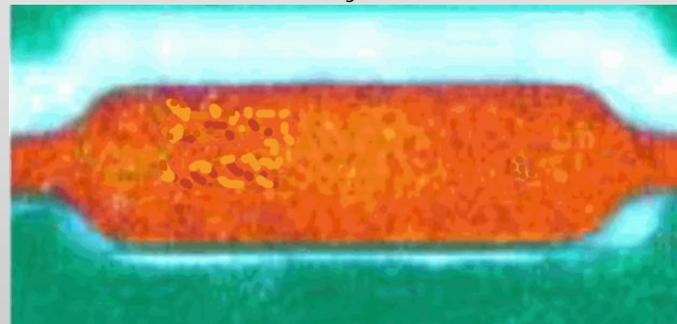
Horns in Layout



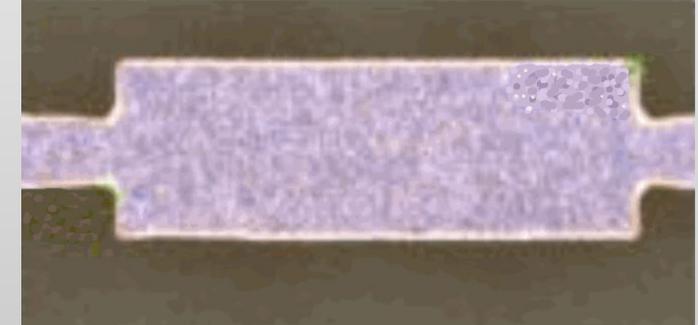
SMD with horns before etching



SMD after etching without horns



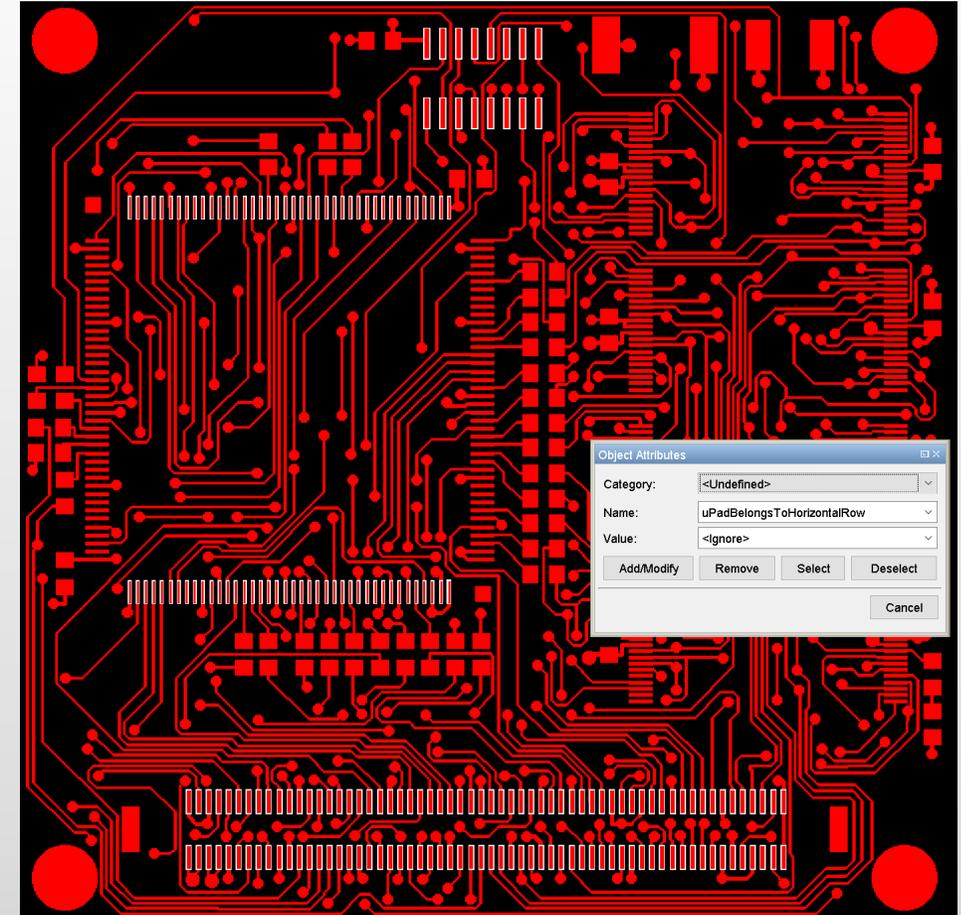
SMD after etching



Extensions

- Extended Markup of copper pads **supports complex apertures** and **conserves CAM resources**
- Identification of **rows of SMD** pads with a pitch below a certain threshold. This new feature has been added in markup of copper pads and **simplifies** e.g. the selection process of SMD rows

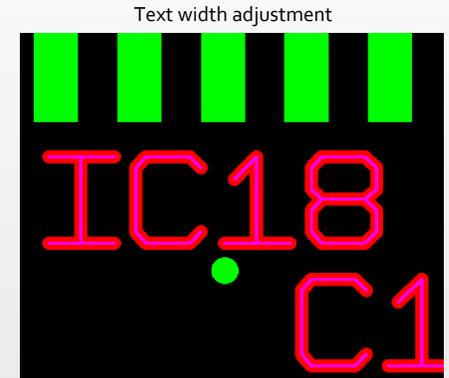
(Addition to existing Auto Markup)



Extensions

- Stepping up the **automation** of YELO
- Automatic **Line Width Repair** in Legend Adjuster **reduces manual labor**

(Additions to existing Legend Adjuster)



(Beta)

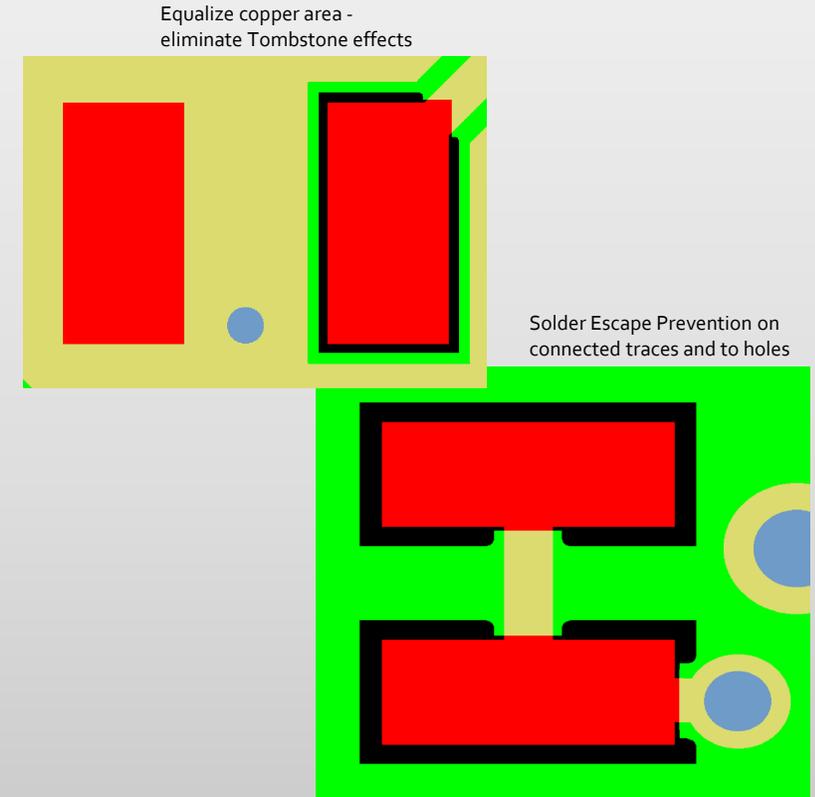
- Now in Beta, will eventually replace the Soldermask Optimizer with upgraded algorithms
- Testing: let your **knowledge and requirements** be part of our current development

(Available to customers under maintenance and with the existing Soldermask Optimizer license)

Tombstone and Solder Escape prevention (Beta)

- YELO Mask Adjuster including **outstanding Tombstone and Solder Escape prevention**
- Adjust masks to have the most positive impact on the assembly process.

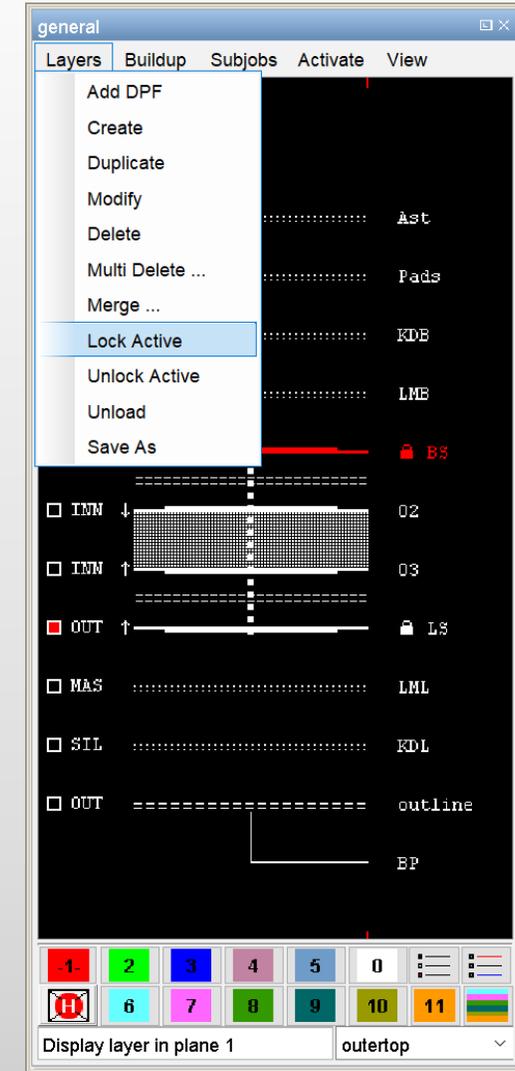
(New option, available to all for Beta testing in release v2020.12 only)



Lock Layers

- **Hightened security** to prevent that these are saved when using Job -> Save
e.g. while simulating different values or changes
- Layers menu in Job Edit: has been extended with 'Lock Active' and 'Unlock Active' for **fast and easy handling**

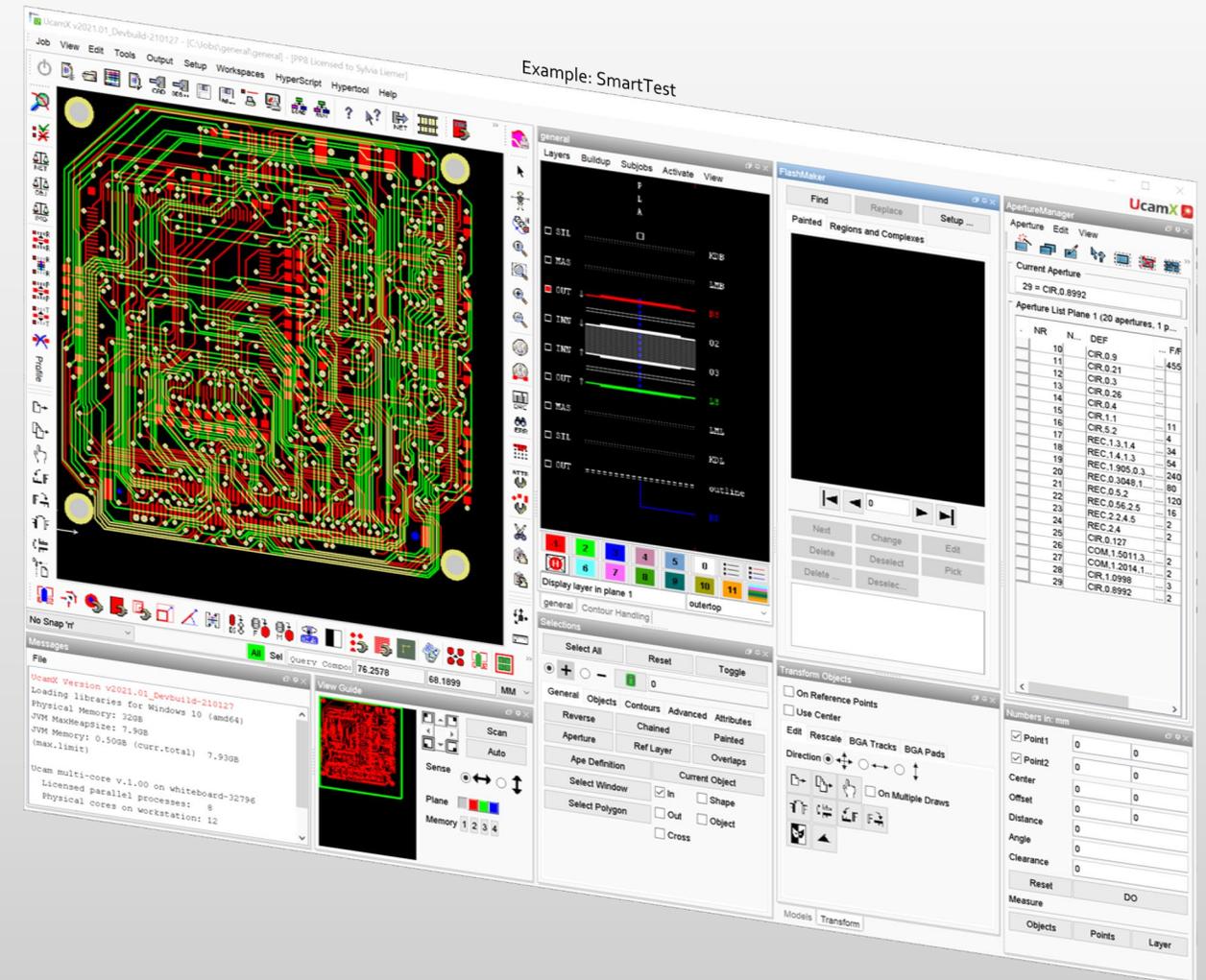
(Addition to existing Job Editor)



Workspaces

- Menu of Smart Products has been extended with the **Workspaces** menu option.
- These products are now also benefitting from the possibilities of using an **optimized workspace** to complete actions

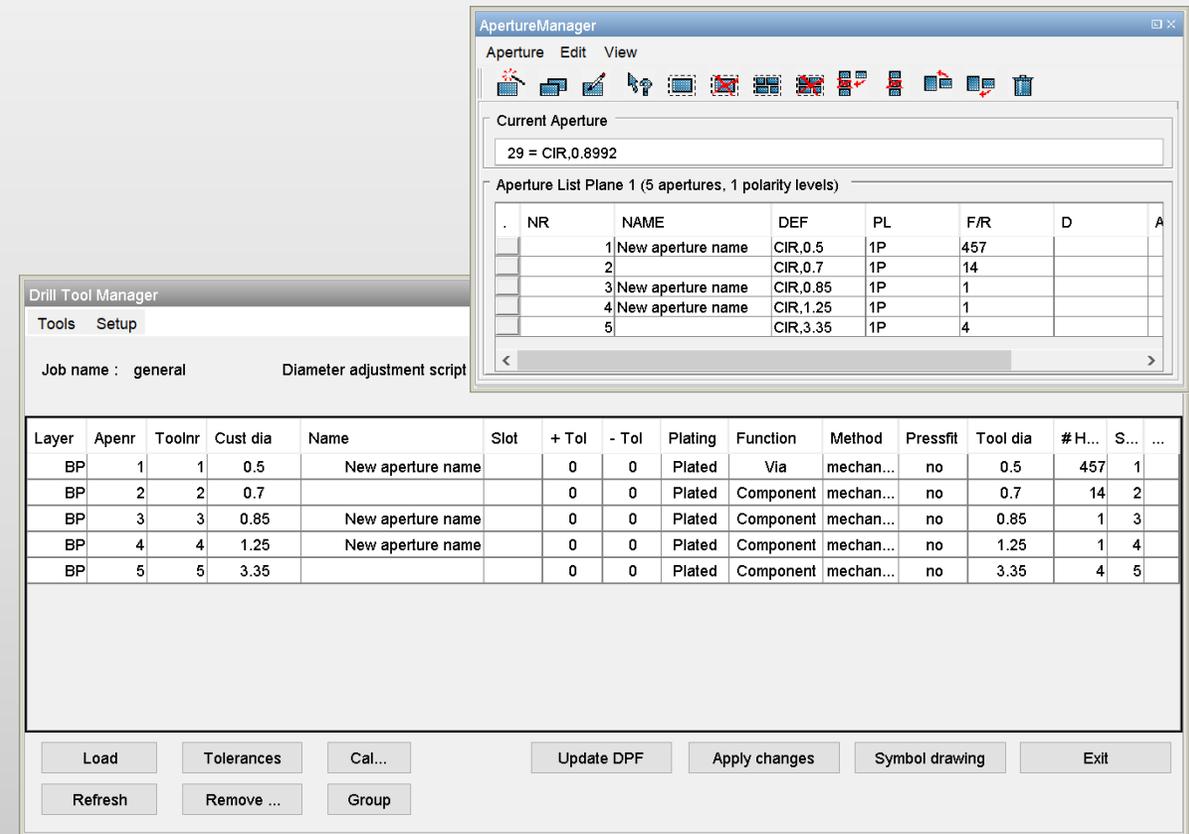
(Additions to existing Smart Products)



Extension

- **Save unnecessary labor** when adding aperture names directly while running **Drill Tool Manager** instead of adding them manually

(Additions to existing Drill Tool Manager)



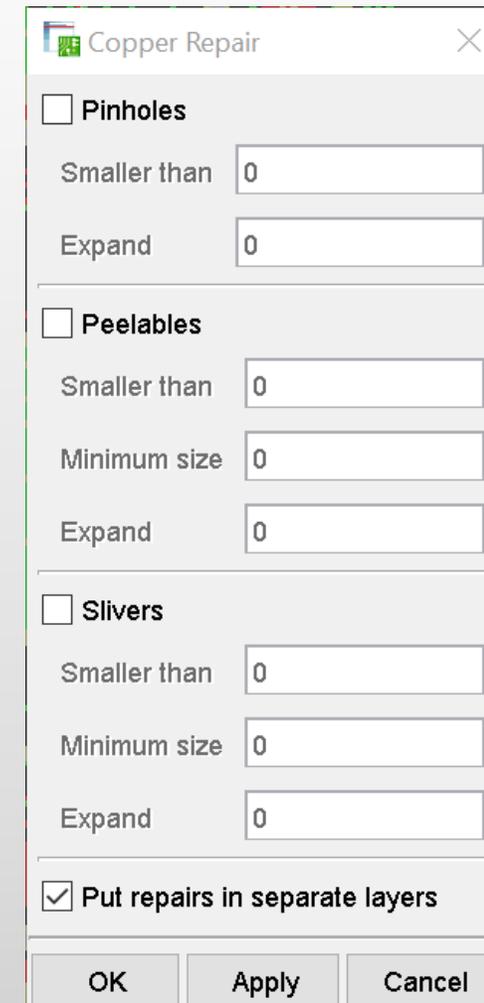
The screenshot displays the Drill Tool Manager software interface. At the top, there are tabs for 'Tools' and 'Setup'. Below the tabs, the 'Job name' is set to 'general' and the 'Diameter adjustment script' is visible. The main area contains a table with columns: Layer, Apenr, Toolnr, Cust dia, Name, Slot, + Tol, - Tol, Plating, Function, Method, Pressfit, Tool dia, #H..., S..., and The table lists five apertures, each with a 'New aperture name' and various parameters. Below the table, there are several buttons: Load, Tolerances, Cal..., Update DPF, Apply changes, Symbol drawing, Exit, Refresh, Remove ..., and Group.

Layer	Apenr	Toolnr	Cust dia	Name	Slot	+ Tol	- Tol	Plating	Function	Method	Pressfit	Tool dia	#H...	S...	...
BP	1	1	0.5	New aperture name		0	0	Plated	Via	mechan...	no	0.5	457	1	
BP	2	2	0.7			0	0	Plated	Component	mechan...	no	0.7	14	2	
BP	3	3	0.85	New aperture name		0	0	Plated	Component	mechan...	no	0.85	1	3	
BP	4	4	1.25	New aperture name		0	0	Plated	Component	mechan...	no	1.25	1	4	
BP	5	5	3.35			0	0	Plated	Component	mechan...	no	3.35	4	5	

Extension

- The **decision is back in your hands!**
The new option in **Copper Repair** lets you choose:
 - Put repairs into separate layers to be checked before usage
 - Add the repairs directly to the checked layers

(Additions to existing Copper Repair)



The screenshot shows the 'Copper Repair' dialog box with the following settings:

- Pinholes
 - Smaller than: 0
 - Expand: 0
- Peelables
 - Smaller than: 0
 - Minimum size: 0
 - Expand: 0
- Slivers
 - Smaller than: 0
 - Minimum size: 0
 - Expand: 0
- Put repairs in separate layers

Buttons: OK, Apply, Cancel

Extensions

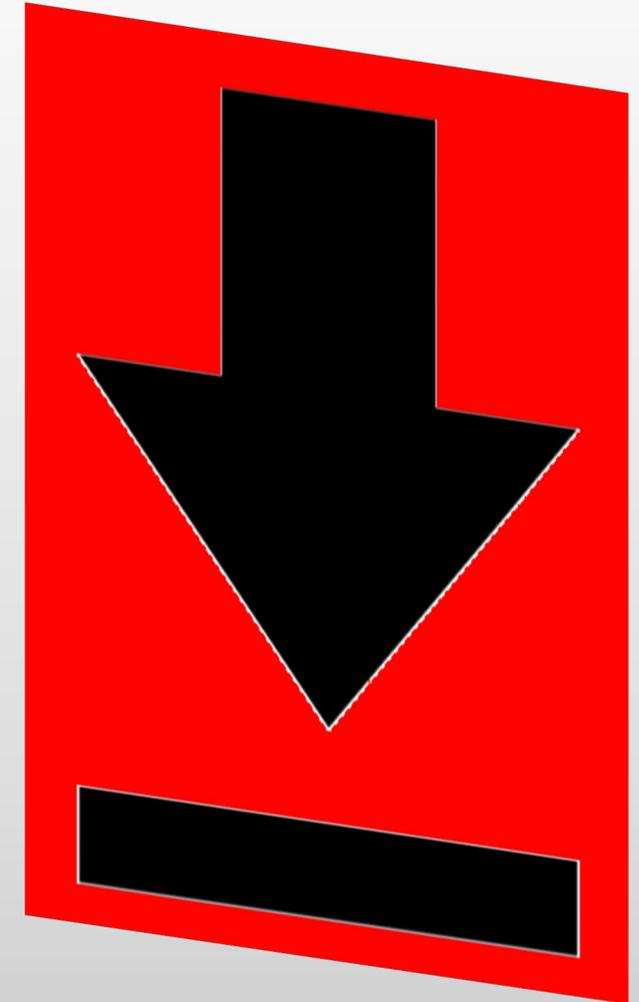
- **More detailed information** as **LPD attributes** now added as layer attributes if an LPD file exists in the ODB structure
- Introduction of new ucam.db key allowing influence on conversion of layers with negative polarity. **Import ODB++** data with polarity converted to **your requirements**

(Additions to existing ODB++ Import)



Install v2020.12

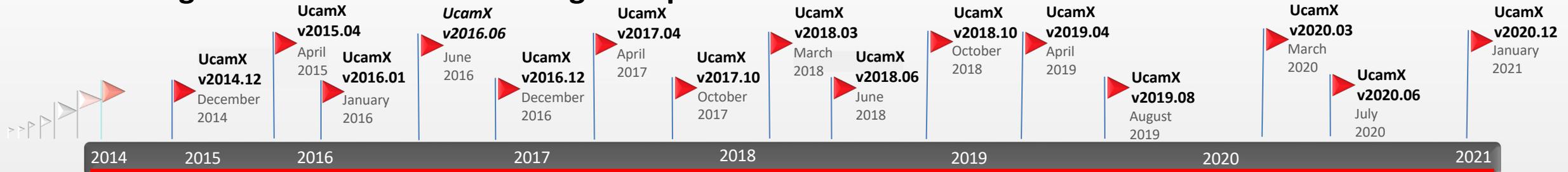
- The installer can be downloaded from the Ucamco FTP download server. As most internet browsers have stopped supporting FTP download, we recommend that you use an FTP client to do so
- We recommend installing this update at your earliest convenience
- For any further questions you may have, please contact our local business partner or the Ucamco helpdesk
- We thank you for choosing a Ucamco product



Already looking ahead



Serving our customer base with 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	Performance boost DRC copper-cut-ins, Improved "Select Painted" feature
2017.10	Oct-17	New startup routine, Extended Job Editor View, Optimized Rout Compensation
2018.03	Mar-18	Eagle input with proportional font, Scaled line width in Silk optimizer, Introduction of YELO Signal Layer Adjuster
2018.06	Jun-18	Save jobs by creating archives, free trial period of all YELO modules
2018.10	Nov-18	Query Component, Read Component information from ODB++
2019.04	Apr-19	YELO Combined GUI for all copper layers, New YELO functionality, Rout Manager enhancements
2019.08	Aug-19	Keyboard Shortcuts, Plane Focus Indicator, Maintenance update
2020.03	Mar-20	Upgraded to Java 11, New Select Painted algorithm, New YELO functionality, Gerber X3 input (component information)
2020.06	Jul-20	Verification of unique combination of subclass, attach and index number
2020.12	Jan-21	DPMX Import, Text Updater, Line width adjustment in YELO Legend Adjuster, Via pad stack move in YELO Copper Adjuster

▲ Today

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