

UcamX v2021.04



Release Overview

Always a step ahead ...

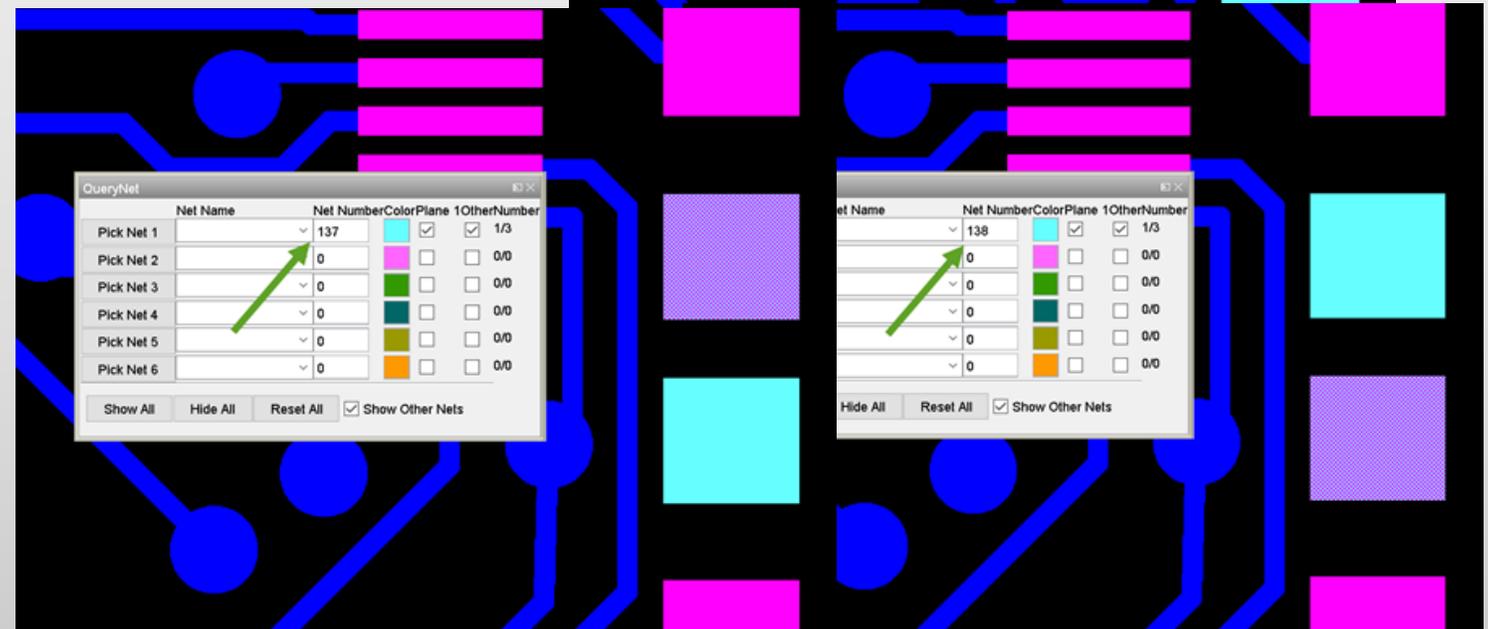
- Netlist extension 
- YELO Copper Adjuster extensions
- YELO Legend Adjuster extensions
- YELO Mask Adjuster (Beta) extensions
- SEC file size reduction
- Ledia Output 
- ODB++ Output optimization 
- And more!

Extension

- **Resource conserving** update of net numbers of test-, mid- and probe-layers, corresponding to the newly calculated netlist information

(Additions to existing Netlist license)

Net number before remove connection



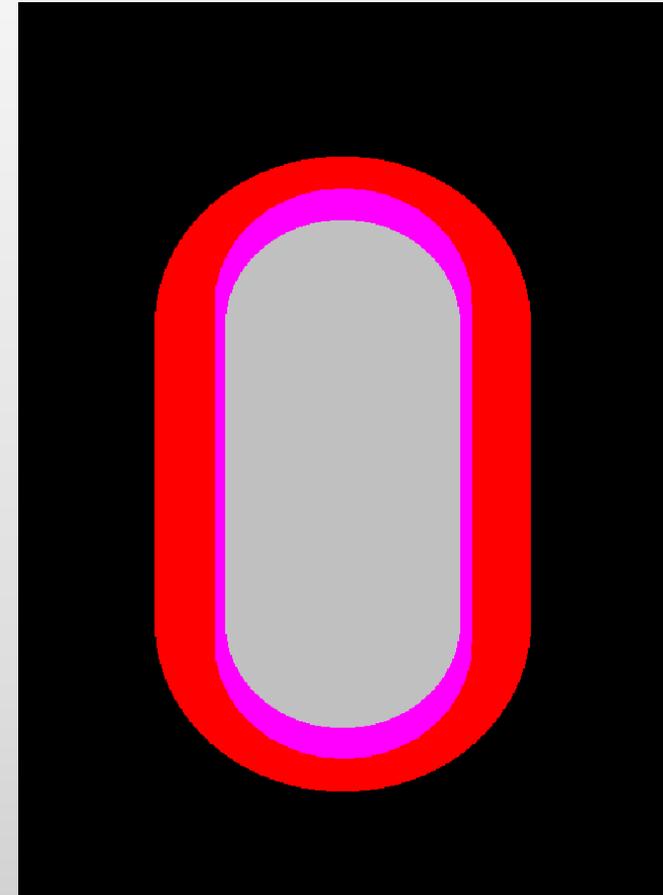
Different net numbers on test layers by only running netlist again

Extensions

- Ring faults for **plated slots** are reported and repaired
- Mechanical via holes can be expanded to fulfill the **min. hole size requirement**
- Plane adjustments optimizes bridge cuts into the contour to **prevent unnecessary pads**

(Additions to existing Copper Adjuster)

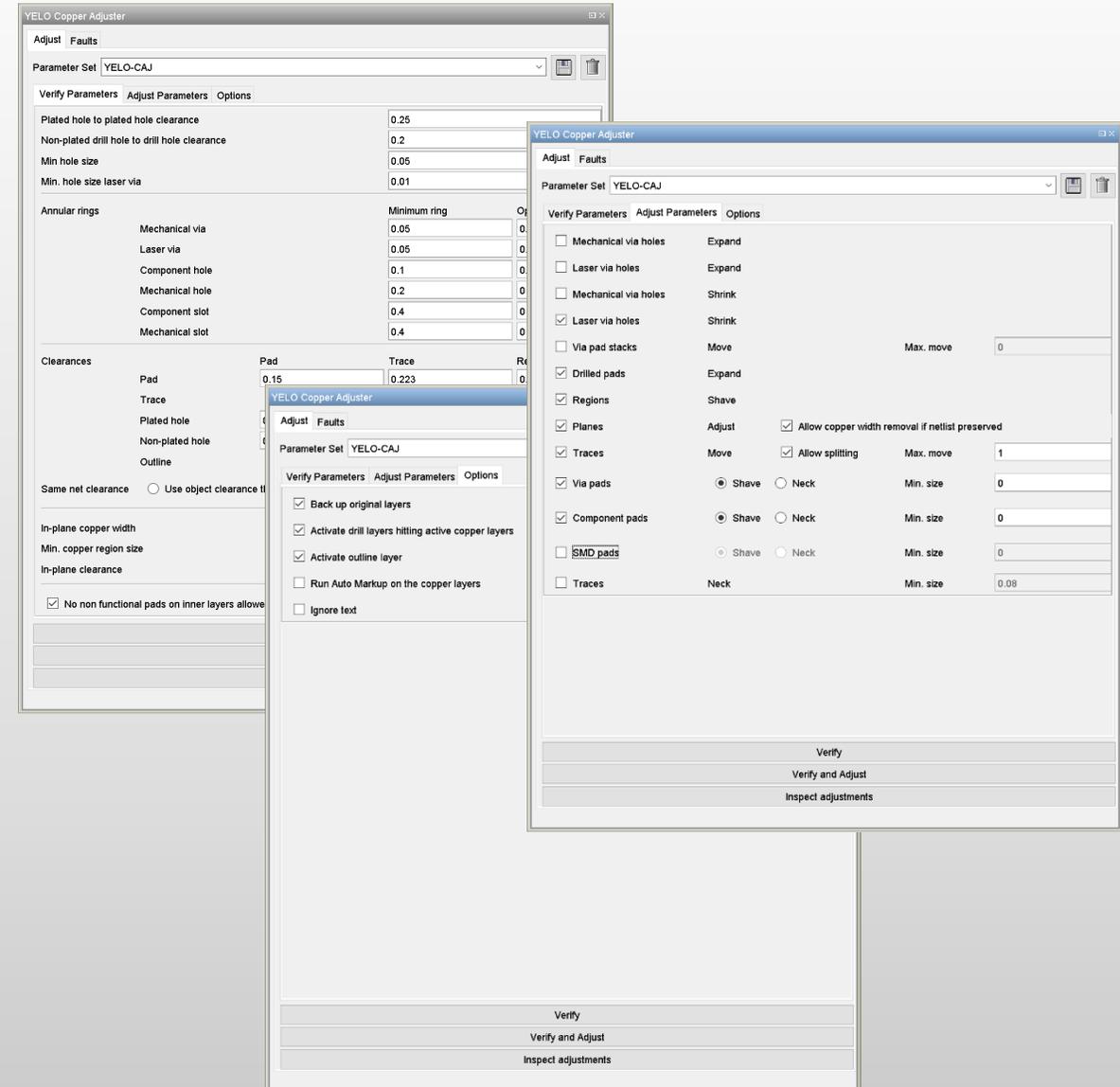
Ring faults for plated slots are reported and repaired



Extensions

- A **new option** to exclude text.
All electrical nets that do not contain any pads are considered as text
- **Improved GUI** for better handling by using tab pages
- Updated ring parameters. 4 new adjustment parameters to check **slots to a dedicated ring** parameter

(Additions to existing Copper Adjuster)

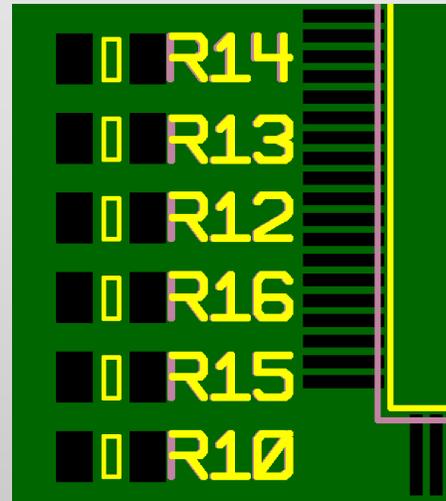


Extensions

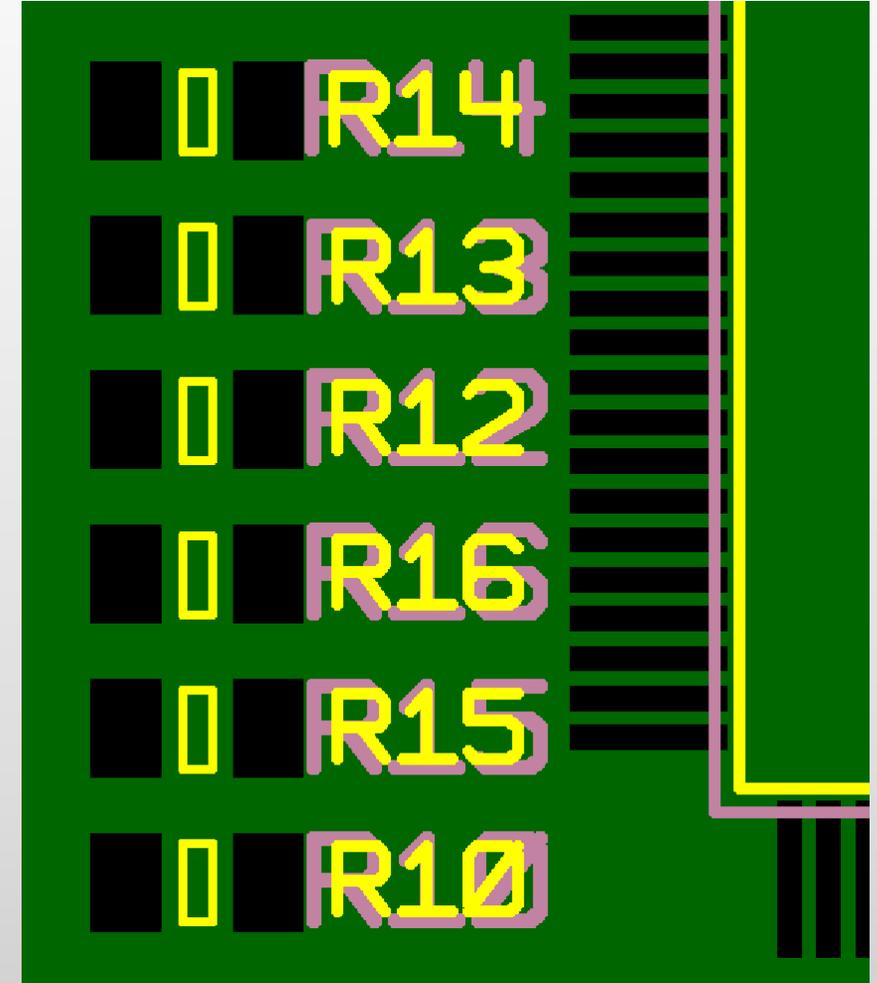
- The Adjust tab contains a new option to **scale all texts in one go** on all active layers by a certain factor. It always preserves the minimum line width.

(Additions to existing Legend Adjuster)

Not enough space to move the text -> text will be shaved



No shave necessary after scaling text



File size reduction

- **Boost the speed of file handling** with the new option to reduce object count for clearance draws by replacing chains of draws
- A new 'Finalize' option and a check box 'Auto Finalize' have been added to the SEC GUI to **prevent negative objects**
 - 'Finalize' to run netlist and expand true objects on active layers manually
 - Checked 'Auto Finalize' will run **automatically** at the end of 'Apply' to eliminate the negative clearance draws

(Additions to existing SEC)

*Change of file size
(same data same values)*

Before changes:

11.182 MB

With Finalize:

7.235 MB

*With replacing chains of
draws:*

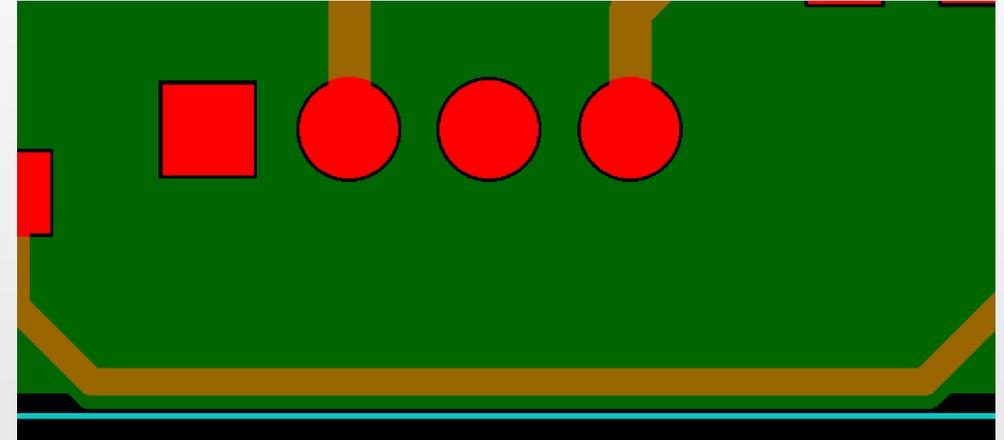
1.616 MB

Extensions

- Due to the great feedback in the first trial period, the trial is **extended** for this release
- **Added option** to remove existing mask openings for vias
- Clearance to outline and overhang **implemented**

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

Removing soldermask from outline while ensuring mask overhang
Example: traces



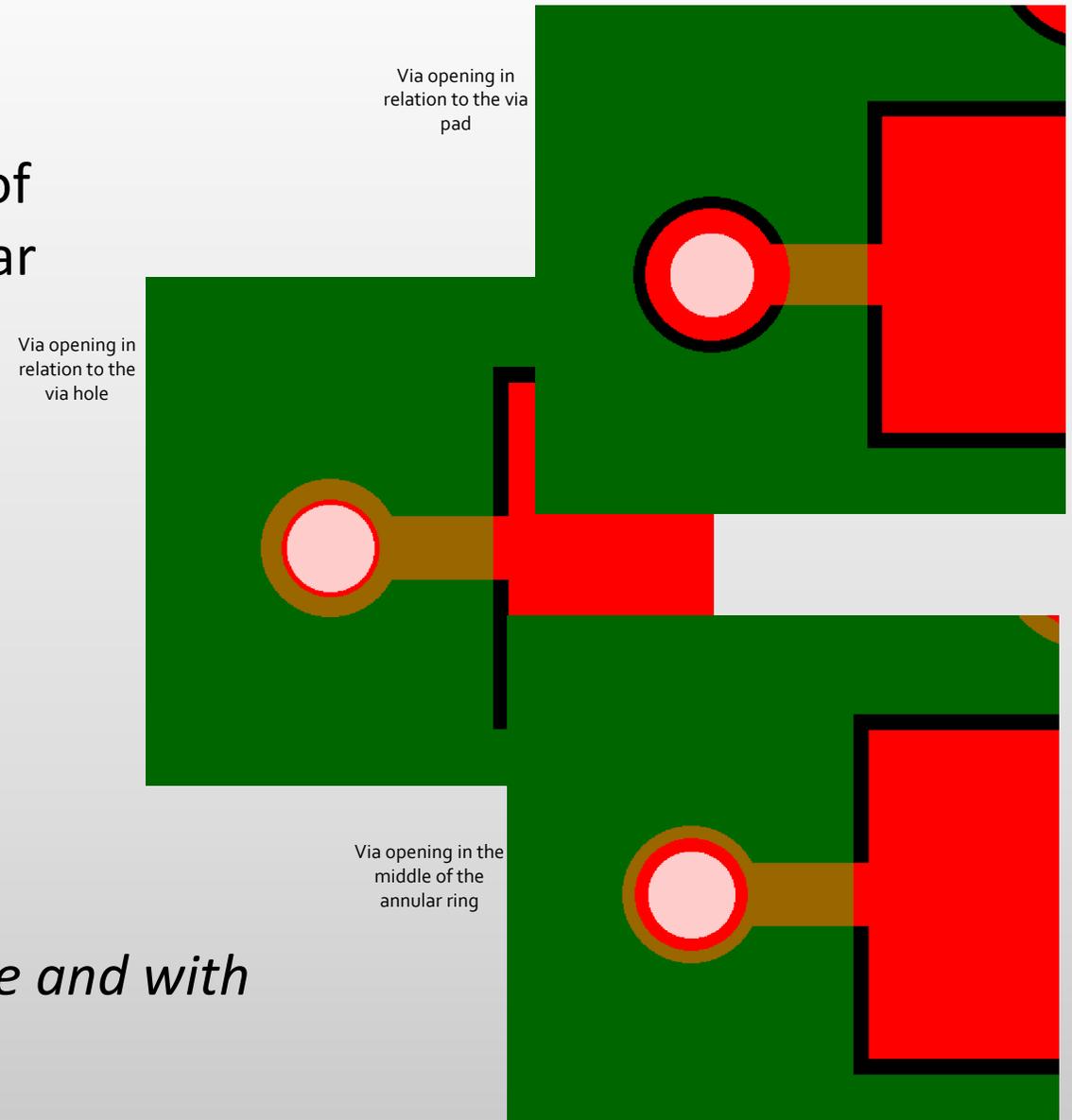
Example: region



Extensions

- **Expanded** functionality for adjustment of via openings to the middle of the annular ring between hole and copper pad
- Outline handling of cut-outs and inner rout **implemented**
- Rings for non-plated slots were **added** to Mask Adjuster. It handles these the same way as non-plated holes

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



New Hotfolder solution

- Be able to send data to expose on the Ledia machine without taking care of the CU9000 software version
- UcamX is completely **independent** of CU9000, it is not sending data directly to the Ledia RIP but is always sending data to CU9000 via hotfolder

(New option, available free of charge to customers under maintenance with the existing “Dainippon Screen DI Output” license)



The screenshot shows the 'SCREEN LI Output' dialog box with the following settings:

- Group: DI Testdata
- Job: Top
- Front Layer: Bot
- Front Layer Name: Top
- Back Layer: Bot
- Back Layer Name: Bot
- Machine: ledia (LediaS_365_385_405)
- Board Setup File: C:\SS\DS_DI_ROOT\brd\221181.brd
- Resist Setup File: (empty)

Board Setup section:

- Board Setup: Load ... Save ...
- Size: 458 615
- Thickness: 0.15
- Mirror: None
- Rotation: 0
- Polarity: Positive
- Alignment Center: Job Layer CAD
- Offset: -0.5 1.5
- Alignment Points: 3 Marks Detect
- Image File: hole_2mm

AP	X	Y
AP1	454.498	259.499
AP2	2.498	114.499
AP3	2.498	495.499
AP4	0	0

Alignment: CAD Board Machine

Hide Global Alignment

Back Layer Mirror: Y

Conversion Mag. 1.0003 times 1.00045 times

Plot Mag. 1.0 times 1.0 times

Group Scaling: Max Min

Scaling Tol. X: 0.0 % 0.0 %

Scaling Tol. Y: 0.0 % 0.0 %

Hide Output Options

Apply to front layers
 Apply to back layers
 Keep layer order

Buttons: Preview Apply XML Output

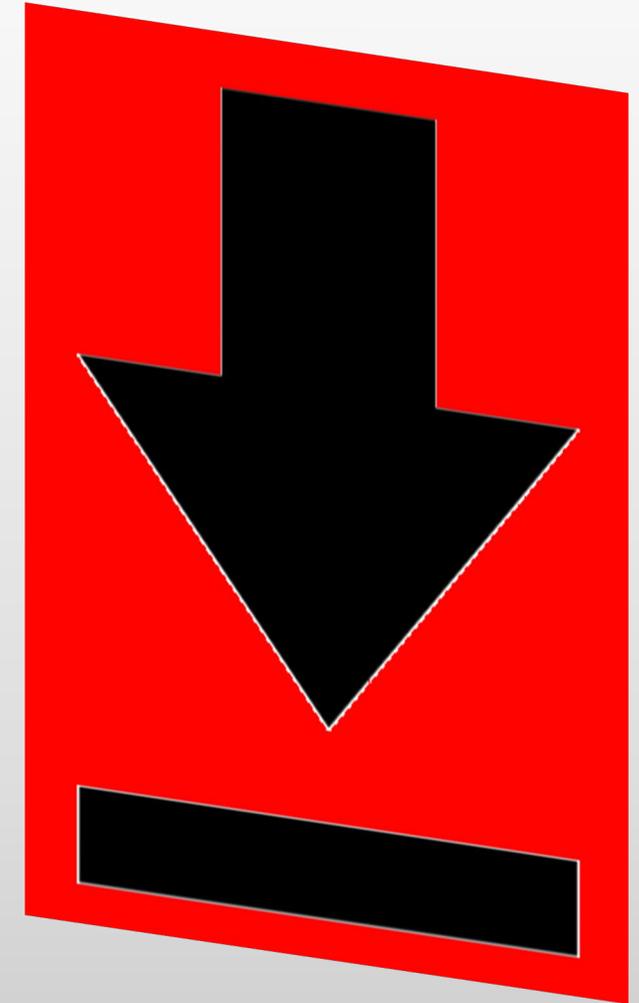
Optimization

- ODB++ output is correctly handling the scale factor allocated to a block aperture definition. This scale factor was previously ignored during ODB++ output

(Addition to existing CAD Output ODB++)

Install v2021.04

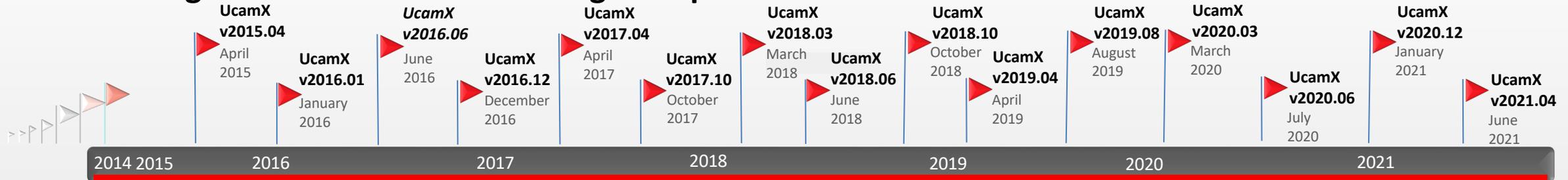
- The installer can be downloaded from the Ucamco FTP download server. As most internet browsers have stopped supporting FTP download, we recommend that you use an FTP client to do so
- We recommend installing this update at your earliest convenience
- For any further questions you may have, please contact 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	Today
2021.04	Jun-21	Size reduction in SEC, Extensions to all YELO Adjusters, Optimized Netlist, New Ledia Output for UcamX in Java 8 and Java 11	
2020.12	Jan-21	DPMX Import, Text Updater, Line width adjustment in YELO Legend Adjuster, Via pad stack move in YELO Copper Adjuster	
2020.06	Jul-20	Verification of unique combination of subclass, attach and index number	
2020.03	Mar-20	Upgraded to Java 11, New Select Painted algorithm, New YELO functionality, Gerber X3 input (component information)	
2019.08	Aug-19	Keyboard Shortcuts, Plane Focus Indicator, Maintenance update	
2019.04	Apr-19	YELO Combined GUI for all copper layers, New YELO functionality, Rout Manager enhancements	
2018.10	Nov-18	Query Component, Read Component information from ODB++	
2018.06	Jun-18	Save jobs by creating archives, free trial period of all YELO modules	
2018.03	Mar-18	Eagle input with proportional font, Scaled line width in Silk optimizer, Introduction of YELO Signal Layer Adjuster	
2017.10	Oct-17	New startup routine, Extended Job Editor View, Optimized Rout Compensation	
2017.04	Apr-17	Performance boost DRC copper-cut-ins, Improved "Select Painted" feature	
2016.12	Dec-16	New insert Arc command, Improved Sieb&Meyer rout import	
2016.06	Jun-16	Maintenance update	
2016.01	Jan-16	Background output, Parallelized image compare	
2015.04	Apr-15	Load balanced sessions, Gerber X2 Input support	

© Copyright 2021 Ucamco NV, Gent, Belgium. All rights reserved.

This material, information and instructions for use contained herein are the property of Ucamco NV. The material, information and instructions are provided on an AS IS basis without warranty of any kind.

Ucamco NV 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 NV 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 presentation may be reproduced, stored in a data base or retrieval system, or published, in any form or in any way, electronically, mechanically, by print, photoprint, microfilm or any other means without prior written permission from Ucamco NV.