

120816

CAD Output

Gerber

B362532

Gerber 274X output, on a 32 bit machine, of certain data (noticed on region containing inner contours composed by arcs for which the arc center point almost at the size height as the end point of the arc) could be missing a clearance (inner contour). Both 32 and 64 bit machines are now correctly handling this data.

120702

CAD Output

ODB++

BB03129

ODB++ output was causing Ucam crash on certain data. This was noticed on a job on which different block apertures on which conflicting uPCB attribute are allocated (same uPCB attribute value for block apertures with different content).

Following improvements have been made to the ODB++ output module:

- Upgraded exported ODB version to 7.1, for allowing specifying all kind of rotation values that are allocated to the uPCB blocks (not longer limited to multiple values of 90°).
- Support outputting reverse blocks, on which uPCB attribute is allocated, as step
- Blocks on which the same uPCB attribute value is allocated but a different image on the same layer, the uPCB attributes are extended for making them uniquely linked with certain image.
- Some modification are made to ensure the correct order of uPCB blocks that are written to the stephdr file.

120808

Drill Output

AutoDrill Setup

B362462

The combo box, that allows selecting the expected Transformation, in Run Properties of AutoDrill Setup has been improved, previously the text and image was displayed through of each other.

121014

Editing

Apertures

B362643

apertures.

A similar issue could be noticed while submitting a layer (containing many polarity levels and also blocks that only contain reverse apertures) to a PowerRIP, MLFDPF could suffer with a similar issue while reducing the amount of polarity levels. MLFDPF v7.0.8.0 is correctly handling these layers.

120813

Editing

Apertures

B361388, B361351, B361379, B362114

Some issues with Insert Before/After, in Edit ApertureManager have been corrected.

Insert Before/After was losing the selections of the objects of the aperture definitions that are inserted at a different location in the aperture list.

When configuring aperturemanager.edit_insert with value local, Insert Before/After was failing, as if the aperture is moved into a different layer.

Insert Before/After was deleting the aperture(s) and all related objects, when the layer, displayed in plane 1 (reflected in ApertureManager), is not active.

120712

Editing

Apertures

B361939

Saving the changes after running Rout Editor functions inside a (embedded) block aperture could cause Ucam crash. This crash has been resolved.

Editing Tools

Clipping

B362033

Clipping function was sometimes having problems with arcs, sometimes arcs were clipped (partially) unexpectedly. The arcs in these jobs are now correctly handled by the clipping function.

121014

Editing Tools

Contours

BB03173

Exact Contourize of slightly overlapping rounded reverse objects on top of a positive object could change the image. The issue was noticed on overlapping flashes of reverse THERmal on CIRcle aperture on top of a small contour region, part of the contour region was lost. When

configuring `contourize.analytic.arc.expand.margin`, with a value that represents the overlap, the expected image was obtained. Issue was noticed while calculating Netlist information, while building True Objects for the region.

Exact Contourize is now correctly handling this situation, the expected True Objects are generated.

120426

Editing Tools

Contours

BB02983

Exact Contourize of construction composed by reverse circular flashes, which are touching the common point between a reverse arc and a connecting

reverse track (using circular aperture), could change the image. The constructions are now correctly handled.

120917

Editing Tools

Expand

B362607

Expand Vector Text is now immediately updating the amount of selections in the Selections menu and the information in the ApertureManager with the modified situation after expanding the VTEXT objects. Previously the refreshment of these values was delayed.

120413

Editing Tools

Expand

BB02985

Exact Contourize of construction containing regions, for which inner contour is less than 1μ inside the outer contour (composed by arcs at the nearby location), could change the image. Expanding arcs on these constructions could also introduced ambiguous contours (which gets warned while saving the layer). These constructions are currently correctly contourized. Expanding arcs is now directly verifying ambiguities with the expanded objects.

120917

Editing Tools

Fill Vector

B362521

Fill Vector, on selected flashes with DPF text aperture, was filling all flashes of certain text aperture, when one of the flashes is selected. Now only Fill Vector is restricted to the selected text objects.

120629

Editing Tools

Fill Vector

B361638

During Gerber RS-274X output, with using vector fill on certain regions, a clearance in a copper plane could get lost. A similar problem could be simulated by using Fill Vector or Rescale Thin on these regions. Gerber output is no longer losing the clearance, and also Fill Vector and Choke are now correctly handling this data.

120813

Editing Tools

Models

BB02437

Models could suggest replacing the current selections into a Standard Aperture, even if the difference between the model and the standard aperture was outside the allowed tolerance. The generation of a standard aperture has been made more rigorously.

121011

Editing Tools

Rout

B362527

Make Arcs (Rout Manager) on selected objects was losing the initially not selected objects, when running the function on selections. The not selected objects remain unchanged again, when running Make Arcs on selected objects.

120814

Editing Tools

Rout

B362472

Delete Double, in Tools section of Rout Manager, could change the orientation of certain objects (has been noticed on isolated rout tracks). The orientation of these objects is no longer modified while deleting the doubles.

121008

Electrical Test

Hioki FP

BB03171

UcamX, with using parallel processing, was sometimes failing and the operator was notified about problems while calculating the adjacent nets. This has been noticed while generating Hioki output (using Shielded adjacency).

Hioki output, can now be generated successfully, also when using parallel processing.

121024

General

User Interface

B362020, B362080

previously this menu could be hidden, covered by another menu.

121028

HyperScript

BB03134

Running DRC from a VHS script, when specifying a configuration file that cannot be found on the system, was causing Java NullPointerException. The operator get warned about the incorrect specification of the configuration file.

121007

HyperScript

B362661

VHS command duplicateLayer() was having problems with block on which a mirroring as allocated, the duplicated layer was having incorrect mirroring applied on the blocks. These layers can now being duplicated correctly, when using the duplicateLayer() VHS command.

120719

Input

Excellon 2

BB03138

Excellon2 input, of an illegal drill file (with colon as delimiter between X- and Y- coordinate) was ignoring the value of the Y-coordinate of some of the drill holes. The illegal syntax gets notified but the value of the Y-coordinate gets applied for all drill holes.

121014

Input

Gerber

B362744

Gerber input was sometimes missing certain clearances. Issue was noticed after the conversion of a Gerber file containing a clearance that was composed by a cut-in inner contour containing 2 arcs touching the cut-in line of the clearance (and with an endpoint of the arcs on that line). The conversion of this kind of Gerber files is displaying all clearances.

120726

Input

Gerber

BB03124

When converting Gerber arcs, with identical start- and end-point in single quadrant mode,, could confuse the conversion (certain tracks and arcs were converted as flashes). These 0-arcs are now converted as 0-tracks and the other objects as expected tracks and arcs.

120724

Input

Gerber

BB02972

The performance of the conversion of certain Gerber files, containing many Outline Fill commands, has been improved.

120711

Input

Gerber

BB03136

Gerber input was crashing or causing corrupted image when the Gerber file was not (correctly) specifying which zero's are omitted in the coordinate definitions. These files can be converted again.

120426

Input

Gerber

B357956, B360116, B360543

Validating arcs embedded in contour aperture definition has been reviewed. Previously certain invalid arcs in a contour aperture could not be validated, although the same construction with an arc using a circular aperture could be validated. These contour arcs can be validated now.

B360627

Exact Contourize could be changing the image in case the original contours are containing wedged cut-ins (cut-in for the clearances for which

the cut-in lines are not fully on the same coordinates, not fully horizontal or vertical). These regions can be contourized correctly now.

120420

Input

Gerber

BB03100

A redundant move command (D02*) at the end of an Outline Fill command, in a Gerber RS-274X file, was resulting in a zero-length track with an UNDEFINED aperture. This unexpected object is not longer generated.

120806

Input

GWK Input

B361998, B362282

32bit version of Ucam can again import GWK jobs normally.

121107

Input

Import ODB++

BB02665

of type UPC39), has been improved. The current implementation is better supporting the Extended 39 code and the position of the additional text string (in case it needs being displayed) has been reviewed for having a similar image as obtained while importing the ODB++ barcodes in other viewers.

120716

Input

Import ODB++

B359672

ODB++ Import of layers containing text strings that are containing carriage return (<CR>) character (text sting in features file displayed over different lines) were giving an error message for these text strings and the string was missing in the layer..

These <CR> characters are not allowed, by the ODB++ syntax, and are ignored, and notified with an error message, during the conversion.

120704

Input

Import ODB++

BB03131

Selecting and deleting contours, on a job that was created by import ODB++, could cause Ucam crash. Crash was not noticed when saving the job after ODB++ Import and working on the reloaded Ucam job. This kind of Ucam crashes have been resolved.

120426

Input

Import ODB++

BB02161

Changing the sequence of the apertures (Insert Before/After in ApertureManager), on a layer that was created by importing an ODB++ job , could cause Ucam crash. Crash was not noticed when saving the job after ODB++ Import and working on the reloaded Ucam job. This kind of Ucam crashes have been resolved.

121025

Input

IPC-D-356

B361331

IPC-D-356 import of a complex record (record with continuation records; e.g. because the shape of the feature is different for the objects at both sides of the job) of single point network (marked with N/C as net identifier) was allocating a unique net number to the objects resulting from the different lines of the complex record. Now all records of a complex record are handled as belonging to the same net, and the same net number will be allocated to these objects.

120917

Input

IPC-D-356

B362554

IPC-D-356 input is allocating the same net number to all records of a multiple record. Previously the features could be handled as single point networks or as unplated tooling holes, in case the signal name identifier field was not repeated for the continuation records.

120801

Input

IPC-D-356

B362500

Loading IPC-D-356 file, containing misalignment in the JOB parameter section, was causing Ucam crash. The operator is now warned about the syntactically incorrect IPC file (and the conversion is failing) but Ucam is not longer crashing.

121011

Job Editor

Layers

BB02819

Duplicate layer and DragModify, in Job Editor, were sometimes displaying the sub-class, of certain layers, in reverse video. These functions are not longer swapping the display of the sub-classes.

121010

Job Editor

Layers

B362445

Duplicate layer is now inheriting the active status and color of the duplicated layer, the configured plane actions are applied on the original layer.

120703

Job Editor

Layers

B360738, B361596

The allocated Layer Information was sometimes incorrectly stored on the layer (allocation of Layer Info on drill and extra layers and in certain configurations incorrectly saved into the DPF file). Layer Information is now allocated normally on all type of layers and correctly saved in the DPF file.

121014

Netlist

Build

B362613

The generation of TrueObjects could cause that (slightly) overlapping objects are allocated to different nets. These

nets are allocated to the same net again.

120912

Netlist Output

IPC-D-356A

B362629

IPC-D-356A output was sometimes missing some information of the probe layers. These probe layer objects are again mentioned in the 099 continuation records.

120907

Netlist Output

MET2

B362471

MET input for certain constructions could convert a test point into a mid point layer. These test points are now added to a test point layer.

120426

PowerRIP

mlfdpf

BB03053

In some RIP configurations (FlashRIP with option /vectorize) the image of certain painted data was incorrectly exposed on film. These jobs are now correctly exposed.

120814

SmartPlot

B361583

Submitting certain data from SmartPlot Merge Queue in Plot Queue could be losing certain regions, created with reverse contours. These regions are now preserved in the Plot Queue.

120802

SmartPlot

B362509

Submitting certain data from SmartPlot Merge Queue in Plot Queue could be losing certain regions, created with reverse contours. These regions are now preserved in the Plot Queue.

120426

SmartPlot Server

Load Job RS-274X

BB03105

Submitting external formats (such as Gerber RS-274X) towards a RIP by using SmartPlot Server could be failing (with error messages in the HotFolder Messages menu). These external format can be submitted again.

120919

Undo/Redo

B362563

An Ucam crash was observed with UNDO after thickening a contour region (containing inner contour(s)) followed by Measuring the region, as soon the mouse cursor was moved again Ucam was crashing. This Ucam crash has been resolved.

121012

Verification

Design Rules

B357851, B345320, B351648, B359839, B360909

Values of Exclude text (if applicable for the test) and Use Netlist are now displayed on the lines of the individual checks of the Setup tab of Smart Design Rule Check, these toggles are configurable for each class section of the configuration. Previously the Use Netlist toggle was configured globally (for all test) and the configured value of Exclude Text was ignored (violations between vector text objects were always notified).

121008

Verification

Design Rules

BB03172

UcamX, with using parallel processing, could be generating false DRC violations (between layers that are not related to each other), when Job Netlist was calculated before running the DRC checks.

Job Netlist build has been corrected for allowing running the DRC checks normally, when using parallel processing.

120909

Verification

Design Rules

B362483

The value displayed in the Min. found column of Smart Design Rule Check was the value found on the first tested layer. Now the Min. found column is displaying minimum value that was found on all tested layers.

121023

Verification

Image Compare

BB03178

Saving the Errors, from Error Handling menu, could cause Ucam crash. This crash was noticed while creating a UFD file containing regions (such as after running Image Compare). Saving these UFD files is no longer causing Ucam crashes.

121007

Verification

Net Compare

B362685

Net Compare was failing on job containing layer containing unused BLOck apertures, BLOck apertures are defined but these BLOck apertures are not flashed. These unused BLOck apertures are no longer preventing running Net Compare.

120822

Verification

Net Compare

B362556

The error messages (to the operator), when Net Compare is failing, has been improved.

This improvement has been made in case the amount of nets, involved in the error messages, is exceeding the configured maximum (netcompare.max_faults) and when the netlist reference layer(s) is(are) containing reference points for which no valid netlist number has been allocated.

120706

Input

SmartStart

BB03061

Introduction of new ucam.db key, smartstart.config.directory, for allowing selecting a dedicated ucam.db configuration that should be applied while converting files from Options in SmartStart.

121017

Panelization

B361394

While running PanelPlus, the resulting tracks, generated for the uFillPattern attribute, are using the same polarity as the aperture on which the attribute has been allocated. Previously always positive tracks were added as the result of allocating the uFillPattern attribute.

120906

SmartPlot

B330451, B357253

Introduction of a new set of ucam.db keys, smartupl.force.layer.<option> (e.g. smartupl.force.layer.Position) to force certain plot parameters on a certain value (even if the converted data contains other values for the plot parameter).