Maintenance Report - UcamX v2014.12

AOI Output

Camtek

B365133

Bug Fix Calculation of the inspection area during Camtek output, by using Auto Insp. Area, could be missing some exclusion areas between the blocks (with uPCB attribute allocated). These areas are marked as exclusion zones now.

CAD Output

DPF, Save layer

BB03439

Bug Fix Importing some constructions in Gerber files using certain Ucam.properties conditions (always displaying the Options section in SmartStart) and saving the resulting layer as DPF file and using low output resolution could corrupt the saved DPF file. Loading these DPF file can be notifying for invalid aperture definitions and could be missing certain contour regions embedded in BLOck aperture (although editing the block aperture was correctly displaying the image). Importing the data and saving as DPF, using the indicated conditions, is not longer corrupting the data.

Gerber

BB03475

Bug Fix Gerber output was not always respecting the rotation of some apertures. Issue was noticed, when generating Gerber output after importing an ODB++ layer containing the same aperture definition with a different rotation allocated. Both apertures were output into the same aperture definition (both with the same rotation). Issue was not noticed when saving the job after ODB++ import and reloading the saved job.
Gerber output is now also defining the correct rotation when the output is generated directly after importing the ODB++ job.

Editing

Apertures

B365139

Bug Fix Group Pos/Neg is now preserving the Object attributes that were allocated to the original objects, previously these objects attributes could be lost after grouping.

Enhanced Editor

BB03461

Bug Fix Deleting the redundant segments of a crossing track and arc connection was not always calculating the exact same connection point between the track and arc, as a result a different rout group could be allocated to these objects. The remaining segments are now having the same end points.

Transform

BB03336

Bug Fix Choking a contour, by using option Rounded and very small value for contourize.analytic.arc.expand.margin (issue has been noticed

with contourize.analytic.arc.expand.margin: 0.0002mm) could be adding “bubble” at the edge of the choked region. Also Fill Vector could be suffering with the issue (when using similar configurations). Choking and Fill Vector are not suffering with these small configurations of contourize.analytic.arc.expand.margin.

Editing Tools

Contours

B364764, B364989

Bug Fix Exact Contourize could be failing with the notification of out of memory, this has been noticed on layers with many painted areas. Contourize has been improved for supporting these layers.

BB03408

Bug Fix Contour merge, with option Single, on selected objects could change the image, disappearing of not selected regions has been noticed on certain constructions. Merging these objects is not longer influencing the objects that were not selected.

Fill Pattern

BB03431

Bug Fix Fill Pattern selecting option Fill With Tracks was not always respecting the edges of the original contour region. Some tracks of the pattern could be missing and other tracks could exceed the edge of the original image. Fill Pattern behaves normally again.

Fill Vector

BB03447

Bug Fix After running Fill Vector on selected contour regions all vectors, resulting from filling the regions, are now selected. Previously some objects were not selected.

Rout

B364829

Bug Fix Running some functions in the Tools section of the Rout Manager was losing the current active aperture, a Warning message "no current aperture" was popping up after running the functions. These functions are now keeping the current aperture active.

BB03460

Bug Fix Using the Trim function, in Rout Manager, for connecting a track with an arc, could corrupt the image. Trim is now correctly connecting these objects.

BB03464

Bug Fix Running Default Order, in the Tools section of Rout Manager, after clearing the unused apertures, could be causing a Java NullPointerException.
This exception has been resolved.

Shave

B364942

Bug Fix Pad Shave was causing Ucam crash on certain constructions. Crash has been resolved.

Electrical Test

Utest

B364662

Bug Fix Test Point generation with activating option "Filter Copper Area's" could filter away all test points of certain nets, when all potential test points are embedded in a copper plane at one side. At least one test point remains on these jobs.

BB03455

Bug Fix The performance of calculating test points on painted pads was suffering with big areas in the mask layer(s), this has been notice on mask layers for which the enclosing box of the connected areas are covering a big part of the job. These mask layers are not longer delaying the calculation of the test points.

Input

Gerber

BB03442

Bug Fix Gerber input of an almost full arc, with endpoints very close to each other, could result in a short track between the endpoints of the object. Issue was noticed after the conversion of a Gerber file that was created in high accuracy (5.5mm) and with an almost full arc with 0.6µ between the endpoints of the arc. These arcs are now converted as expected.

BB03473

Bug Fix Gerber input of constructions containing self-intersecting contours could be missing some clearances (created by the self-intersecting cut-in lines). These constructions are now flagged and result in ambiguous contours (since cleaning up these contours can lose

Import IPC-D-356B

B363691, B364438

Bug Fix Import of an IPC-D-356B files was always converting the file as it was created with 0.1 MIL values, Parameter record UNIT was ignored. The UNIT parameter is now correctly interpreted, even in case the alignment on the line is conflicting with the IPC-D-356B specifications (in case of conflict a warning message is given but specified unit is considered).

Import ODB++

BB03437

Bug Fix ODB++ Import of job composed by nested symbol definitions (symbol definition using another symbol definition) on which transformations (mirror and rotation) are applied at different levels, could be applying the transformation in different sequence. These transformations are now applied in the same sequence as defined on the features, which results in the expected image.

IPC-D-356

B364826

Bug Fix Importing an IPC-D-356A file, for creating netlist reference layers, was creating all netlist reference points in case the IPC file is loaded in an empty or in a job that contains the same amount of layers as indicated in the IPC file (access field in the record definitions). In other situations some references could be missing. All netlist references are created from an IPC-D-356A file, independent from the amount of layers that are available in the job when converting the IPC file.

Netlist Output

IPC-ATG

BB03459

Bug Fix Output Netlist ATG-IPC was only working on stepped data, output of flat data resulted in an empty file. Now IPC-ATG output also supports flat data.

IPC-D-356A

B364857

Bug Fix IPC-D-356A output, using the FixGenius algorithm (ipcmet.new_output_algorithm: 1), of a single layer job, which contains stepped data (blocks), and configuring ipc356a*style: ATG, is also adding the Soldermask flag (columns 73-74) for the records describing the drill holes (017 records). This S2 indication was missing for the 017 records.

Panelization

PanelPlus

BB03444

Bug Fix Running PanelPlus by using an Outline layer containing the region (using a CONtour aperture) that is embedded in a BLOck aperture (array data) is now clearing the background (venting pattern) at the location of the stepped image. This was already the case when the region of the outline layer is not embedded in a BLOck aperture.

SmartKleo

BB03448

Bug Fix Running smartkleo script, for converting Gerber file towards XDPF, could be crashing (crash noticed on Linux platform). The conversion of this Gerber file can be completed successful again.

SmartPlot

B364800

Bug Fix Submitting certain constructions from SmartPlot Merge Queue in SmartPlot Plot Queue could be losing certain regions. This has been noticed on layer for which the operator was notified for Open contours while submitting in the Plot Queue. These jobs are now correctly submitted towards the RIP.

View

BB03456

Bug Fix Some single arcs could be displayed as composed by different objects, this could be noticed when selecting, querying or displaying in Skeleton mode. These arcs are displayed normally again.

Select

BB03445

Bug Fix Select Embedded could be selecting objects which would change the image after deleting these “embedded” objects. Issue has been noticed on selected COMplex apertures for which the outline is completely embedded in CONtour region and the region has an inner contour inside the image of the COMplex aperture. These not full embedded objects are not longer selected as embedded objects.