Maintenance Report - UcamX v2018.06

CAD Output

Gerber

B368096

Bug Fix   While generating Gerber 274X output in UcamX in multi-processors mode, but without running the output in background, could be generating temporary files in the job folder. These temporary files are now removed after completing the output.

Drill Output

Classical Drill

BB03938

Bug Fix   (Classical) Drill output, using UcamX in multi-processor mode, could fail with message "Output: <language> - Error during asyncronous background output!". Drill output can be generated now in these conditions.

Editing

Apertures

BB03942

Bug Fix   Grouping linked block aperture (but original apertures have different aperture name and/or attributes) could influence the image (on certain job blocks were no longer displayed). Grouping these block apertures is giving the expected image.

Transform

#994

Bug Fix   Dragging the connection between an arc and track could generate invalid arcs. Dragging these objects is recalculating also the arc center and radius for creating valid objects.

Editing Tools

Clipping

BB03996

Bug Fix   Running Clipping on objects that are embedded in nested blocks could change the sequence of the objects in the these blocks, this has been noticed when similar aperture definitions are grouped in the same definition. When different polarity levels are used in these blocks, changing the sequence of the objects could cause modified image.

Contours

#1052, #1090

Bug Fix   Exact contourize of contours containing touching inners could be

changing the image. These constructions are now correctly contourized.

BB03964

Bug Fix   Exact Contourize, on painted data, could introduce ambiguous contours. Contourizing these objects is creating regions without any ambiguity.

Rout

B363645

Bug Fix   Rout compensation of chained, almost parallel, lines could enlarge the rout pad drastically. This construction is correctly compensated.

B368552

Bug Fix   Rout Compensate, between an arc and a track, could be considering the unexpected intersection point between the compensated objects. Rout compensate is now using the intersection point that is closest to the common point of the original objects.

BB03992

Bug Fix   Rout Compensate, of a chain containing an arc between 2 tracks, could be losing the arc (an breaking rout chain). Rout Compensate is behaving expectedly on this construction.

Electrical Test

Utest

B341236

Bug Fix   Test point generation, on a job that has objects with reverse apertures in the mask layer, was creating test/mid-points that were ignoring the reversed objects. Test point generation is now creating a complex test/mid-point with holes for the reverse objects (1 outer region with inners).

B357100

Bug Fix   Test point generation, using the mask layer, was ignoring the reverse objects of the mask layer, which could result in test/mid-points allocated to locations which are covered by mask, which is causing false violations on the tester. Test point generation is now considering the polarity of the objects in the mask layer.

B360148

Bug Fix   Test point generation, on a job that has vector filled areas in the mask layer with holes in the painted areas, was creating test/mid-points that were ignoring the holes in the painted mask. Test point generation is now creating test/mid-point that are considering these

BB03651

Bug Fix   Test point generation, using the mask layer, was ignoring the reverse objects of the mask layer, which can result in test points allocated to locations which are covered by mask. Test point generation considers the polarity of the objects in the mask layers.

BB03993

Bug Fix   Test point generation, using the mask layer composed by positive contour regions with holes created by reverse contours, was

ignoring the reverse objects of the mask layer, which can result in test points allocated to locations which are covered by mask. Test point generation considers the polarity of the objects in the mask layers.

BB03997

Bug Fix   On certain jobs, containing stepped data, Test Point generation was failing, TP error 7, 'Netlist Missing'. Test points can be calculated successfully on these jobs.

HyperScript

BB04001

Bug Fix   VHS command add_attribute() is now correctly adding the specified attribute to the actual aperture definition.

Input

DPF

#1103

Bug Fix   Slightly invalid arcs with big radius, which get automatically validated, in contour aperture of a DPF file could disturb the image, some contour regions could be lost. These arcs are no longer confusing the representation of the regions.

#860

Bug Fix   Short tracks, between 2 arcs in a contour region, could cause a notification of ambiguous contours, even if the sequence of the objects shouldn't be any problem. These regions are no longer flagged as ambiguous.

BB03987

Bug Fix   Displaying a contour region composed by 180° arcs, representing touching clearances, could be missing some of these clearances. These regions are now correctly displayed.

Gerber

#1076

Bug Fix   Exact contourize of the resulting layer after Gerber input, of a file that was indicating self-intersecting contours that could not be cleaned automatically, could modify the image. These constructions are better supported for preventing image change after manipulating the layer after conversion.

#900

Bug Fix   Gerber input of arcs with Obround aperture could result in arcs with a BOX aperture. Since arcs with boxes are not supported in DPF, these arcs are notified and the Gerber conversion is completed by using a circular aperture for these arcs.

#959

Bug Fix   Gerber input of Moiré primitives could reduce the amount of rings, although the definition of the primitive could still be respected. These primitives are converted as expected.

Import ODB++

BB04000

Bug Fix   Displaying an almost 180° arc could slightly modify the center point of the arc (for obtaining a 180° arc). The center point of these arcs remains unchanged.

Job Management

New Job

#1032

Bug Fix   Creating new job in freshly started UcamX session could have problems for loading the expected GUI (job workspace was not correctly loaded), sometimes there was a Java exception indicated. New (empty) job is correctly created and expected job workspace is loaded, without Java exception.

Netlist

Build

BB03995

Bug Fix   Clearance calculation between arcs could be incorrect, which causes cause incorrect netlist calculated. Clearance calculation has been corrected.

Panelization

PanelPlus

BB03907

Bug Fix   PanelPlus, with Mixed PCB Rotation, was skipping the Search & Replace code representing <board-number> on the rotated images. The board number is correctly indicated on all boards.

SmartPlot Server

Load Job ODB++

#980

Bug Fix   Empty steps in an ODB++ job could confuse the conversion, which could result in modified image after saving/reloading the resulting layer as a DPF file. These layers are correctly stored now. Issue was noticed during SmartPlotServer, where the converted layer was saved into the Merge Queue.

Verification

Design Rules

#1033

Bug Fix   Verifying the annual ring, in DRC, was missing some violations when complex apertures are involved, issue as noticed when a rotation is applied on the complex aperture definitions. DRC is finding the ring

violations also when rotated complex apertures are involved.

B367757

Bug Fix   Same Net Spacing check in SmartDRC could be missing some
violations, when the involved objects are connected in the job (by
using plated drill holes and other layer) but isolated in the layer
itself. These violations are found now.

Layer Validation

B362248, B362288

Bug Fix   When Layer Validation is complaining about invalid aperture
definitions that clicking on Check is selecting the involved apertures.
Previously some type of invalid aperture were ignored (not
selected and/or highlighted) while checking, which could cause

---

View

Select

#1072

Bug Fix   Java NullPointerException could be obtained when moving the
mouse cursor while selecting objects inside a polygon. Selecting
can be completed without the Java exception.