Maintenance Report - v10.1.8

CAD Output

Gerber

BB02557

Bug Fix   The accuracy of the generated Gerber files has been increased. Gerber 274X out is now supporting up to 7 digits behind the decimal

BB02840

Bug Fix   Gerber 274X output is now outputting flashes with asymmetric rounded box apertures as flashes using macro definitions. Previously these objects were filled with vectors, while generating Gerber output.

BB03054

Bug Fix   Gerber RS-274X output could output short arc segments into invalid arcs, when the center point get rounded to one of the edges of the arc (due to inaccurate output accuracy for the generated file). When using an appropriate output resolution these arcs could be defined correctly. These small arcs, in combination with low output accuracy, are now skipped or output as valid short tracks.

PDF

B356980, B363921

Bug Fix   PDF output of an outline layer was incorrect. After changing the subclass of the layer the PDF output could be created normally. Now PDF output of layers with subclass outline can be completed correctly.

Editing

Transform

BB03372

Bug Fix   Thicken & Thin, with option Rounded, on contours embedded in BLOck aperture was applying the transformation on the regions for each BLOck aperture. When the different BLOck apertures are linked to the same BLOck aperture definition the transformation could be applied several times. Thicken Thin transformation is now only applied once, even if different BLOck aperture are linked to the same BLOck aperture definition.

Editing Tools

Clipping

BB03308

Bug Fix   Clipping is cleaning up the aperture list. Previously the original aperture definition remained in the aperture list, even if the aperture was not longer used.

Contours

B363577

Bug Fix   Exact Contourize of region containing clearances, generated by touching arcs, could change the image. Issue has been noticed while expanding True Objects after building netlist on the construction. Exact contourize is correctly handling the data so that expanding True Objects is preserving the image.

B364130

Bug Fix Image could change after running Exact Contourize, outer contour seems disappearing and inner contours get displayed as outers. Exact Contourize can be applied normally on this data.

B364258

Bug Fix Exact Contourize could be suffering with disappearing clearances, issue has been noticed on a contour composed by 2 arcs and 1 very small track. Contourizing these constructions is not longer changing the image.

B364260

Bug Fix Certain constructions, containing touching inner contours, were not always notified as ambiguous contours. These constructions are now flagged.

BB03298

Bug Fix Exact Contourize on image composed be clearances generated by slightly overlapping flashes with circular aperture could be losing a clearance.
Increasing the accuracy, by configuring contourize.analytic.arc.expand.margin, was resolving the issue.
This issue could cause modified image after expanding True Objects.
Exact Contourize is not longer losing these clearances.

Fill Vector

B364141

Bug Fix On certain data Fill Vector could lose clearance(s) made by reverse contour apertures. These regions are now filled as expected.

Electrical Test

Atg

BB03375

Bug Fix ATG ATF output could be missing the Mask state of certain test points. These M-parameters are now also indicated in these

Utest

BB03334

Bug Fix Testpoint generation can automatically activate the painted pads algorithm, in case overlapping pads have been found on the outer layer(s), this is needed for preventing missing test points. This algorithm was also activated when pads are overlapping with contour regions, in situations the option was not required for having the expected test points. The painted pads algorithm is not longer automatically activated for jobs containing pads that overlap with contour regions in the outer layer(s), this prevents the unneeded delay while calculating test points for these jobs.

BB03344

Bug Fix The shape of the generated test points could be indicating that the area(s) indicated by mask layer(s) that covers copper (subclass configurable with testpoint.copper.covered_by_mask.subclass) are accessible for testing. Now these test points are saving out the area that is marked with the "cover" layer(s).

Error Manager

Board Improver

B360952

Bug Fix   Board Improver Local Move of a track (Tlocalmove), for resolving
clearance violations, could sometimes corrupt the image (by adding
objects that could create short and/or open nets). The repair
function has been improved for preventing the creation of new violations.

HyperScript

B364149

Bug Fix   When generating Gerber output while running a VHS script, but
using conflicting values (for applied unit and/or format) in the
applied Cad resource and parameters specified in the script, could
be mixing up the script parameters and those from the resource
file. As a result, it was possible that the generated Gerber file was
containing incorrect coordinate values. The coordinates in the
generated Gerber file are now corresponding with the coordinates of
the original layer.

BB03373

Bug Fix   Running VHS script for generating output could fail indicating "The
function outputExt doesn't exist.". This has been noticed on scripts
that are based on commands that were recorded by older Ucam
versions. These scripts can be completed successfully again.

Input

Gerber

B363505

Bug Fix   (Standard) Gerber input was suffering with the interpretation of data
blocks that are containing a CR/LF (data block split over different
lines in the file). This could result in objects generated with
UNDefined apertures. Since the blocks are separated by the
asterisk character (*) the CR/LF commands inside the data block
are ignored, so the objects are created with the expected aperture.

B363663

Bug Fix   Gerber input of Macro definitions containing touching Outline
primitives could cause invalid aperture definitions that could result
into an incorrect image of the resulting COMplex aperture. These
macro definitions are now correctly converted and displayed.

B363852, B363958

Bug Fix   Importing a Gerber file could be missing a clearance and the
operator was notified for self-intersecting contours, while loading
the Gerber file. Issue was noticed on a clearance that is created by
not fully coincident cut-in segments.

The conversion of these Gerber files are now displaying those
clearances.

BB03324

Bug Fix   Gerber file with incorrect amount of subsequent points in an Outline
primitive of a macro definition (e.g. the indicated amount is 1 bigger
than the provided subsequent points; which was/is notified during
the conversion) was ignoring the rotation that should be applied on
the Outline primitive. The rotation is now correctly applied, even if
the amount of subsequent point is not correctly indicated in the

definition of the Outline primitive.

BB03361

Bug Fix   Gerber files, containing coordinates specified with very high
accuracy (e.g. 4.6MM) could convert small arcs (almost same start
and end point, only last digit is modified) as full arcs. These arcs
are now correctly handled.

Import Eagle

BB03376

Bug Fix   Resulting image after Eagle Import could be missing certain contour
regions. These regions are now correctly converted.

Job Editor

Buildup

BB03365

Bug Fix   An inconsistency for recalculating the Z-position (Buildup in Job
Editor) has been corrected. A new (Netlist) resource key
<language>*thickness has been introduced for influencing the
board thickness calculation.

Layers

B363848

Bug Fix   Layer Merge was losing the layer attributes of the layer in which the
other layers are merged. The layer attributes remain stored on the
layer in which the other layers are merged.

BB03368

Bug Fix   Duplicate layer could change the image of the original layer, image
of duplicate layer is as expected. This seems caused by linked
nested blocks, or broken links between these blocks, on different
layers. After Saving and reloading the layers the expected image is
displayed.
After duplicating a layer the image of both original and duplicate

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Netlist

Build

BB03377

Bug Fix   Job Netlist Build could allocate the same net number to objects that
are not electrical connected. Issue has been noticed on a copper
plane and a plated drill hole that were getting the same net number,
although the drill holes passes through a clearance, created by
arcs, in the plane. These objects are now getting a different net
number.

PowerRIP

mlfdpf

B364291

Bug Fix   Preparing the data by the GCG/GCS module could fail by indicating
an error in merger input. These data and configuration, in which
the issue could be noticed, can being processed successfully when
using MLFDPF v7.1.5.2.

SmartPlate

BB03357

Bug Fix   A Java NullPointerException was given when calculating the

information for SmartPlate, when the board thickness is not defined for the job. This Java exception has been resolved. A new ucam.db key smartplate.approximatedrillsurface has been introduced for influencing the calculation of the drill surface.

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SmartPlot

B364061

Bug Fix   Submitting certain constructions from SmartPlot Merge Queue in SmartPlot Plot Queue could be losing certain (inner) regions. In most constructions the operator was notified for Open contours. These jobs are now correctly submitted towards the RIP.

B364077

Bug Fix   Submitting some layers from SmartPlot Merge Queue in Plot Queue could notify the operator for open contours, although all contours of the layer are closed. In most of the cases the exposed image on film looks correct. The confusing message is not longer displayed and the expected image is exposed on the film.

BB03340

Bug Fix   Submitting certain layers from SmartPlot Merge Queue in Plot Queue could be losing some inner contours. Issue has been noticed on constructions with the inner contour very close to the edge of the outer contour. Submitting these layers is preserving the image.

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View

BB03337

Bug Fix   A circular contour region with a circular hole outside the center of the outer contour was displayed as a DONut (using same center for outer and inner contour). The displayed image is again respecting the center of the inner contour.

BB03379

Bug Fix   Displaying a layer could be missing some contour regions, although these regions are displayed in skeleton mode. Applying certain transformation(s) on the image could correctly display these regions. These regions are now correctly displayed.

Query Object

BB03330

Bug Fix   Ucam could crash when handling a layer containing BOX aperture with rounded corners and with very small value for the cut-off (noticed with cut-off value 0.5µ). These apertures are handled normally now.