Maintenance Report - UcamX v2018.03

Analysis

Board Analyzer

BB03924

Bug Fix The Copper surface information screen, from Board Analyzer, is again displaying the actual layer and the relative copper density of the different areas of the layer. This menu could remain empty.

CAD Output

Gerber

B367693

Bug Fix Gerber 274X output of a region containing inner contours and with configuration that cut-in inner contours are not allowed (configuration of 274x*innCON: 0 in applied Cad resource file) can be covering some objects (objects that are specified before the contour aperture) with the (reversed) inner contour. In critical constructions these contours are filled with vectors, so that the image remains unchanged.

B368086

Bug Fix Gerber 274X output of a region containing very small arc(s) could introduce self-intersecting contours in the Gerber region. These small arcs are correctly handled during Gerber output.

BB03912

Bug Fix Gerber 274X output, allowing stepped data, could be ignoring certain step and repeats (and output as flat data), which results in long output conversion and big output file created. The step and repeat output has been optimized for creating smaller Gerber file describing the image.

ODB++

BB03944

Bug Fix ODB++ Output could be missing flash with irregular stepped block. Issue has been noticed on rotated block, which should be output as substep, when the same block is also output with different transformations and only 1 layer is output towards ODB++. These blocks are now correctly converted into the ODB++ format.

Drill Output

AutoDrill

B368502

Bug Fix The calculation of travel path (distance a drill/rout tool is making, outside the material, between the different drill/rout holes) was incorrect when blocks are involved. This calculation has been improved by considering the travel path between the blocks.

Editing

Apertures

B368654

Bug Fix Loading the aperture(s) of an external DPF file was losing the Reference Points that were defined in the current layer. The Reference Points remain in the layer after loading the apertures from an external DPF file.

Insert

BB03908

Bug Fix "Add full arc between 2 objects" function, in Editing Toolbox, was clearing the value for the radius with each arc that was added. Now the value for the radius remains available, and can being used when

different arcs needs being added.

Editing Tools

Clipping

B368558

Bug Fix Clipping could be incorrect, clipping away parts of objects at bigger distance than the specified clip clearance, issue noticed on certain constructions and with some values for Clip Clearance. Result of clipping is respecting the specified clip clearance.

Reverse Layer

B368007

Bug Fix Reverse Layer, on a job without Outline layer, was creating background contour that is 0.1 mil bigger than the enclosing box of the objects of the original layer. The size of the enclosing box of the original objects is now used as the size of the background contour.

Rout

BB03920

Bug Fix Performance of Chain in Optimize Path section of Tools tab of Rout Manager has been improved.

Silk Optimize

BB03922

Bug Fix Scale text, from section Scaling of tab Text Management of Silk Optimize, was causing crash when Vector Text was involved. Also Vector Text can be scaled now.

General

User Interface

BB03915

Bug Fix Changing the status of the active layers is directly reflected in the Job Edit GUI, previously using the Paneliz8tor workspace the indicating of the layer activity was delayed.

BB03940

Bug Fix Entering in or returning from (Multi) Block edit was losing some menu(s) that were added to a customized workspace, reloading the workspace was required for restoring the menu(s). Block edit is keeping the applied workspace unchanged.

HyperScript

BB03947

Bug Fix Running a VHS script in which the objects should be chained (script containing ape.chain_vectors();) could be causing UcamX crash. Running the script can be completed successfully again.

Input

DXF

BB03913

Bug Fix DXF input, without displaying the available options, was converting the file by using unexpected units for the sizes and coordinates, after opening the Options (in StartStart) the conversion was completed using the specified unit. Also without opening the SmartStart Options the expected unit is applied.

BB03918

Bug Fix DXF input of files containing LWPOLYLINE entities, on which a variable width is defined, was failing with an ERROR message (indicating Unknown error code). These DXF files can be loaded again.

BB03919

Bug Fix DXF input, with configuration that a LINE entity should be converted into a object with a circular aperture, was sometimes creating the objects by using UNDefined apertures (sometimes the conversion could be completed successfully as expected). These LINE entities are now converted as configured.

Excellon 2

B368571

Bug Fix Excellon 2 input could be converting an invalid arc into a short track and almost full arc. This invalid arc is now converted into a small track (between the endpoints of the arc).

BB03928

Bug Fix Converting an Excellon2 drill file, by configuring uwheel.default.excellon2 indicating the wheel file that should be used during conversion, was ignoring the configured value for the wheel file. The configured value, for the default wheel file, is now applied again, while importing Excellon2 drill files.

Gerber

B364533

Bug Fix Gerber input of regions that are composed by many very small regions (contour split in very narrow regions for handling inner contours) could cause narrow gaps between the regions (caused by slightly modified coordinates for preventing potentially problematic spikes). The coordinates of these narrow regions remain respected.

BB03880

Bug Fix Conversion of a Gerber file containing an invalid macro definition, composed by an Outline primitive with incorrect amount of subsequent points, was giving a warning message (indicating memory problems) or could be causing UcamX crash. These invalid macro definitions are flagged as errors and converted into zero sized COMplex apertures (without crash).

BB03961

Bug Fix Allocation of aperture attributes, while loading Gerber X2 files, has been extended. The .FlashText attribute is now supported and different attributes can be allocated to the same aperture definition.

Import ODB++

BB03903

Bug Fix ODB++ Import was correctly converting the attribute values that are defined in the dedicated attrlist file in the layer folder, but the attributes defined at step level (of the layer) were not considered. Now also the attributes from step and layer folder are interpreted correctly.

BB03909

Bug Fix ODB++ Import of layers containing many text strings and using the text font that is embedded in the ODB++ job could be losing the text font definition (for some or the text) and results in empty text strings. These text strings are now correctly converted.

BB03911

Bug Fix ODB++ Import of surface definitions containing very short (almost 0) arcs, could be incorrect, which could result in incorrect regions or incorrectly covered (with reverse regions) objects. These short arcs are now correctly interpreted and the OD++ Import conversion results in the intended image.

BB03933

Bug Fix ODB++ Import could handle part of a string as a dynamic string instead of verifying if the longer part of the text string (or the complete string) could be handled as one dynamic string. The text string is now scanned fully for looking at the longest available part of the text string that could be handled as dynamic string (and replaced by its dynamic value).

Panelization

PanelEditor

B368637

Bug Fix Coupons linked to the step & repeat were not correctly positioned when using Panel Editor (MJP). Panel Editor is now correctly positioning these linked coupons in the resulting job.

SmartPlot

B368585

Bug Fix Submitting a layer, containing 0-sized objects in (embedded) block, to a plotter is cleaning up the 0-sized objects (these objects aren't influencing the image), but while cleaning also the flashes blocks, in which 0-sized objects containing the 0-sized objects, were lost. Only the 0-sized objects are cleaned, also from the (nested) blocks, but the flashes with the blocks remain.

Verification

Design Rules

B368549

Bug Fix DRC Single Track check, with option to ignore embedded objects not activated, was not working properly, single tracks with an embedded object were also flagged as violation. The configuration of ignore embedded objects is correctly considered.

BB03840

Bug Fix Performance of Same Net Spacing calculation has been improved.

Layer Validation

B366734

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 confusion.

View

Select

B367498

Bug Fix A small region, which is touching a bigger region, could prevent that Select Embedded Object could find the embedded objects of big region. That small region is no longer confusing the selection of the embedded objects.