



## **Release Highlights for CAM350 Product Version 10.7**

### **Introduction**

CAM350 Version 10.7 is a support release that introduces new functionality, including encryption of CAM350 macros.

### **New Functionality**

The following functional enhancements are contained in CAM350 Version 10.7

- ✓ Encryption of CAM350 macros
- ✓ Clear Silkscreen Utility Update

### **Details**

**Macro Encryption** – CAM350 VB scripts can now be encrypted. Encryption allows customers to distribute CAM350 macros without losing intellectual property (IP). Macro playback is updated to accept either decrypted or encrypted CAM350 macros.

**Clear Silkscreen Update** – The CAM350 utility command that removes silkscreen from solder mask openings has been enhanced. Previously, the clear silkscreen command only operated on drawn silkscreen data. Now any combination of silkscreen and solder mask data types are compared and operating upon in the clear silkscreen operation.

**Defect Fixes** – Software corrections have been made to previously existing functionality, further improving upon CAM350's quality and reliability:

### **Highlights from Earlier Versions of 10.x**

CAM350 10.6 introduces Flying Probe export to Microcraft tester format. The Microcraft testers support continuity and isolation tests on both side of PCB board. CAM350 10.6 supports import of spline geometry formats from DXF files. CAM350 10.6 supports zoom control for viewing Streams Rules Check errors.

CAM350 Version 10.5 introduces important new functionality, including the Design Analyzer, new data translation updates for Blueprint-PCB integration, Large Address

Aware (LAA) implementation for expanded memory access, Pastemask rules checks, Stream Rules Checks updates, and DXF interface updates.

CAM350 Version 10.2 is a support release for CAM350. CAM350 10.2 includes Gerber import improvements for polygon self intersection analysis and DRC analysis accuracy updates for polygon outlines with arcs.

CAM350 Version 10.1 is a support release for CAM350. CAM350 10.1 includes performance improvements and memory usage improvements over previous releases of CAM350. Areas of improved performance include Gerber import and ODB++ import. Optimization for memory usage is delivered in CAM350 10.1 for all polygon analysis, which means that larger more complex layers of polygons can now be processed for commands such as Netlist Extract and Gerber Import. CAM350 10.1 also delivers over 50 important customer reported defect resolutions.

CAM350 Version 10.0 introduced significant new functionality, including reading and writing BluePrint-PCB files, new graphics user interface, a project explorer bar, flip panel support, design compare, Expedition cross probing, and various enhancements.

## **Defect fixes for CAM350 V10.7**

Software corrections and enhancements have been made to previously existing functionality, further improving upon CAM350's quality and reliability:

\*\*\* CAM350 BUILD 570 \*\*\*

### **FILE > IMPORT**

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Areas affected: File Import ODB++

Symptoms: For certain ODB++ files with custom symbol names that begin with the period (".") character, symbol graphics are dropped for the File > Import > ODB++ command.

Reference number: 55060

Areas affected: File Import PADS

Symptoms: For certain PADS ASCII files with copper with arcs that are associated with part decals, the File > Import > CAD Data command incorrectly displays coppers for mirrored components.

Reference number: 55102

### **FILE > EXPORT**

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Areas affected: File Export Panel Gerber

Symptoms: For certain CAM350 files with few flashes, the Export Gerber data command in the Panel Editor fails to complete.

Reference number: 55246

### **INFO**

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Areas affected: Measure Object to Object

Symptoms: The Info > Measure > Object To Object command displays no results for pads for SMT components that are placed on the bottom side of the PCB design.

Reference number: 54885

### **TABLES**

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Areas affected: Aperture Table

Symptoms: The Aperture Table dialog creates rounded rectangle apertures with less precision for rounded corners compared to earlier versions of CAM350..

Reference number: 55103

## UTILITIES

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Areas affected: Netlist Extract

Symptoms: The Utilities > Netlist Extract command fails to complete for certain MCM designs with copper fill.

Reference number: 54997

## LICENSING

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Areas affected: Multiple Bundle Licenses

Symptoms: When multiple bundles are purchased in a single license, the bundle choice dialog on program startup only selects the lowest level bundle.

Reference number: 55039

\*\*\* CAM350 BUILD 564 \*\*\*\*

## FILE > IMPORT

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Areas affected: File Import ODB++

Symptoms: For certain ODB++ files from Genesis, mirrored rotated pads may not be imported correctly.

Reference number: 54887

Areas affected: File Import DXF

Symptoms: For certain DXF files with long multi-line strings, the File Import DXF command fails to complete.

Reference number: 54993

## FILE > EXPORT

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Areas affected: File Export DXF

Symptoms: For certain DXF files, the File Export DXF command fails to complete for R14 DXF format.

Reference number: 54904

## ANALYSIS

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Areas affected: Pad to Drill Check

Symptoms: When the DRC or Streams RC check for Pad to Drill spacing is run, errors are missed for pads that are contained within drills.

Reference number: 54893

#### EDIT > LINE CHANGE

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Areas affected: Segments To Arcs

Symptoms: For certain design files, the Edit > Line Change > Segments To Arcs command incorrectly converts segments to arcs.

Reference number: 54908

#### UTILITIES

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Areas affected: Draw To One-Up Border

Symptoms: The Utilities > Draw to One-up Border command fails to create correct board outlines when the selected drawn lines contain arcs that have not been sectorized.

Reference number: 54370

\*\*\* CAM350 BUILD 558 \*\*\*

## FILE > IMPORT

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Areas affected: File Import IPC-D356A

Symptoms: For certain IPC-D356A netlist files with long net name mapping, the long versions of net names are not imported properly.

Reference number: 54866

## EDIT

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Areas affected: Edit Commands

Symptoms: The D-Code filter for the Edit commands such as Move does not accept more than ten (10) D-Codes.

Reference number: 43239

## ANALYSIS

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Areas affected: Netlist Compare

Symptoms: For certain CAM files, if you run netlist extract after running Netlist Compare, successive Netlist Compare executions will fail to complete.

Reference number: 54799

Areas affected: Track to Pad Check

Symptoms: When the DRC or Streams RC check for Track to Pad spacing is run, clearance errors are missed for certain CAD designs.

Reference number: 54505

Areas affected: Pad to Drill Check

Symptoms: When the DRC or Streams RC check for Pad to Drill spacing is run, false clearance errors are reported for laser drills that are placed within SMD pads.

Reference number: 54549

Areas affected: Streams RC

Symptoms: When the command Run One-Up Border is executed to run Streams RC checks, any area exclusions that defined for the executed checks are ignored.

Reference number: 54086

Areas affected: Streams RC

Symptoms: For certain graphics cards, Streams RC results tab will cause the graphics screen to flicker.

Reference number: 54795

Areas affected: Streams RC

Symptoms: When the Streams RC check for Copper Slivers is run, false errors may occur when small pin holes exist and cause copper slivers to be detected.

Reference number: 54586

## UTILITIES

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Areas affected: Clear Silkscreen

Symptoms: The Utilities > Clear Silkscreen command does not handle different combinations of silkscreen and solder mask data types. For example, Clear Silkscreen only works for drawn silkscreen items; it needs support for flashes and polygons.

Reference number: 34781

## PANEL EDITOR

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Areas affected: Panel Editor

Symptoms: For various zoom levels in the Panel Editor, polygon fill is dropped for certain panel designs with polygons and stepped images.

Reference number: 54458

## MACROS

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Areas affected: Macro Scripting

Symptoms: Macro commands should support encryption so that CAM350 users can create and distribute CAM350 macros without losing the intellectual property (IP) that is contained in the CAM350 macros.

Reference number: 54682

\*\*\* CAM350 BUILD 517 \*\*\*

#### FILE > OPEN

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Areas affected: File Open

Symptoms: The File > Open command fails to complete for certain old version CAM files with complex custom apertures.

Reference number: 54746

#### FILE > IMPORT

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Areas affected: File Import Gerber

Symptoms: The File > Import > Gerber creates duplicate Dcodes on import rather than reusing existing Dcodes for certain Gerber files.

Reference number: 51576

Areas affected: File Import DXF

Symptoms: The File > Import > DXF creates text that is incorrectly offset for certain DXF files with MTEXT (embedded text style) constructs.

Reference number: 54737

Areas affected: File Import Mill Data

Symptoms: The File > Import > Mill Data incorrectly imports arcs in the IJ format for Sieb & Meyer format NC data files.

Reference number: 54243

#### FILE > PRINT

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Areas affected: File Print

Symptoms: The File > Print fails to output text and filled polygons for certain CAM350 database files.

Reference number: 54714

#### EDIT COMMANDS

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Areas affected:

Symptoms: After you delete a polygon vertex, the Copy, Move and Delete commands do not select the edited polygon when you use the "Select All" command button.

Reference number: 53960



## ADD COMMANDS

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Areas affected: Add Polygon

Symptoms: The Add > Polygon fails to maintain specified clearance when pouring around shapes for certain CAM files.

Reference number: 54224

## UTILITIES

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Areas affected: Teardrops

Symptoms: The Teardrops command fails to maintain specified clearance when creating teardrops for certain CAM files.

Reference number: 54727

## ANALYSIS

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Areas affected: Find Pin Holes

Symptoms: The Analysis Pin Holes command fails to find some pin holes for certain CAM files.

Reference number: 54780

\*\*\* CAM350 BUILD 514 \*\*\*\*

## FILE > IMPORT

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Areas affected: File Import and Export ODB++

Symptoms: The File > Import > ODB++ command incorrectly imports drilled slots from ODB++ files when slots are defined as oval pad symbols.

Reference number: 54535

Areas affected: File Import ODB++

Symptoms: The File > Import > ODB++ command incorrectly imports certain Expedition ODB++ files that have negative planes definitions with anti-pads.

Reference number: 54510

Areas affected: File Import CAD Data  
Symptoms: The File > Import > CAD data command incorrectly imports PADS ASCII files for free standing copper cutouts defined for decal pads.  
Reference number: 54558

Areas affected: File Import CAD Data  
Symptoms: The File > Import > CAD data command incorrectly imports PADS ASCII files for rotated SMD components that have thermal pad definitions for split mixed plane polygons.  
Reference number: 54571

Areas affected: File Import Gerber Data  
Symptoms: The File > Import > Gerber Data incorrectly repairs self intersecting polygons for bow tie shaped polygons that have four edges.  
Reference number: 54539

Areas affected: File Import DXF  
Symptoms: The File > Import > DXF creates text that is undersized for rotated text in a DXF file that was created by exporting the text to R2004 format.  
Reference number: 54594

Areas affected: File Import DXF  
Symptoms: The File > Import > DXF incorrectly imports special characters (for example, the degree character and the diameter symbol) when the code page is Chinese.  
Reference number: 53967

Areas affected: File Import DXF  
Symptoms: The File > Import > DXF fails to complete for certain DXF files.  
Reference number: 39444

## FILE > EXPORT

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Areas affected: File Export Panel Gerber Data  
Symptoms: The File > Export Panel > Gerber Data results in Gerber files with undefined apertures for certain panel designs with flipped stepped images.  
Reference number: 54459

Areas affected: File Export ODB++

Symptoms: The File > Export > ODB++ command causes duplicate drill hit definitions in the exported ODB++ file. The drill count is incorrectly increased after ODB++ export.

Reference number: 54506

Areas affected: File Export ODB++

Symptoms: The File > Export > ODB++ command does not export the nonplated status for drill hits for NC layers.

Reference number: 54530

Areas affected: File Export ODB++

Symptoms: The File > Export > ODB++ command fails to complete for certain CAM350 database that are reverse engineered.

Reference number: 54536

Areas affected: File Export DXF

Symptoms: The File > Export > DXF command fails to complete for certain CAM350 database files with empty strings.

Reference number: 54541,54485

#### FILE > MERGE

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Areas affected: File Merge

Symptoms: When the File > Merge command merges databases with all graphic layers, after the merge operation is complete, the merged data cannot be exploded nor edited.

Reference number: 54575

#### FILE > OPEN

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Areas affected: File Open Blueprint file

Symptoms: The File > Open command for a Blueprint database file may incorrectly drop SMT pads when the pads are centered on vias.

Reference number: 54695

**FILE > PRINT**

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Areas affected: File Print

Symptoms: The File > Print command incorrectly assigns colors to drill tools when you print to a color printer or plotter from the NC Editor.

Reference number: 54321

**EDIT**

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Areas affected: Copy NC Data

Symptoms: The Edit > Copy command results in reverse order for mill paths when copying mill paths from one layer to another layer and the source layer also contains drill paths.

Reference number: 53929

**ANALYSIS**

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Areas affected: Streams RC

Symptoms: The View > Streams RC command should include zoom controls to specify the minimum and maximum zoom level for the graphics port when cross probing errors in the Streams results tab.

Reference number: 53694

Areas affected: Trace to Pad DRC

Symptoms: The DRC check for Trace to Pad misses certain trace to pad violations for certain noncircular pads.

Reference number: 54505,54597

**MACROS**

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Areas affected: Variable Text

Symptoms: When playing back a macro that defines the values for variable text in Panel Symbols, the variable text values are not properly set for the associated symbols.

Reference number: 53931

## PANEL EDITOR

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Areas affected: Panel View Zoom

Symptoms: The View Zoom commands drops polygon display when zoomed in for certain panel designs with polygons and stepped images.

Reference number: 53466

\*\*\* CAM350 BUILD 471 \*\*\*\*

Areas affected: File Import ODB++

Symptoms: The File > Import > ODB++ command results in incorrect pad orientation for certain Allegro ODB++ files when assymmetric pads are offset from pin centers for components and those components are placed on the bottom of the PCB board.

Reference number: 54455

## LICENSING

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Areas affected: Hardware Key Support

Symptoms: A single license file cannot be used to specify license features for more than one dongle.

Reference number: 53959

## PANEL EDITOR

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Areas affected: Panel Centroid Report

Symptoms: The Info Report Centroid command reports incorrect component rotations when stepped images in the panel definition are rotated.

Reference number: 54432

## ANALYSIS

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Areas affected: Streams RC

Symptoms: For certain designs with complex one-up borders, Streams run using One-up Border may fail to complete.

Reference number: 54392

\*\*\* CAM350 BUILD 468 \*\*\*

#### FILE > SAVE

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Areas affected: File Save Panel NC Data

Symptoms: The File > Save command fails to save any change made to Panel NC Drill data by using the Utilities > Sort Drills Hits command to sort the Panel NC drill path.

Reference number: 54312

#### FILE > IMPORT

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Areas affected: File Import ODB++

Symptoms: The File > Import > ODB++ command results in incorrect pad orientation for certain Allegro ODB++ files when pads are offset from pin centers for components and those components are placed on the bottom of the PCB board.

Reference number: 54333,54334

Areas affected: File Import DXF

Symptoms: The File > Import > DXF command fails to complete for certain DXF files that have font definitions that are not installed in the Windows OS.

Reference number: 54362

Areas affected: File Import GENCAD

Symptoms: The File > Import > CAD data command fails to complete for certain GENCAD files that have FILLED keywords in the ROUTES sections of the file format.

Reference number: 54387

#### FILE > EXPORT

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Areas affected: File Import Zuken Redac

Symptoms: The File > Export > CAD data command fails to complete for certain CAM350 files that have paste mask layers in the component footprint definitions.

Reference number: 54387

## ANALYSIS

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Areas affected: Design Analyzer

Symptoms: Design Analyzer does not report SMD pad criteria when components are not defined in the CAM file.

Reference number: 54373

\*\*\* CAM350 BUILD 464 \*\*\*

## FILE > OPEN

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Areas affected: File Open Large Designs

Symptoms: The File > Open command may fail to open large CAM350 database files and report out of memory. The repair for this problem is only delivered for Windows XP 64 bit or Windows 7 64 bit.

Reference number: 53510

## FILE IMPORT

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Areas affected: Import Gerber Data

Symptoms: The File > Import > Gerber command fails to complete for certain files with complex polygons.

Reference number: 53952,54174

Areas affected: Import PADS ASCII

Symptoms: The File > Import > CAD Data command for PADS ASCII files does not support decal copper voids for certain PADS Layout designs.

Reference number: 54146

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command may fail to complete for certain Genesis ODB++ files that have internal parameters for pad feature oversize or undersize.

Reference numbers: 54230

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command may shift component pads that are offset from pin centers for certain Allegro and Expedition ODB++ files.

Reference numbers: 54249,54261

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command may drop component pads that are offset from pin centers for certain Allegro ODB++ files.

Reference numbers: 54201, 54109

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command may not properly define blind and buried layer pairs for certain Allegro ODB++ files.

Reference number: 53255

Areas affected: Import DXF

Symptoms: The File > Import > DXF command may fail to complete for certain DXF files.

Reference number: 53962,54238,54247,54248

Areas affected: Import DXF

Symptoms: The File > Import > DXF command may drop circles for certain DXF files.

Reference number: 53721

Areas affected: Import DXF

Symptoms: The File > Import > DXF command may fail to properly import arcs for certain DXF files. The arcs are shifted or offset.

Reference number: 53306

Areas affected: Import DXF

Symptoms: The File > Import > DXF command may fail to properly import embedded text styles for certain DXF files.

Reference number: 54089

Areas affected: Import CAD Data - GENCAD

Symptoms: The File > Import > CAD Data command may fail to properly import custom pads for certain GENCAD files with FILLED keywords.

Reference number: 54193



Areas affected: Import CAD Data - GENCAD

Symptoms: The File > Import > CAD Data command may fail to complete for certain GENCAD files with FILLED keywords.

Reference number: 54192

Areas affected: Import CAD Data - GENCAD

Symptoms: The File > Import > CAD Data command may fail to create correct padstacks for certain GENCAD files with FILLED keywords.

Reference number: 54191

## FILE EXPORT

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Areas affected: Export Gerber Data

Symptoms: The File > Export > Gerber command may fail to complete certain designs with complex polygons.

Reference number: 54235

Areas affected: Export DXF

Symptoms: The File > Export > DXF command may fail to fill circles for the exported DXF file for certain design data.

Reference number: 53961

## EDIT

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Areas affected: Rotate

Symptoms: The Edit > Rotate command may result in incorrect display of raster polygons with arcs.

Reference number: 54237

## ANALYSIS

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Areas affected: Streams Execution

Symptoms: Stream RC execution fails to complete for certain designs for isolated thermal check with complex negative planes.

Reference number: 53437

Areas affected: Streams Execution

Symptoms: Stream RC execution fails to complete for certain designs for track to pad check for large designs.

Reference number: 53214

Areas affected: Streams Negative Plane Checks

Symptoms: The Negative Plane Check analysis for Isolated Plane Thermals may fail to complete for certain complex negative planes.

Reference number: 53958, 53953, 53911, 53588

Areas affected: Streams Pastemask Checks

Symptoms: Pastemask analysis checks are requested by the user to verify pastemask configuration with respect to soldermask, copper and through holes pads.

Reference number: 53855

Areas affected: Streams Signal Checks

Symptoms: Signal Layer analysis checks may hang on Track to Pad (TP) analysis for certain design databases.

Reference number: 53792

Areas affected: Streams Signal Checks

Symptoms: Positive Plane Layer analysis checks may fail to complete for certain design databases.

Reference number: 53787

Areas affected: Stream Rules Checks

Symptoms: True arc analysis may cause poor execution performance times for certain design databases.

Reference number: 53662

Areas affected: Streams Signal Checks

Symptoms: Signal Layer analysis checks for Pads without Drills (PWOD) may cause false errors for designs with SMD pads on top and bottom sides at the same location.

Reference number: 54221

Areas affected: Streams Signal Checks

Symptoms: Signal Layer analysis checks for Unplated Drills to Copper (UDC) and Plated Drills to Copper (DC) may cause false errors for so-called spot pads that are smaller than the drill sizes.

Reference number: 53767

Areas affected: Streams Execution

Symptoms: Stream RC execution fails to complete for certain designs for isolated thermal check with complex negative planes.

Reference number: 53437

Areas affected: Find Pin Holes

Symptoms: When Pin Holes are automatically fixed by the Analysis > Find Pin Holes command, polygon voids may be incorrectly removed for certain designs.

Reference number: 54197

## UTILITIES

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Areas affected: Netlist Extract

Symptoms: The Utilities > Net Extract command does not properly merge stacked vias into the same net for stacked vias which are located at the same position and terminate on a negative plane.

Reference number: 54141

Areas affected: Netlist Extract

Symptoms: The Utilities > Net Extract command may short nets together erroneously when mill route data is present in the design database.

Reference number: 54043, 54018

Areas affected: Netlist Extract

Symptoms: The Utilities > Net Extract command may fail to complete for large databases.

Reference number: 54223

Areas affected: Netlist Extract

Symptoms: The Utilities > Net Extract command may fail to complete for certain designs.

Reference number: 54262

Areas affected: Draw To Flash

Symptoms: The Utilities > Draw To Flash > Any Angle command may fail to complete for large databases. The repair for this problem is only delivered for Windows XP 64 bit or Windows 7 64 bit.

Reference number: 54222

Areas affected: Remove Covered Data

Symptoms: The Utilities > Data Optimization > Remove Covered Data command may incorrectly remove pads that are not covered.

Reference number: 45273,51482

Areas affected: Remove Covered Data

Symptoms: The Utilities > Data Optimization > Remove Covered Data command may fail to complete for certain designs.

Reference number: 48842

## REPORTS

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Areas affected: Info Report Centroid

Symptoms: The Info > Report > Centroid command may fail to complete for design databases with long device names.

Reference number: 53745

## USER INTERFACE

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Areas affected: View Dashboard

Symptoms: After using the View > Dashboard command to turn off the Dashboard toolbar, if you then save the CAM file (or Save Defaults) and then load the saved CAM file, CAM350 may be unstable and may crash.

Reference number: 54218

Areas affected: Navigation Pane

Symptoms: When the path name is long for imported Gerber files, selection of layer names in the Navigation Pane layer bar may cause CAM350 to crash.

Reference number: 53788

## MACROS

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Areas affected: Netlist Import

Symptoms: When playing back a macro that imports a netlist as an External Netlist into CAM350, the final dialog for the File > Import IPC356 or IPC356A command is erroneously displayed.

Reference number: 54199

\*\*\* CAM350 BUILD 401 \*\*\*\*

## FILE > OPEN

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Areas affected: Mill Route Visibility

Symptoms: The File > Open command may fail to properly display mill routes for certain mill closed cutout shapes.

Reference number: 54076

## ANALYSIS

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Areas affected: Streams RC Checks

Symptoms: For certain design files with fine patterns, Streams RC may report erroneous errors for Track to Track and Plated Drill to Copper checks.

Reference number: 54074

## INFO REPORTS

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Areas affected: Centroid Report

Symptoms: For certain design files with long device names, the Info > Reports > Centroid command may fail to complete.

Reference number: 54072

## BED OF NAILS EDITOR

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Areas affected: Export CircuitLine

Symptoms: For certain design files, the File > Export command in the Bed Of Nails Editor may fail to complete for CircuitLine format.

Reference number: 54075

\*\*\* CAM350 BUILD 400 \*\*\*\*

## FILE IMPORT

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Areas affected: Import Gerber

Symptoms: The File > Import > Gerber Data command may fail or cause incorrect graphics for Gerber files that have undefined apertures.

Reference number: 53976,53815

Areas affected: Import Gerber

Symptoms: The File > Import > Gerber Data command may fail for certain Gerber files that have the percent character ("%") in aperture macro names.

Reference number: 42567

Areas affected: Import PADS ASCII

Symptoms: The File > Import > CAD Data command does not support PADS Layout version 9.2 ASCII files.

Reference number: 54003

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command may cause pads to shift for ODB++ files that contain pads that are offset from the associated component pin origins.

Reference number: 53975

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command fails to properly import and flatten ODB++ files that contain flipped images.

Reference number: 53778

Areas affected: Import Drill Data

Symptoms: The File > Import > Drill Data command does not support the Excellon command ("%SR\*%") to end step and repeat data in drill files.

Reference number: 53863

Areas affected: Import Drill Data

Symptoms: The File > Import > Drill Data command may fail for certain Allegro generated NC Drill files.

that have very small arcs.

Reference number: 53486,51315,50813

Areas affected: Import AutoImport

Symptoms: The File > Import > AutoImport command fails to initialize colors for layers properly when the NEXT button is selected on the AutoImport dialog.

Reference number: 53852

## FILE EXPORT

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Areas affected: Export ODB++

Symptoms: The File > Import > ODB++ command may fail to export correct Mill data for certain Mill route definitions with arcs.

Reference number: 53853

## PANEL EDITOR

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Areas affected: Edit Flip

Symptoms: The Edit > Flip command may fail to properly display mill data that contains arcs for stepped images that are flipped.

Reference number: 53847

## NC EDITOR

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Areas affected: Add Mill Tab

Symptoms: The Add > Mill Tab command may incorrect add mill tab locations and associated perforations for certain jagged mill route patterns.

Reference number: 53822

Areas affected: Settings View Options

Symptoms: The Middle Mouse zoom setting will be lost after modifying and saving changes to the Settings > View Options dialog in the Panel Editor.

Reference number: 54002

Areas affected: Explode Step & Repeat Data

Symptoms: The Edit > Change > Explode Step & Repeat command fails to report that step and repeat (SR) NC data does not exist in the current design.

Reference number: 53848

## UTILITIES

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Areas affected: Netlist Extract

Symptoms: The Utilities > Netlist Extract command may fail to complete for designs that have zero size Dcodes.

Reference number: 53868

## USER INTERFACE

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Areas affected: Grid Visibility

Symptoms: The Grid Visibility toggle on the command toolbar may cause CAM350 to crash when the dashboard toolbar is not visible.

Reference number: 53872

\*\*\* CAM350 BUILD 391 \*\*\*\*

## FILE IMPORT

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Areas affected: Import DXF

Symptoms: The File > Import > DXF command may fail for certain DXF files that have very small arcs.

Reference number: 53874



\*\*\* CAM350 BUILD 391 \*\*\*

## FILE IMPORT

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Areas affected: Import DXF

Symptoms: The File > Import > DXF command may fail for certain DXF files that have very small arcs.

Reference number: 53874

Areas affected: Import Drill Data

Symptoms: The File > Import > Drill Data command is incorrect for Seib&Meyer 3000 files that have drilled slots (code G85).

Reference number: 53835

Areas affected: Import PADS ASCII

Symptoms: The File > Import > CAD Data command will display reference designators that have PADS Label visibility set to "None".

Reference number: 53844

Areas affected: Import PADS ASCII

Symptoms: The File > Import > CAD Data command may drop drill definitions for pad stacks that have square pads.

Reference number: 53862

## FILE EXPORT

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Areas affected: Export DXF

Symptoms: The File > Import > DXF command will fail to complete when exporting DXF data and panel mill data layers are specified for output.

Reference number: 53834

## EDIT

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Areas affected: Break At Vertex

Symptoms: The Edit > Line Change > Break At Vtx command will fail to complete when modify segments for an added circle that has been sectorized.

Reference number: 53866

## ANALYSIS

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Areas affected: Streams Report

Symptoms: The Info > Report > Streams Results command truncates net name lists for long names or long lists of net names.

Reference number: 53776

## USER INTERFACE

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Areas affected: Cursor Display

Symptoms: For certain Microsoft Intellimouse Mouse drivers, the CAM350 cursor graphics may disappear for various window commands.

Reference number: 44126

\*\*\* CAM350 BUILD 389 \*\*\*

## FILE IMPORT

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Areas affected: Import Gerber

Symptoms: The File > Import > Gerber command loses arc precision for polygons in for certain small designs.

Reference number: 53699

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command incorrectly assigns nets to finger edge pads for certain files output by Mentor Expedition.

Reference number: 53590

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command incorrectly imports bottom mounted finger connector components for certain ODB++ files.

Reference number: 53686

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command incorrectly handles angles for components and other elements for ODB++ files output by PADS Layout 9.1.

Reference number: 53668

Areas affected: Import PADS ASCII

Symptoms: The File > Import > CAD Data command may drop custom apertures for PADS 9.x files when alphanumeric pin mapping does not specify all pins in a component.

Reference number: 53675

Areas affected: Import HPGL

Symptoms: The File > Import > HPGL command fails to complete for certain HPGL files with filled polygons.

Reference number: 53666

## FILE EXPORT

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Areas affected: Export Gerber

Symptoms: The File > Export > Gerber command may drop some features after the import DXF command is executed for certain DXF files with polygons.

Reference number: 53672

Areas affected: Export Gerber

Symptoms: The File > Export > Gerber command may drop resolution for certain designs with filled polygons.

Reference number: 53616

Areas affected: Export Drill and Mill Data

Symptoms: The File > Export > Drill Data and Mill Data command dialogs should support the Copy Names button to copy layer names to file names just as the Export Gerber dialog already does.

Reference number: 53629

## ANALYSIS

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Areas affected: Find Pin Holes

Symptoms: The Analysis > Find Pin Holes command may find false errors for certain designs with complex polygons.

Reference number: 53663

Areas affected: Find Pin Holes

Symptoms: The Analysis > Find Pin Holes command may fail to complete for certain designs with polygons that have arcs.

Reference number: 53644

Areas affected: Acid Traps

Symptoms: The Analysis > Acid Traps command may find false errors for certain designs with complex polygons.

Reference number: 53680

## UTILITIES

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Areas affected: Quick Part

Symptoms: The Utilities > Quick Part command does not keep track of the side of the board on which the parts are placed. Quick Part should allow you to create parts from pads on the bottom side and match pads on either top or bottom side of the board.

Reference number: 53135

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## FILE IMPORT

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Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command may create invalid CAM data for certain ODB++ data files.

Reference number: 53591

## FILE EXPORT

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Areas affected: Export Composites

Symptoms: The File > Export > Composites command may fail to complete for composite definitions created by deleting table entries.

Reference number: 53597

## EDIT

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Areas affected: Delete Segment

Symptoms: The Delete Segment command may fail to complete for certain arcs or circles that have be sectorized.

Reference number: 53631

## ANALYSIS

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Areas affected: DRC

Symptoms: The Analysis > DRC command may fail to complete for certain designs with polygons that have arcs with out of memory message.

Reference number: 53627

Areas affected: Streams DFF

Symptoms: The Streams DFF check for Copper for Border minimum gap may report false errors for certain board outlines with arcs.

Reference number: 53660

Areas affected: Streams Design Compare

Symptoms: For an ODB++ file import, the Design Compare function reports false errors for TopPartOutline and BotPartOutline layers.

Reference number: 53640

## UTILITIES

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Areas affected: Clear Silkscreen

Symptoms: The Utilities > Clear Silkscreen command may fail to complete for certain CAM files.

Reference number: 53595

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## FILE IMPORT

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Areas affected: Import Gerber

Symptoms: The File > Import > Gerber Data command drops certain voids for complex cutline polygons.

Reference number: 53484

Areas affected: Auto Import

Symptoms: The File > Import > Auto Import command should load IPC-D-356 and IPC-D-356-A netlist formats.

Reference number: 53551

Areas affected: Drill Data

Symptoms: The File > Import > Drill Data command does not support G85 (drilled slots) for Sieb & Meyer format.

Reference number: 53160

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command fails to complete for certain Genesis files that have annular ring attributes and CAMTEK attributes.

Reference number: 53573

Areas affected: Import ODB++

Symptoms: The File > Import > ODB++ command fails to complete for certain Zuken files that illegal references to layers that are not defined.

Reference number: 53577

## FILE EXPORT

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Areas affected: Export Gerber

Symptoms: The File > Export > Gerber Data command does not properly export arcs that are in mirrored raster polygon outlines.

Reference number: 53575

## UTILITIES

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Areas affected: Draw To Raster

Symptoms: The Utilities > Polygon Conversion > Draw To Raster command displays the warning message for polygons with more than 16,000 vertices multiple times for one command. There should be an option to not display the warning again.

Reference number: 53570

## GUI

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Areas affected: Arc segmentation

Symptoms: Arc graphics are not smooth for large arcs when you zoom such that the arc radius is larger than the width of the graphics port.

Reference number: 53579