
DownStream CAM350 14.5 Release Notes

Build: 1771

Date: 10/6/2021

What's New?

This document describes the new features, enhancements and defect fixes in this Release:

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Release Summary

CAM350/DFMStream 14.5 is a major update to CAM350 14.1. New product features are detailed later in this document. The major focus of this release is support of Rigid-Flex and Embedded part design data via import from ODB++ and IPC-2581 file formats. Several areas of the product were updated to support new layer types, new area types and multiple stackups common in these advanced design technologies. Additional updates include expanded drill and via in pad checking in DFM Analysis.

Note: The content of this document is based on an assumption you are upgrading from CAM350 14.1 and Blueprint 6.1. If you have not previously installed those releases, consult those release notes available on our website regarding changes to product licensing.

Installation and Licensing

The installer for the client software (CAM350 14.5 and Blueprint 6.5) will create new folders and you can run both your previous release (CAM350 14.1 and Blueprint 6.1) and your new Release software side by side on the same PC if you wish.

For many users your installation should be as simple as this:

1. Run the installation executable
2. Choose "Install License File" to install your new License and/or License Manager.
 - a. If you are an existing customer on maintenance, choose "Install license from media" to install your new license file.
 - b. If you are a new user or your license is not found on media, get your new license from DownStream, copy it to your PC and then choose "browse to select" you license file.
3. Choose "Install DownStream Products" to install the new CAM350 14.5 and Blueprint 6.5 software on your PC.

If you are installing to a Virtual Machine or have any questions, reference our DownStream Installation Guide or contact us at support@downstreamtech.com.

Notice: Microsoft requires that all Microsoft components installed on a PC are of the "same bit". Since Blueprint-PCB 6.x is 64 bit and installs Microsoft Access Database 2016 (64 bit) to query its database, MSOffice 64 bit is required on the same PC when Blueprint-PCB is also installed. The DownStream install now checks to see if MSOffice 32 bit is installed when installing Blueprint-PCB and warns the user if this is the case.

System Requirements

Your PC should meet or exceed the following requirements:

- 64 bit Windows OS 8, 8.1, 10
- Processor: 2GHz or faster
- Memory: 8GB+
- Disk Space: 2GB available
- Graphics: Discrete graphics card with on-board memory preferred (for best 3D performance)
- 64 bit MS Office 2013 or later

Note: Please be aware that CAM350 14.5 and BluePrint 6.5 are 64 bit applications and will ONLY run on 64 bit Windows 8 and 10. DownStream has discontinued support of Windows 7.

Note: If you run Microsoft Office on the same PC as CAM350 and BluePrint-PCB, then you must use a 64 bit version of Microsoft Office. Microsoft Office 32 bit will no longer run after BluePrint-PCB 6.x is installed. Microsoft requires that Microsoft Office components must be of the same “bitness” on a PC. BluePrint-PCB 6.x installs a Microsoft Office 64 bit component that will render Microsoft Office 32 bit inoperable.

CAM350 14.5 New Functionality

- ✓ Import/Export of ODB++ and IPC2581 Rigid-Flex design data
- ✓ Import/Export of ODB++ and IPC-2581 embedded parts
- ✓ Stack Up Visualizer updates to visualize and manage multiple stackups and zones and PCB Cores.
- ✓ Stack Up Visualizer updates to support PCB Core definitions and data passing using an IPC2581 Stack Up exchange format
- ✓ Stack Up Visualizer, Materials Editor enhancements to support new material layer types and PCB Core data passing using an IPC2581 Stack Up exchange format
- ✓ 3D Viewing of Rigid-Flex designs, embedded components, slots, cutouts and cavities
- ✓ Creation and management of rigid-flex related areas:
 - stack up zone areas
 - bend, rigid, flex and stiffener areas
 - layer profile areas
- ✓ Expanded drill checking and via-in-pad DFM analysis checks

CAM350 14.5 New Functionality Details

Import/Export of ODB++ and IPC-2581 rigid-flex designs

CAM350 and Blueprint use standard design formats, ODB++ and IPC2581, to import and export design data. The integrity of that design data for Rigid-Flex are dependent on the support within the format version and the writers of the data from CAD vendors such as Mentor, Cadence and Zuken. Below you will see which Rigid-Flex features are supported in CAM350 and Blueprint's import function. The ODB++ 8.1.2 format from Expedition is fully supported. IPC2581B format exported from Cadence, Zuken and many other vendors is fully supported. Design formats released before ODB++ 8.1.2 and IPC2581B do not support Rigid-Flex design features.

Note: IPC2581C, which is soon to be approved, provides full support for Rigid-Flex and will be supported in a future update to CAM350 14.5 and Blueprint 6.5.

New Area Source from Supported Imports

Area Type	ODB++ Pre 8.0	Xpedition & DST ODB++ 8.1.2	Other IPC-2581 B	Zuken IPC-2581 B	Cadence & DST IPC-2581 B+ Rigid-Flex
Bend Area	N/A	X	Note 1	Note 1	Note 1
Flex Area	N/A	X	Note 1	Note 1	Note 1
Rigid Area	N/A	X	Note 1	Note 1	Note 1
Stiffener Area	N/A	X	N/A	N/A	DST export only
Stackup Zone Area	N/A	X	N/A	N/A	X
Layer Profiles	N/A	X	N/A	N/A	X
Embedded/Cavities	N/A	X	N/A	X	X

To Derive Areas:
Layer name:
"bend_area"; or
"flex_area"; or
"rigid_area"; AND
layerFunction type:
"DOCUMENT"
All shapes imported as
their respective area types
on their respective layers

Notes:

1. Area Types not present in current 2581 exports. Areas are derived during import from layer name and layerFunction type
2. IPC-2581 B+ = rev b titled, but includes rev c rigid-flex constructs
3. PADS ASCII does not support rigid-flex or embedded/cavity constructs

Import/Export of ODB++ and IPC-2581 embedded parts

The parts pane was updated to support additional properties for embedded parts. When parts are present on internal layers, a new Layer column appears in the Parts pane to present the mounted layer for the part. In addition, if stackup zones are present, a new Stackup Zone column is present with the stackup zone where the part is mounted. These new properties cannot be edited, but can be used to sort parts by their layer or stackup zone. When parts are mounted on inner layers, the Side property is specific to the part's layer. For example, a part could be mounted on the bottom layer of a core and inserted from the bottom side of the PCB.

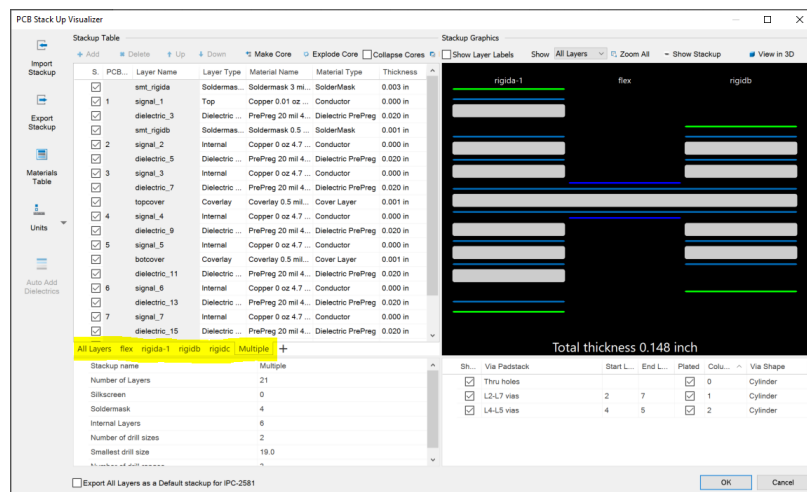
Find by Ref Des						
X Loc	Y Loc	Angle	Side	Layer	Stackup Zone	Height
-700.0	2400.0	0.00	Top	signal_2	rigidb-1	4.0
650.0	-900.0	0.00	Top	signal_4	rigidb-2	4.0
-200.0	2450.0	0.00	Top	signal_2	rigidb-1	8.0
-621.3	3050.8	90.00	Top	signal_2	rigidb-1	50.0
1800.0	2450.0	0.00	Top	signal_2	rigidb-2	8.0
1947.3	3153.4	90.00	Top	signal_2	rigidb-2	50.0
2150.0	2500.0	0.00	Top	signal_2	rigidb-2	4.0
1100.0	4750.0	0.00	Top	signal_4	rigidb-1	8.0
650.0	3300.0	90.00	Top	signal_1	rigida-1	50.0
250.0	4750.0	0.00	Top	signal_4	rigidb-1	4.0
650.0	5200.0	0.00	Top	signal_4	rigidb-1	8.0
1187.7	-440.9	0.00	Top	signal_4	rigidb-2	4.0
156.2	-448.1	0.00	Top	signal_4	rigidb-2	8.0
1164.3	4576.3	0.00	Top	signal_4	rigidb-1	4.0
1040.5	5066.4	0.00	Top	signal_4	rigidb-1	8.0
228.2	4512.3	0.00	Top	signal_4	rigidb-1	4.0
210.9	4995.3	0.00	Top	signal_4	rigidb-1	8.0
-800.0	3650.0	180.00	Bottom	signal_7	rigidb-1	4.0

SUV updates to visualize and manage multiple stackups and zones and PCB Cores

Import a Rigid-Flex design from a supported ODB++ or IPC2581B design file. Open the Stack Up Visualizer and notice enhancements:

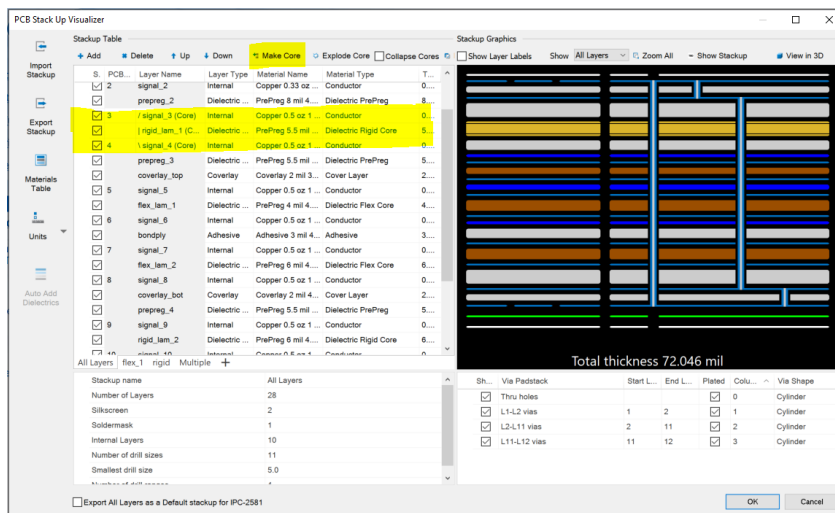
Multiple Stackups

All Stack Ups in the design will be listed as separate tabs at the bottom of the Stackup Table. When each stackup tab is selected, it is that stackup which is displayed in the Stackup Graphics. You can also select Multiple to visualize multiple stackups at once.



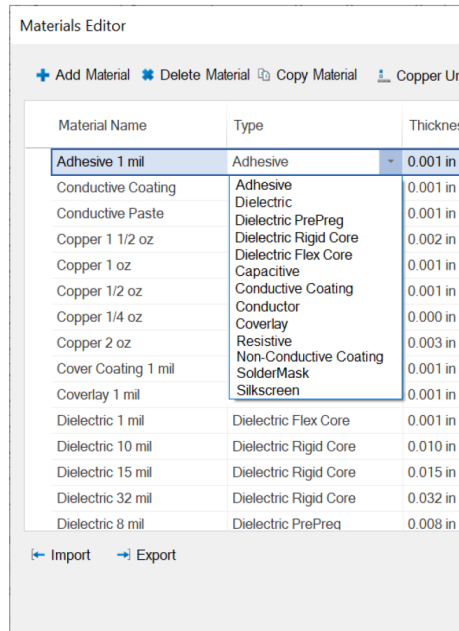
PCB Cores

A core is a common base material used in the fabrication of PCBs. It is commonly a double sided copper clad rigid or flexible material used to fabricate pairs of layers in a double or multi-layer PCB. You can now assign material types to layers and use the Make Core function to create a Core out of 2 or more layers. In the Stack Up Visualizer Core layers are compressed into a more Core-like appearance.



Stack Up Visualizer, Materials Editor enhancements

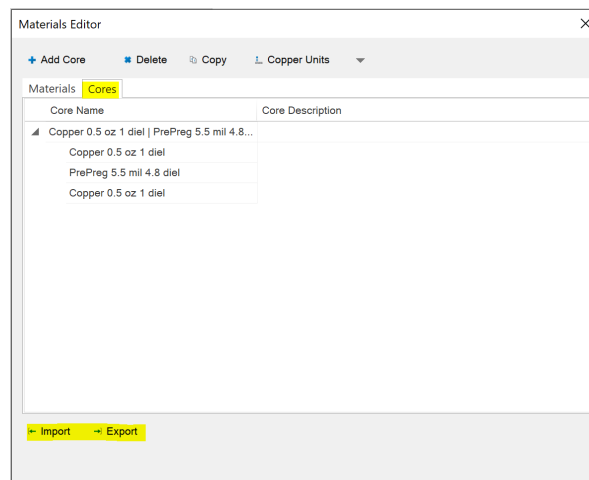
Stack Up Visualizer's Materials Editor has new material layer types defined for Rigid-Flex design:



The screenshot shows the 'Materials Editor' window with a table of material layers. The table has three columns: 'Material Name', 'Type', and 'Thickness'. The 'Type' column is currently expanded, showing a list of material types including Adhesive, Dielectric, Dielectric PrePreg, Dielectric Rigid Core, Dielectric Flex Core, Capacitive, Conductive Coating, Conductor, Coverlay, Resistive, Non-Conductive Coating, SolderMask, and Silkscreen. The 'Adhesive 1 mil' row is selected, showing a thickness of 0.001 in.

Material Name	Type	Thickness
Adhesive 1 mil	Adhesive	0.001 in
Conductive Coating	Adhesive	0.001 in
Conductive Paste	Dielectric	0.001 in
Copper 1 1/2 oz	Dielectric PrePreg	0.002 in
Copper 1 oz	Dielectric Rigid Core	0.001 in
Copper 1/2 oz	Dielectric Flex Core	0.001 in
Copper 1/4 oz	Capacitive	0.000 in
Copper 2 oz	Conductive Coating	0.003 in
Cover Coating 1 mil	Conductor	0.001 in
Coverlay 1 mil	Coverlay	0.001 in
Dielectric 1 mil	Resistive	0.001 in
Dielectric 10 mil	Non-Conductive Coating	0.010 in
Dielectric 15 mil	SolderMask	0.015 in
Dielectric 32 mil	Silkscreen	0.032 in
Dielectric 8 mil	Dielectric Flex Core	0.008 in
	Dielectric Rigid Core	0.010 in
	Dielectric Rigid Core	0.015 in
	Dielectric Rigid Core	0.032 in
	Dielectric PrePreg	0.008 in

You can also define Cores in the Stack Up Visualizer, save them to your Materials Table and then export those Cores to a standard IPC2581 file to share with other users so that they don't need to recreate that Core. The user can instead import your Core and add that Core to their Material Table. Stack Up Exchange is implemented on the Cores tab of the Materials Editor:



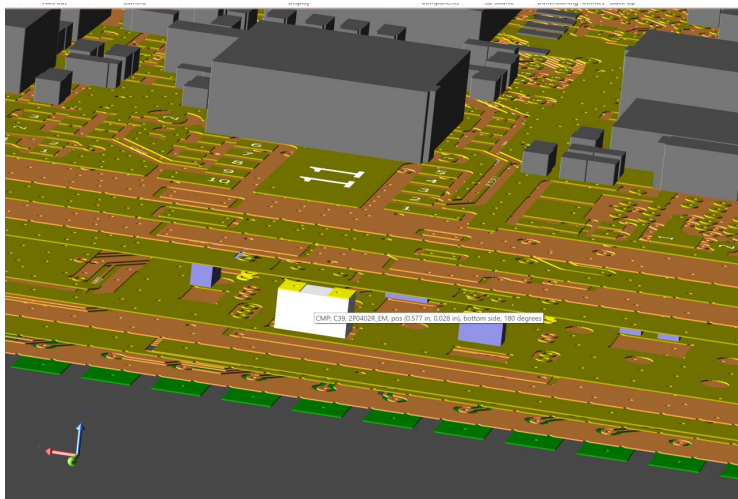
The screenshot shows the 'Materials Editor' window with the 'Cores' tab selected. The table lists core names and descriptions. The first core is 'Copper 0.5 oz 1 diel | PrePreg 5.5 mil 4.8...'. Below it, a list of components is shown: 'Copper 0.5 oz 1 diel', 'PrePreg 5.5 mil 4.8 diel', and 'Copper 0.5 oz 1 diel'.

Core Name	Core Description
▲ Copper 0.5 oz 1 diel PrePreg 5.5 mil 4.8...	
Copper 0.5 oz 1 diel	
PrePreg 5.5 mil 4.8 diel	
Copper 0.5 oz 1 diel	

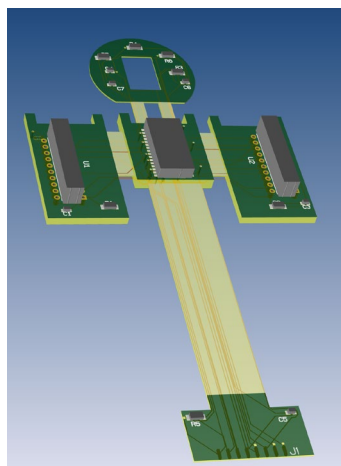
3D Viewing of Rigid-Flex designs, embedded components, slots, cutouts and cavities

The 3D View of imported design data has been enhanced to properly display Rigid-Flex designs, embedded components, slots, cutouts and cavities. The first image below shows that embedded components are now recognized and displayed on the correct

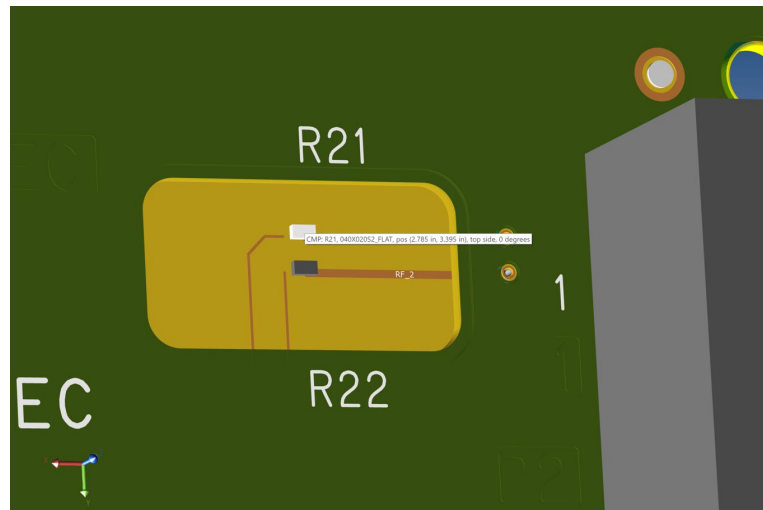
inner layer. The components tab displays the Layer for each component and the mounting Side. In this 12 layer example, component C39 is mounted on the Bottom side of Layer 6.



The second example is a Rigid-Flex design with 4 stackups, each displayed with appropriate layers and thickness. There is also a cutout at the top of the board, displayed with appropriate depth and definition through all copper and dielectric layers.

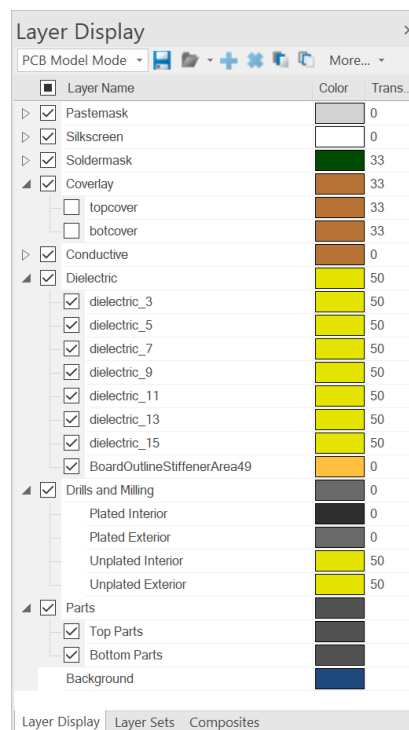


This third image is an example of an embedded component in a cavity:



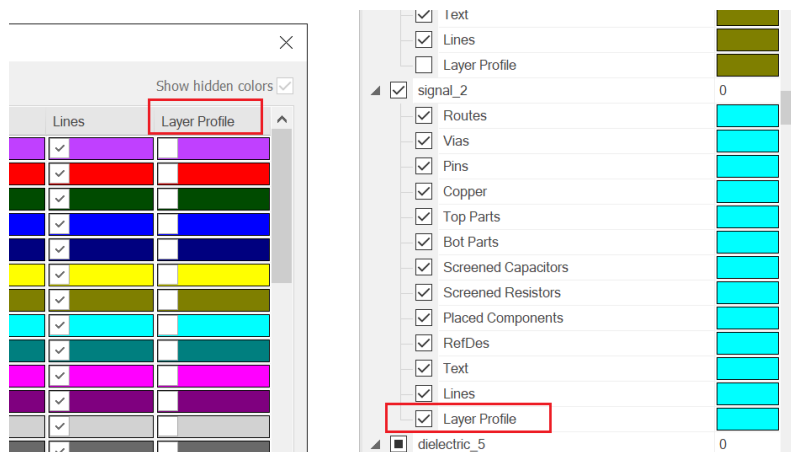
Expansion of PCB Model Mode Layer Display

To support the 3D visualization of rigid-flex and embedded component designs, the layer display list was expanded when viewing 3D in PCB model mode. As shown in the partial layer type example below (rigid-flex design), a new Coverlay color/visibility group was added. All Dielectric layers are now fully modeled and a new Dielectric color/visibility group was added. The Drilling and Milling group color/visibility settings will be applied to any cavities in the design. The Parts color/visibility group was expanded to provide entries for Top, Bottom and Embedded components.



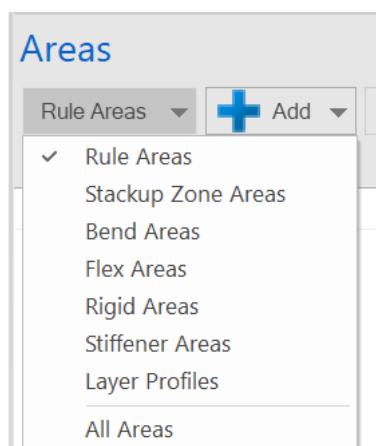
Display of Layer Profiles in Layer Display Pane and Color

The Color Matrix dialog and Layer Display Pane were updated to add color settings for Layer Profiles commonly present in rigid-flex designs.



Creation and Management Of Rigid-Flex Related Areas

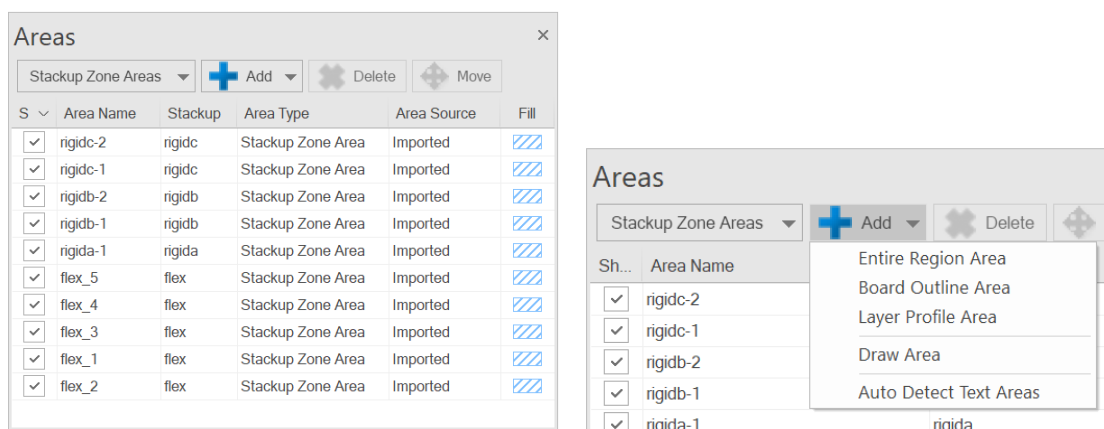
Import a Rigid-Flex design from a supported ODB++ or IPC2581B design file. Open the Areas Pane and notice the pane was updated to present more areas types than just rule areas. A new area type selector was added to the pane to choose which areas to view in the pane.



The new area types are commonly present in a rigid-flex design and include:

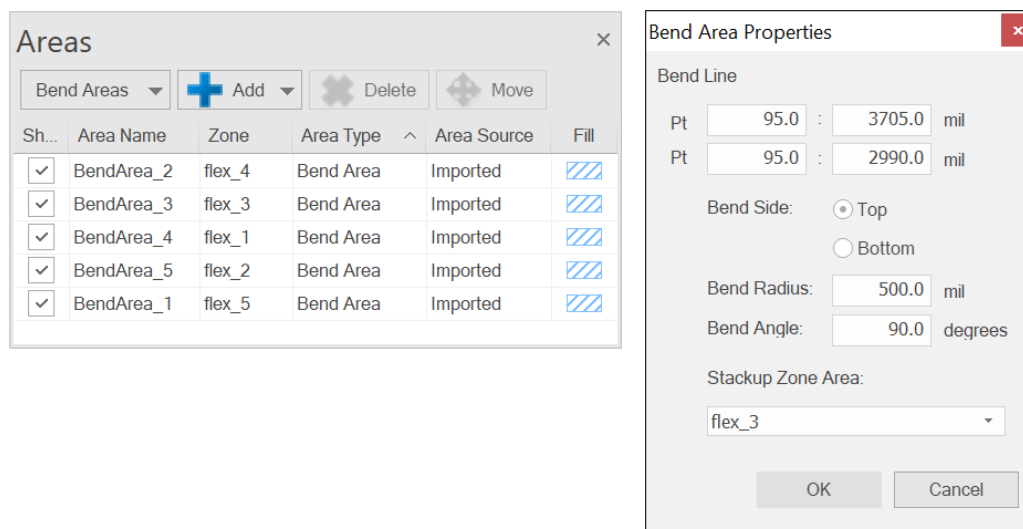
Stack Up Zone Areas

A stackup zone is an area of a rigid-flex design where a specific stackup is present. The layers in the stackup commonly vary from zone to zone. Other than typical area properties, stackup zone properties include the stackup assigned to the area. Click in the stackup assignment to change the assigned stackup. Use the Add or Copy commands to create new stackup up zone areas.



Bend Areas

A bend area is an area of a design where the layers are bent at assembly. When bend areas are imported or created, a Bend Area layer is also present (or added) with a filled polygon identical to the bend area shape. Bend area properties include the stackup zone assignment and specific bend area properties. Use the bend area properties dialog to change bend area properties. Use the Add or Copy commands to create bend areas.



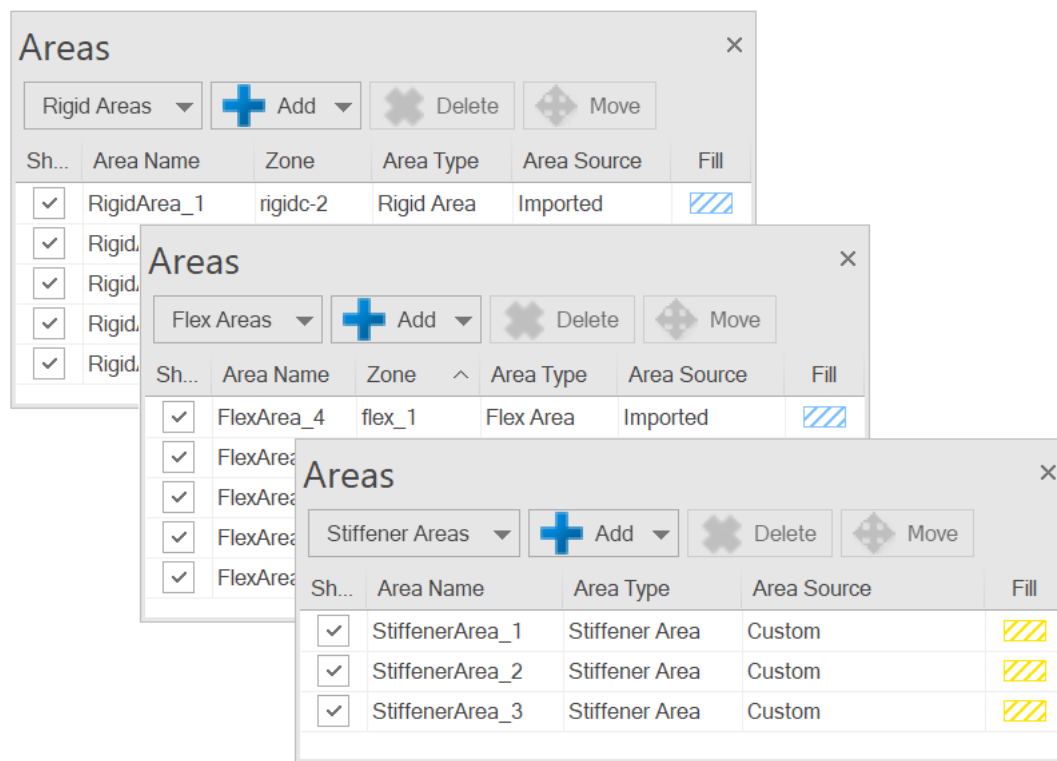
Rigid, Flex and Stiffener Areas

A rigid area is an area of a design where a combination of rigid and flex layers, are present in a design. When rigid areas are imported or created, a Rigid Area layer is also present (or added) with a filled polygon identical to the rigid area shape. Other than typical area properties, rigid area properties include the stackup assigned to the area. Rigid area properties cannot be changed in the areas pane. Use the Add or Copy commands to create new rigid areas.

A flex area is an area of a design where flex layers are present in a design. When flex areas are imported or created, a Flex Area layer is also present (or added) with a filled polygon identical to the flex area shape. Other than typical

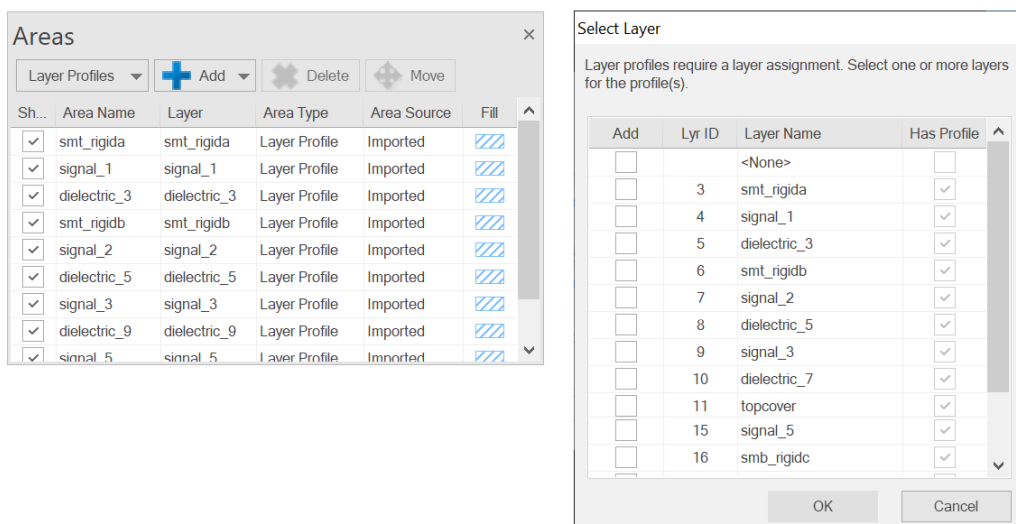
area properties, flex area properties include the stackup assigned to the area. Flex area properties cannot be changed in the areas pane. Use the Add or Copy commands to create new flex areas.

A stiffener area is an area of a design where stiffener layers are present in a design. When stiffener areas are imported or created, a Stiffener Area layer is also present (or added) with a filled polygon identical to the stiffener area shape. Other than typical area properties, stiffener area properties include the stackup assigned to the area. Stiffener area properties cannot be changed in the areas pane. Use the Add or Copy commands to create new stiffener areas.



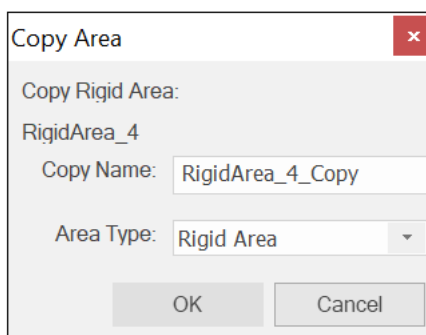
Layer Profile Areas

Unlike rigid PCB's, flexible and rigid-flexible designs can have a unique shape for every layer of the design. A layer profile is similar to a board outline, but represents the boundary of an individual layer. When layer profiles are imported or created, the profile exists solely as an area and not a polygon that can be modified. Other than typical area properties, layer profile properties include the layer the profile represents. Click in the layer property to change the layer assignment of a layer profile. Use the Add or Copy commands to create new layer profile areas.



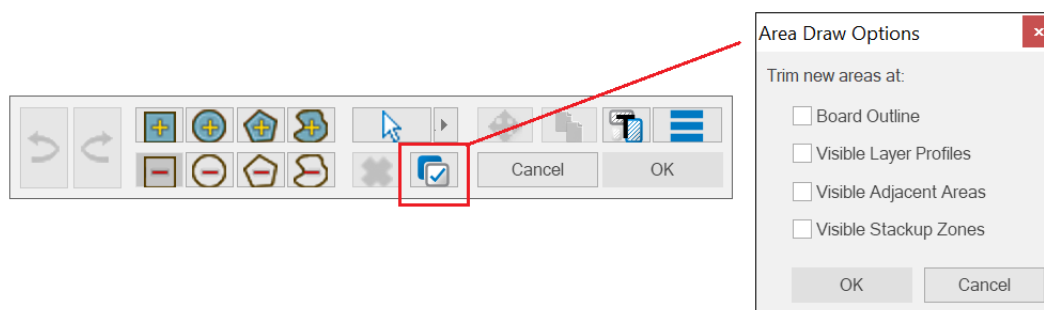
Copy Area

A new Copy Area command was added to the areas pane to support the creation of new areas by copying an existing area. Select any area and use the copy area dialog to complete the process. Choose the new area name and the type of area to create from the selected area.



New Draw Area options

Use new draw area options to set trimming options when drawing new areas. When the options are enabled, new areas are trimmed where they intersect a board outline, or visible layer profiles, adjacent areas or stackup zones.



Expanded drill checking and via-in-pad DFM analysis checks

The drill and mill checks for DFM Analysis were expanded to include new drill checks.

Expanded Drill Checking

A new collection of drill type to drill type checks were added to mill and drill analysis. Use the new drill spacing checks to analyze minimum distance between adjacent drills of variable types.

☒ Drill spacing

Drills to check:

☒ All ☐ Only different net drills ☐ Only same net drills

All	Through	Via	Laser	Buried	Blind	Unplated	Backdrill
Backdrill	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0
Unplated	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	
Blind	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0		
Buried	☒ 5.0	☒ 5.0	☒ 5.0	☒ 5.0			
Laser	☒ 5.0	☒ 5.0	☒ 5.0				
Via	☒ 5.0	☒ 5.0					
Through	☒ 5.0						

☒ Ignore Stacked Vias

Via in Pad Checking

Two new via in pad checks were added to copper geometry checking. Use Partial Vias in Pad or Through Vias in Pad checks to either skip or include analysis of partial and through vias in SMD pads. When enabled, all partial or through vias inside SMD pads will be flagged as a violation. When disabled, it is assumed vias in pads are permitted and vias in SMD pads will be ignored during analysis.

☒ Slivers of copper

Size: mil

☒ Ignore pin holes smaller than

Size: mil

☒ Pin holes in copper

Size: mil

☒ Antennas

☒ Partial Vias in Pad

☒ Through Vias in Pad

CAM350 14.5 Issues Resolved

Build 1771

Defect ID	Description
67479	Compare layers takes too long on this design
67866	Import Altium ODB++ - not all pins are associated with components and pin numbers are incorrect
68057	IPC2581 – Shaved pads are incorrectly imported for Zuken design files
68358	Altium ODB++ import issue
68366	Zuken package definitions are now mirrored for bottom mounted parts
68571	Import Gerber issue after print
68839	ODB++ via name attributes for drills are incorrect
68967	No thermals being generated for vias on negative planes using PADS ASCII data
68899	Merge time performance improved to match 12.2 performance

CAM350 14.5 Issues Resolved

Build 1762

Defect ID	Description
67631	CAM350 Floating Option Advanced NC Editor does not enable Drill and Mill checks
66834	Auto Dim Script does not work properly in 14.x
67137	PADS import – incorrect for rounded rect apertures
67250	Unplated to copper not working
67367	PADS import – Drill Letter size is incorrect
67106	Clear Silkscreen does not record and playback Mask Layers checkbox
66987	Many vias missing after importing this PADS ascii file
67676	Misc file names in “Recent Files” after install

Build 1753

Defect ID	Description
66603	Xpedition ODB++ file import crash
66602	Altium ODB++ file import – incorrect copper pour fill
66641	Xpedition ODB++ file import – missing data
66164	ODB++ import crashes on long part name
66176	Local and Global Fiducials are missing on IPC2581 import
66511	PADS Layout ASCII Import – bad rotation for oblong padstack for bottom mounted part
66141	PADS Layout ASCII Import – All Layers graphics are not copied to every layer on import
61434	Arc display problems for small arcs
66230	Pour arc segmentation for drawn circles
65231	Hang on Convert to arcs with this design
66609	Xpedition cross probing operations are updated for current Xpedition release version

Build 1748

Defect ID	Description
62584	Many issues with Setting "Hole Type" for analysis
63433	Holes identified as "Laser" failing "Through" checks
63434	False errors on Min Gap Same net
64282	Design compare problem with layer names
64433	Missing copper checks versus DRC from 12.2
64783	Hang on Layer stackup select – low resolution screen
65049	Crash on DXF export with this GenCAD data
65059	Problems in active layer changes in edits
65170	Variable error counts in DFM analysis Run Board Outline versus Run Entire Area
65231	Hang on Convert to arcs with this design
65261	Hang on auto-import with these Gerber files
65322	Problem Gerber Data import with bad result
65345	IPC-2581 Import - bad silk layer on export
65606	Arc's inverted after DXF import
65608	Ribbon Custom is reset after exit + restart of C350
65617	Allegro Mirror command not retained for export
65665	IPC-2581 Import - Traces not imported correctly
65706	IPC-2581 Import - Browse dialog does not offer file type *.cvg like BluePrint
65711	Crash on Merge command with this design
65712	Dcode info not read from older CAM350 file
65753	Vector Polygon Metric wrong units
65878	Redraw takes too long
65882	IPC-2581 import - DRILL_SIZE attribute format not imported from Allegro
65902	Bad ODB++ import
65991	Copper to outline does not work on inner plane fill

CAM350 14.1 Issues Resolved

Build 1590

Defect ID	Description
65408	ODB++ import - Allow "=" sign in component part names
65393	ODB++ import does not import last copper layer width correctly.
65174	Crash on ODB++ import
65173	ODB++ import - Micro symbol (4.7 μ F) is not recognized
64681	ODB++ import - Nets are dropped on some pads, which results in copper spacing errors
64641	ODB++ import - Data are missing on ODB++ import; Data was present in 12.2
64529	ODB++ import – Pad is missing
64392	ODB++ import - Pads on graphic layer are lost
63750	ODB++ Export - Negative polarity text is lost
65468	IPC-2581 import - Component pads are incorrectly oriented
63976	IPC-2581 import - Drill properties are incorrect
65426	PADS ASCII import - File Import crashes
65194	Design Compare reports false errors
64667	Layer compare - Errors are missed.
64243	DFM Checker – Netlist Compare Open Error found when Run as Entire Area but not within Board Outline
62602	Film box dialog – Behavior is incorrect for user entered negative values
64181, 62739	Crash on adding mill arc
64859	Crash and corrupted file on File Save

Build 1581

Defect ID	Description
63964	Import IPC-2581 - Layer spans are incorrect for some backdrills
64140	ODB++ data loads incorrectly
64215	Components with SMT pads on opposite mount side are incorrectly displayed
64272	PADS ASCII import nonelectrical layers are incorrect for Max Layer design
64281	Allegro ODB++ import - Allegro - component pads are incorrect
64361, 64368	Gerber import – Custom aperture line widths are incorrect
64413	IPC-2581 - Donut standard shape is incorrectly imported

Build 1576

Defect ID	Description
63658	ODB++ import does not rotate flashed pads in component outlines
63160	Extra pads appear for ODB++ import of this design
63543	Tool not found message for ODB++ import should report more information
63716	Data on assemnt and assemb layers are not retained for ODB++ import of Xpedition design
63629	IPC-2581 Rev A import offsets padstack copper
62131	Gerber and NC Data import should support 6:6 format
63260	Mill path of zero length is dropped on NC import
63450	Remove Unused Pads does not retain top pad for through hole padstack
63233	Combine Drills deletes selected drills and changes other drills
63347	3D one-up image does not support mill paths and mill slots
63980	GenCAD import hangs for this design
63525	Paste mask data for panel symbol is lost after File Save and File Open
62746	Remove Unused Pads aborts CAM350 for this design
63122	Draw To Flash aborts CAM350 for this design
63340	False shorts for named nets are reported by Cleanse Data check for this design
63363	Add line break to text and text is lost after File Save and File Load
63339	CAM350-160 license does not allow database to be overwritten in Cleanse Data check
63371	CAM350 aborts during cross probe for PADS Layout

Build 1570

Defect ID	Description
63269	Units wrong on DXF Export from CAM350 (R2004 format)
63172	PADS ascii import truncates long layer names
63000	Tools – Reports does not work after importing this design
62924	Keyboard customization lost by use of CAP editor
62877	Performance degradation when validating errors
62843	Interactive Draw to Flash shifts pads
62842	Pads and Vias interpreted differently after import
62753	This IPC2581 missing layers, comps and pins after import
62718	This ODB++ design does not import into CAM350 14.1
60987	Add “classic” transparency option

Build 1557

Defect ID	Description
62465	Improved performance of ODB++ import backstage
62366	Panel information from older CAM350 files not displaying
62355	IPC2581 import creating redundant padstacks at comp pins
62344	Interactive Draw to Flash shifts pads
62279	Expedition IPC2581 import missing NC Data
62222	Netlist extract error on this design
62219	Enhancement to add polygon voids in Panel editor
62204	Removed ODB++ false warnings
62203	Part to Part spacing check missing errors on this design
62163	Measure Object issues
62136	Cannot see files in directories while using autoimport 14.x
62133	Rotate and Mirror icons are too similar
62105	File – Import – ODB++ Panel incorrect after import
62084	Over/undersize does not work on polygons
62054	CAM350 Japanese and Chinese report header issues
61974	Oblong shape with hole rotated incorrectly
61742	Mask Slivers Autofix not working
61627	Netlist extract shorting arc to pad
61346	Selection filter does not work on polygons
61319	Traces not clipped correctly in 3D
60907	Netlist extract error
60906	Some net information lost on import
60878	PADS cross-probing offset issue
60839	ODB++ import error on custom shapes
60838	ODB++ import error on staggered net info
60015	This ODB++ file with panel data does not import
62084	Some pads lose net info after ODB++ import of this file

Build 1545

Defect ID	Description
59612	Issues with Mill Tab data in Panel
61411	New CAMvu functionality
60739	BluePrint to document from CAM350 was not working
60749	Gerber Export issue with layer names
60764	ODB++ import - void lost
60690	ODB++ import – some mill data missing
60726	PADS ASCII import slot data incorrect
60749	Gerber export – change file names to layers names failure
60992	Autoimport crash when no gerber in folder to import
60786	Design Compare issues resolved
61147	Problem saving CAM350 file resolved
61240	Change text performance issue resolved
61023	Edit command issues resolved
61426	Add polygon issue resolved
61523	Oversize shows wrong units
61451	Improvement to 3D rendering for component which do not have closed outlines
61402	Printing drill data uses tool color instead of layer color
61346	Polygon issues resolved
61639	IPC import from external nets tab results in crash
61593	Chinese and Japanese language builds
61541	Overall thickness units in SUV issues resolved

61639	Issue importing IPC from External Nets tab
61648	Un-plated drill to copper not found
61522	Mill origin incorrect move on Space Origin change
61434	Arc display issue
61486	Silent install issues resolved for default settings
62076	Default settings in Cleanse data removes trace junctions
62084	Over/Undersize does not work on polygons

CAM350 14.0 Issues Resolved

Build 1501

Defect ID	Description
61217	Drill paths not set to plating status set in SUV
61239	Cannot add CR in change text control
60903	Cannot change drill type on NC table to backdrill
60902	Support for backdrill on ODB++ import
59234	Pre-process netlist extract errors – ODB++ import error
60731	Draw to flash – interactive to custom failure
61055	Gerber import crash on this file
60749	Gerber export – change file names to layers names failure
59612	Bad mill tab data added in this case
61133	Bed of Nails editor license missing common test features
60840	Layer re-order drops layer
61054	Comp outlines drawn with rotated regular apertures incorrect
60625	Area rules set for 1 check end up in other checks
60631	False copper sliver errors
60624	Min width check failure
60857	Drill Export crash on this design

Build 1496

Defect ID	Description
60691	Failure when selecting Tools Panel
60660	PART_NAME attribute is not used for DEVNAME
60644	Custom Aperture display is incorrect in 3D
60589	Draw to Flash does not convert polygon shapes
60601	Panel Editor incorrect stepped image rotation
60672	Assign NC Table dialog shows incorrect layer numbers
60584	Column headers disappear after dragging
60645	Macro playback failure \$ variable incorrectly changes

Build 1491

Defect ID	Description
60570	Coordinate Bar input does not work properly
60436	Seib & Meyer Drill imports incorrectly for Auto Import
60582	DXF Export licensing problem for 070 bundle
60578	Print black and white option not working
60561	Failure on Seib & Meyer 3000 drill export
60560	Design Compare does not retain mapping
60564	Product selection dialog appears twice
60568	Streams execution runs once only
60562	Gerber export incorrect overwrite warning
60581	Drill and Mill decimal input for non-US region doesn't work
60005	Panel Editor Merge Panel command missing

Build 1485

Defect ID	Description
60365	DFM preprocess results in false errors on this design stream
60298	Error on ODB++ import for this file
60213	PADS ASCII Export improvements
60201	Expedition ODB++ import CAP errors
60199	DFM misses annular ring errors for this design
60198	New drill on track check
60180	Incorrect cap rotation on gerber import causes short
59786	Installation improvements for Virtual Machines
59778	Allow negative values for Mill Tabs
59774	Re-Export of Mill Data gets unexpected results
59708	Gerber to Mill compensation error at plunge point
59239	Missing mask checks do not distinguish via drills from through hole drill
58757	IPC2581 import improvements

How to Contact Us

Please send any defects, feedback or questions to support@downstreamtech.com.

Defects: Please include a detailed description with steps on how to reproduce the defect and attach any media necessary to reproduce the issue.

Feedback: If you have feedback for us about what we could improve or add to the product, even if not a defect, we still want to hear from you. Please send description.

Questions: If you have any questions about the Release software, please contact us through support@downstreamtech.com.

Patents, Copyrights, and Trademarks

Patents

“AUTOMATED PCB MANUFACTURING DOCUMENTATION RELEASE PACKAGE SYSTEM AND METHOD”, United States Patent No. 7,409,666 B2

“ADAPTIVE TEMPLATE SYSTEM FOR AN AUTOMATED PCB MANUFACTURING RELEASE PACKAGE SYSTEM”, United States Patent No. 8,875,072 B2

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