



Release Highlights for BluePrint-PCB Product Version 1.8

Introduction

BluePrint Version 1.8 Build 341 is a “rolling release” update. BluePrint “rolling releases” allow us to be extremely responsive to customer defect reports and functional enhancement requests. BluePrint Version 1.8 Build 341 and all future “rolling releases” can be downloaded and run by any customer with a current BluePrint support contract.

New Functionality

The following functional enhancements are contained in BluePrint Version 1.8:

- ✓ We now support Altium Designer V6.7 (or later) ODB++
- ✓ The Ability to Show and Dimension Drill Symbols or Drill Holes
- ✓ Side View support for Projection Angles and Board Width
- ✓ CAD Style (“fixed grid”) support
- ✓ Exploded View enhancements
- ✓ Line Lock controls to force diagonal and orthogonal drafting
- ✓ The ability to Lock (“glue”) the position of a drawing element on a sheet
- ✓ The ability to format lines with Arrows
- ✓ Parts List Import/Export Improvements

Details

We now support Altium Designer V6.7 (or later) ODB++. Import your Altium design data through our Altium ODB++ interface and BluePrint will automatically generate drill patterns, drill charts, layer stackups, top and bottom side assembly views, parts lists, and much more!

The Ability to Show and Dimension Drill Symbols and Drill Holes. In BluePrint V1.8 you now have the option to display the drill symbol in a drill pattern or to show the circle representing the drill hole. You can also dimension the drill symbol or drill hole using BluePrint’s dimensioning tools.

To Display a Drill Symbol or a Drill Hole in a Drawing Pattern

1. Import a CAD Design file
2. Drag and drop a Drill Pattern onto a drawing sheet
3. Select the Drill Pattern and the PCB View Toolbar will become visible.
4. Select the “Toggle Selection of Drills” button on the PCB View Toolbar
5. Select a Drill on the Drill Pattern. The PCB View Format Pane will appear with the drill you have selected highlighted. The last column of the row representing the drill symbol is a Symbol checkbox. When the Symbol checkbox is selected the Drill Symbol is displayed in the drill pattern. When the Symbol checkbox is unselected a circle representing the Drill Hole is displayed instead of the Drill Symbol.

To Dimension a Drill Symbol or a Drill Hole in a Drawing Pattern

6. Select AutoDimension on the Drafting Toolbar and move the cursor over the Drill Symbol or Drill Hole you want to dimension. Once the drill highlights, click and drag to create the dimension.

Side View support for Projection Angles and Board Width. BluePrint now supports the ASME Y14.3 specification for first and third view projection angles on side views. You can also enter a board width in BluePrint's Fabrication Drawing Manager and the width will be displayed in the side view.

To Set a Projection Angle for a Side View

1. Import a CAD Design file
2. Drag and drop a top or bottom-side view
3. Drag and drop a Side View detail and place the Side View Link Arrow on the PCB View to generate a Side View pictorial.
4. Double-click on the PCB View to bring up the PCB View Format dialog. Select the Options tab. Here you will see Angle Projection settings for Normalized, First Angle and Third Angle projections. Select any of these projection angle settings and then select OK on the PCB View Format dialog for the new projection angle to be displayed.

To Set the default Projection Angle for your drawing

5. BluePrint is installed with the Normalized project angle set by default. You can change this default setting. Select Tools – Options to bring up the Options dialog.
6. Select Drawing – PCB View on the Options dialog.
7. Select the project angle you would like to set as the default.
8. Select Okay on the Options dialog to accept the new default.

To Display a Board Width in the Side View

9. Select the Fabrication Manager in the Fabrication Drawing palette.
10. Select the PCB Attributes button in the Fabrication Drawing Manager.
11. Enter Bare Board Thickness. Select Preview or Okay to see the board width update in the Side View pictorial.

CAD Style (“fixed grid”) support. BluePrint now has the ability to display a “CAD style” grid where the distance between the grid points remains fixed at all zoom levels. By default, BluePrint's Standard grid displays grid points in a major and minor scheme that are re-generated at different zoom levels.

To Set the BluePrint Grid Style

1. Select Tools – Options – Environment – Rulers and Grid.
2. Select Standard Grid or Cad Style Grid. Select OK on the Options dialog to accept your setting.

Exploded View enhancements. BluePrint Exploded Views now support all the features of any other PCB View. Reference Designators, Components, Nets and Drills can all be selected and formatted. Dimensions can be added. You can now set the Exploded View Scale from the format dialog.

Line Lock controls to force diagonal and orthogonal drafting. A Line Lock control will force BluePrint into Orthogonal or Diagonal modes for drafting lines. Orthogonal will only allow the drawing of lines at 90 degree increments. Diagonal will allow lines to be drawn at 90 and 45 degree increments. The control for Line Locks are on the Drafting and Formatting Toolbars.

The ability to Lock (“glue”) the position of a drawing element on a sheet. BluePrint can now lock the position of a drawing element so it cannot be moved. Lock Position control is found on the context menu for a drawing element.

The ability to format lines with Arrows. You can now add Arrow Styles to lines drawn in BluePrint. Arrow Styles can be found on the Formatting Toolbar. Select the line and then select the Arrow Style you want to apply.

Parts List Import/Export Improvements. BluePrint now gives the user greater control over the Parts List data that can be imported and exported. BluePrint “Imported Data” is data that has been imported through a CAD Design file import or by importing Parts List information through a CSV file. BluePrint “User Data” is Parts List data that was created in BluePrint (typically mechanical parts). You can now:

1. Import and Export a Parts List (CSV file) with both Electrical and Mechanical parts.
2. Import and Export “Imported Data” only
3. Import and Export “User Data” only
4. Import and Export both “Imported Data” and “User Data”

The new Import and Export controls are found in the Import and Export Parts List Wizards.

Defect fixes for BluePrint V1.8 Build 341

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

Product/Project	ID	Description
File Open	47721	BluePrint V1.8 does not report error when attempting to open a V2.0 BPD database
File Import ODB++		ODB++ import slow when design contains copper with many circles
Performance		Text entry and VPN performance improvement
Parts List	48455	Parts List crash when exceeding sheet parameters, but next sheet has insufficient space

Defect fixes for BluePrint V1.8 Build 339

Product/Project	ID	Description
Import Altium ODB++	43599	Copper_weight not imported and displayed correctly in layer stackup
Automation API	45893	API Imports PDF and places it on sheet at incorrect scale
User Interface	46246	Dimension units are metric in database, but displayed as inches in BluePrint
User Interface	46287	Crash when dropping drill chart on sheet with no room to execute
Import Allegro ODB++	46340	Pads imported incorrectly on this file
Import PADS ASCII	46457	Part status on variant in this PADS ASCII file imported incorrectly
Import ODB++	47037	Drill Chart reports plated slots as unplated on this ODB++ file
Parts List		RefDes are duplicated in Parts List after importing this ODB++ file

Defect fixes for BluePrint V1.8 Build 336

Product/Project	ID	Description
User Interface		Format PCB View - Assembly Variant tab - selection of Variant types for display not working correctly
Import PADS ASCII	46108	This ASCII imports in PADS successfully, but crashes BluePrint on import.
Import PDF	45981	Cannot sort Variant Parts List by ref des

Defect fixes for BluePrint V1.8 Build 334

Product/Project	ID	Description
User Interface		Formatted PCB View reference designators were shifting on display when lines on certain layers enabled in the view.
Automation API	44421	Enhancement to support component attribute updates
Import PDF	45684	PDF Import drops polygon fills and spline widths
File Open	45710	Cannot open this BPD file due to custom font issue.
Import Parts List		Import sometimes incorrect when bom contains both comma and space separators in reference designator attribute

Defect fixes for BluePrint V1.8 Build 330

Product/Project	ID	Description
File Import - Expedition ODB++	44288	Annular rings incorrectly displayed as filled on this design
Viewer	43963	Rectangular callout outline is not displayed in BluePrint viewer
Process Step Manager	44271	Process Step Manager crashes when Assembly Variant on step changed for this design
File Import - Altium ODB++	44287	The import logic fails to properly set the Throughhole type for parts in Altium ODB++ files
File Import - Allegro ODB++	39522	Allegro ODB++ is missing drill tolerances, layer thickness and assembly component outlines.

Defect fixes for BluePrint V1.8 Build 328

Product/Project	ID	Description
File - Open	44213	This BPD file crashes when opened and select on sheet
File - Print	43966	A large number of small copper arcs cause this file to print incorrectly
BluePrint Web Browser		Tooltips do not display in ActiveX control for BluePrint web browser
Licensing		Performance issue when using the license borrow feature
Assembly Document		Variant list does not execute on this CAD file
Import ODB++	44298	Incorrect pad display on this file

Defect fixes for BluePrint V1.8 Build 326

<u>Product/Project</u>	<u>ID</u>	<u>Description</u>
Import PADS ASCII	43535	PADS 2007 ASCII - This file crashes on import. New keyword tags for grouping copper in design need to be handled.
Import PADS ASCII	43579	PADS 2007 ASCII - This file crashes on import. Empty line in ASCII for text block in PADS needs to be handled.
Import PADS ASCII	43519	Component Attribute not imported if attribute name contains 2 spaces
Import Pulsonix ODB++	43628	ODB++ structure diversion causes crash on this Pulsonix ODB++ file
Import Allegro ODB++	43578	Allegro ODB++ - This file crashes on import. Attribute data structures where item Number does not line up with attribute position needs to be handled.
Import Zuken ODB++	43655	Import crash caused by net links to voids in this design database
Import Parts List	43654	Parts List Import fails for ref des "22"

Defect fixes for BluePrint V1.8 Build 323

<u>Product/Project</u>	<u>ID</u>	<u>Description</u>
Import PADS ASCII	43129	Missing net after importing this PADS ASCII design file
Import Allegro ODB++	43168	Missing drills after importing this Allegro ODB++ design file
Export DXF/PDF	43305	Callout with Flag balloon shape does not export correctly to DXF or PDF

Defect fixes for BluePrint V1.8 Build 321

<u>Product/Project</u>	<u>ID</u>	<u>Description</u>
Import DXF	43050	BluePrint applies the wrong scale on an Imported DXF in certain instances
Import PADS ASCII	42641	Import PADS ASCII - Ref Des rotated incorrectly in this file
Import PADS ASCII	42554	Import PADS ASCII - Through holes should not show up on Paste Mask layer in this PADS 2007 database.
Side View	42499	Side View - Board displayed incorrectly when component hangs beyond edge of board
Import Parts List	42778	Import Parts List - New attributes not handled correctly on ECO of Parts List data

Defect fixes for BluePrint V1.8 Build 319

<u>Product/Project</u>	<u>ID</u>	<u>Description</u>
Layer Stack-up	41015	LAST_LAYER variable added so stack-up template can be created independent of layer count
Print	41848	Line thickness not drawn when printing to PDF driver
User Interface	42246	Format PCB View and change "Lock Position" setting and scale will change incorrectly
User Interface	42492	Transform and format actions cause the PCB View scale to change incorrectly
Import PADS	42362	PADS 2007 ASCII drill tolerances are imported and displayed incorrectly (displayed as 'Y')
Import PADS	42177	Import of a PADS ASCII file over the network is 10X slower then importing file on local disk
Import	42350	PCB import generates empty Parts List table when Part Type contains non-existed attributes
Import Parts List	42334	Need to add warnings when ITEM and QTY are automatically generated and not mapped
Print	42600	Printing large sheet sizes with a lot of data can result in a crash
Print	42554	Problem printing OLE objects on sheet
Licensing	42558	Redundant server licenses cause unnecessary checkout calls for floating options

Defect fixes for BluePrint V1.8 Build 316

<u>Product/Project</u>	<u>ID</u>	<u>Description</u>
UI	41841	Text editing performance can be slow in PCB View captions when many drawing elements are visible in the edit view
UI	41472	Drill symbols in drill chart appear too large in respect to the drill chart text. The drill symbols should be displayed with margins in each table cell.
UI	42169	Autosequencing cursor jumps after each text box is placed on sheet
Import PADS ASCII	42164	Copper displayed incorrectly on this design after import

Defect fixes for BluePrint V1.8 Build 314

<u>Product/Project</u>	<u>ID</u>	<u>Description</u>
ECO	41779	Reference Designators are re-drawn with leader lines when they should not be
Export DXF	41843	Export DXF of top-side view with reference designators results in incorrect text orientation when imported into Parametric's ProE product.
Export PDF	41842	Export to PDF of some exploded views results in a large black-filled circle.
Export PDF	41501	Dimension with Type=Reference, parenthesis around dimension text are exported as a circle in the PDF.
Import Parts List	41767	Attributes with value zero are imported and displayed as empty cells in BluePrint. The value zero should be displayed.
Import PDF	41576	This PDF is not imported correctly when selecting YES to convert on import
Printing	41577	Imported PDF displayed on sheet printed to network laserjet as large black rectangle

Defect fixes for BluePrint V1.8 Build 312

Product/Project	ID	Description
Assembly Drawing	40041	Variant parts are missing a quantity field
Assembly Drawing	29432	Side and Sectional Views - Would like ability to format and change visibility of ref des
Assembly Drawing	37847	Side View - Would like first and third angle projections
Automation API	39337	Enhancement request to Automation API for Design view PCB Format Pane
Automation API	39338	Enhancement request to Automation API for Net tab in PCB Format Pane
Automation API	39340	Enhancement request to start BluePrint Application with Automation
Common Elements	38839	Feature control frame does not resize properly
Common Elements	40083	Datum Feature terminator should be equilateral triangle
ECO	39209	PCB View formatting not retained after ECO of this design. Specifically, pads that were formatted off become visible.
ECO	39691	Components disappear after ECO
Export	37886	Parts List Export - Would like to be able to export User Parts only
Export DXF	38888	Export DXF - The page number on each generated DXF file should match the sheet it represents
Export PDF	39770	Export PDF - Colored text on PADS ASCII layers is exported as solid text box fills
Fabrication Drawing	40860	Drill Chart - Drill symbols not resized correctly when cell height formatted to be less than 12pts.
Fabrication Drawing	41205	PCB View Format Pane - Drill Tab - Drill size is a fixed precision and should be variable with design data precision.
Format	36575	Enhancement request to draw lines with Arrows
Format Noteblock	37215	Request Option to hide/display header and hide/display footer
Format PCB View	41233	Polarity format incorrect when mounting holes in group select
Import	40225	Import PADS ASCII - This file crashed on import
Import DXF	39185	Enhancement request for ImportedFile shape (DXF,PDF,Gerber) to support 2-digits precision for scale
Import DXF	39201	Incorrect scale of Imported File shapes
Import Expedition	38847	Problem importing circular board
Import ODB++	38847	Expedition ODB++ - Outline disappears on this circular board
Import ODB++	39134	ODB++ import Mentor BoardStation - mill data is incorrect
Import ODB++	39138	ODB++ import Mentor BoardStation - drops voids

BluePrint-PCB Version 1.8 Build 341 Release Highlights

Product/Project	ID	Description
Import PADS ASCII	41019	Enhancement request to support new PADS 2007 Drill Symbols
Import Parts List	38848	Problem setting type for new attribute on import
Import Parts List	34161	Enhancement to allow update of USER entered parts list data
Import Parts List	39222	Part Attributes in PCB View not updated after re-import of Parts List.
Import Parts List	39271	Callout links to Parts List item lost after Import of Parts List from CSV file.
Import Parts List	40044	Quantity usage is not clear in Parts List import
Import Parts List	40238	Import Parts List - Parts List does not auto-update on sheet after Import of Parts List
Import Parts List	40245	Import Parts List - Parts List wo ref des (mechanical parts) can not be imported
Import Parts List	40841	Import Parts List - BluePrint does not import all numbers when setting Part Type to "Number", but setting Part Type to "Integer" does import all numbers in CSV.
Import Parts List	40847	Import Parts List - In Field Mapping dialog of import wizard warn user that "Quantity" and "ItemNo" are auto-generated
Import Parts List	40936	Import Parts List - Field type change in Field Mapping page is not reflected in the Database Schema on the Merge and Replace page of the import wizard.
Import PDF	35813	Import PDF - convert - save - reopen and graphics flipped
Pack and Release	32669	This PDF graphic displays upside down in Pack and Release Viewer
Print	35113	Print Preview dialog should include buttons for Close, Next, Previous and Print commands
Side View	38845	Enhancement request to improve side-view reference designator control
User Interface	38891	The rotation edit box shrinks when Preview button is selected
User Interface	39190	Crash occurred after changing a font in a table cell on this file
User Interface	39346	Hyperlink - Select from Sheet - select drawng element on different sheet = CRASH
User Interface	39650	Ref Designators shift outside of component outlines when mounting hole visibility toggled off
User Interface	39660	Bottom-Side ref des disappear when PCB View scaled 5:1 on this ASCII file
User Interface	39729	Request to minimize horizontal scrolling in PCB View Format dialog
User Interface	40127	Move with CTRL any imported file with pictures inside it - CRASH
User Interface	40330	Parts List Manager - If I sort on an Integer Attribute BluePrint sorts Alphabetic
User Interface	40653	Crash while working in Title Block
User Interface	39199	Pictures can not be embedded into and extracted from the BluePrint file
User Interface	40132	Parts List Manager re-executes Parts List even if you exit without changing anything