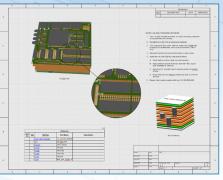
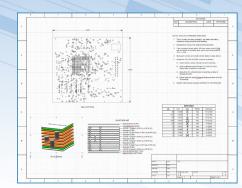


### DATASHEET



Use 3D models for superior illustration of PCB assemblies



Combine standard 2D drawing objects with 3D models to further articulate form, fit, and finish of the PCB

BluePrint-PCB works with your PCB CAD system and/or CAM350 to help you quickly produce comprehensive electronic drawings to drive PCB fabrication, assembly, and inspection processes.

- 3D Modeling
- Fabrication Drawings
- Assembly Panels
- Stack Up Details
- Assembly Drawings

- Assembly Variants
- Electro-Mechanical Assemblies
- Rework Instructions
- Bill of Materials
- Support for Flex, Rigid Flex and Embedded Component CAD Data

### **Importance of Documentation**

Successful documentation records the form, fit, and function of a PCB. It drives the procurement process, aids manufacturing engineering, and is used in final inspection to verify the product was built to engineering's specifications. Documentation instructions are archived to ensure later production runs can be repeated successfully with the same level of quality.

## **Automating the Documentation Process**

BluePrint-PCB creates a PCB document by importing the entire CAD database to automatically create and link unlimited PCB views and details, while at the same time maintaining the design intelligence. The resulting electronic document articulates all the details and instructions for manufacturing. BluePrint now supports 3D Modeling for even better visualization and communication as well as expanded support for Flex/Rigid Flex Layer types.

- Automatically create PCB views, details, and tables from the CAD data
- Add 3D models to PCB drawings for more effective communication
- Refresh data to support ECOs instantly
- Share data between all DownStream products seamlessly
- Support for Rigid-Flex Designs & Embedded Components
- Rigid-Flex Stackup support

## The Benefits

PCB engineering groups can expect to reduce the documentation process to a fraction of time when using BluePrint-PCB. Not only does it automate the tedious mostly manual process, it also manages ECOs without any visible effort. Since all views, details, and charts of the PCB remain linked to the original CAD data, they are instantaneously refreshed in BluePrint whenever the CAD data is changed.

- Lowers documentation cost and increases details accuracy
- Reduces documentation time by as much as 60-80%
- Shortens PCB design cycles

- Improves manufacturing instructions with electronic live linked data and 3D modeling
- Simplifies manufacturing inspection



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# **BluePrint V 6.6 Features and Highlights**

#### **Expanded Layer Support for Flex/Rigid Flex Layer Types**

Further expansion of our support of Rigid-Flex design data includes support for Conductive Foil, Conductive Film and Dielectric Bondply layer types commonly assigned in PCB CAD systems. IPC-2581 and ODB++ interfaces were updated to support import and export of these new layer types.

#### **New 2D OpenGL Graphics Acceleration**

BluePrint will support OpenGL graphics acceleration. OpenGL dramatically improves the performance for all 2D displays of the CAD database including BluePrint's "Design View" database viewer. Performance has also been improved for BluePrint documents that includes assembly PCB views, drill patterns, exploded Views and custom views.

#### IPC 2581 Rev C Support

The IPC-2581 Rev C specification includes updates for defining Vias In Pads and Net Bridges.

- CAM350 IPC-2581 interface includes import and export of via in pads, net bridges
- Definition of via in pad type drills and recognition of vias in pads in DFM analysis.
- Drills in the Drill and Mill and Padstack tables can be set as Via in Pad hole types.
- Copper Geometry DFM checks that detect Via In Pads were updated to report Via in PADS hole type presence in error reports.
- The Design Analyzer now includes presence of Vias in Pads.

#### **Net Bridge Support**

Net Bridges are used to identify design elements where intentional shorts are present in PCB designs.

- Import and export Net Bridges from existing CAD tools. Note that each CAD tool may have varying degrees of support and varying formats to exchange data.
- Ability to assign and manage net bridges within BluePrint
- Support for Net Bridges have been added to a new Net Bridge table that can be used for documentation.

#### **BluePrint Panel Translation to CAM350**

The Panel Drawing elements in BluePrint allow the user to design and document Assembly panels using advanced features like step and repeat and merge web routes and mill tabs. These panel definitions can now be read in and support by CAM350 panel design functions.

• Exports and converts BluePrint panel size and array, fiducials, pinning holes, mill tabs, routes, and drill rows into CAM350 data.