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CAM350® Classic is a powerful, yet easy-to-use solution which helps transition engineering data into physical PCBs. CAM350 is the price/performance leader delivering powerful solutions to the PCB design and fabrication industries. It improves the inspection, preparation, and manufacturing of PCB designs, increases speed and accuracy of processes, and ensures optimal fabrication flow.

CAM350 and BluePrint are integrated, giving the user everything they need to post-process a design and create and distribute all the deliverables needed for a complete PCB fabrication and assembly release package.

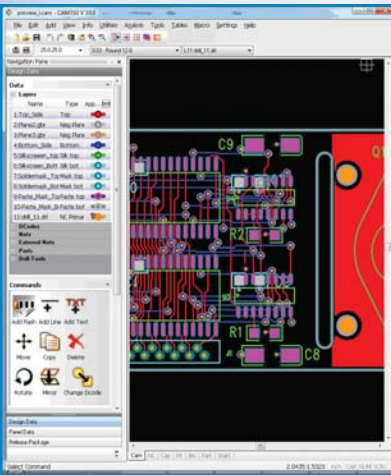
Features and Functionality

CAM350 has everything necessary to import, export, optimize, and modify your design. Optional modules such as Design Rule Checking, NC Editor, Fast Array, ODB++ Import, Release Package Navigator, DXF, Crossprobing, Streams rule checking, DFF Analysis, Macro Debugger, and ODB++ Export make CAM350 more robust. In addition, advanced modules can be added such as the Panel Editor, the Advanced NC Editor, Bed-of-Nails and Flying Probe.

The process begins with CAM350 at the PCB designer's station and continues with CAM350 throughout the fabrication process. Powerful and versatile, CAM350's reputation and performance remain unrivaled.

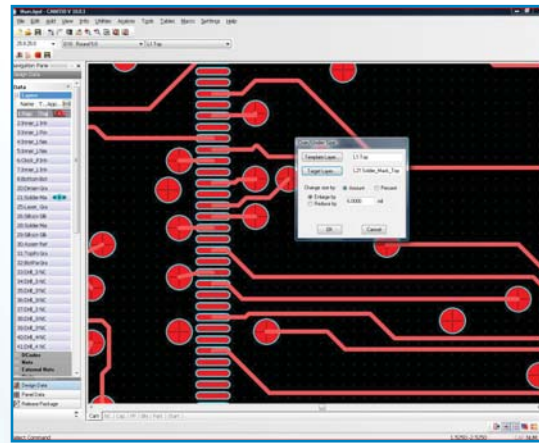
Read and Write with Confidence

- Translate Gerber, NC, and HPGL files
- Load intelligent data from CAD programs
- Import intelligent data from major CAD systems via ODB++
- Export CAD files to PADS®, PCAD®, GENCAD® and more...
- Translate to and from AutoCAD®
- Generate intelligent manufacturing outputs via ODB++



View

- Easily measure and view data
- Work concurrently with CAD programs for intelligent analysis and viewing

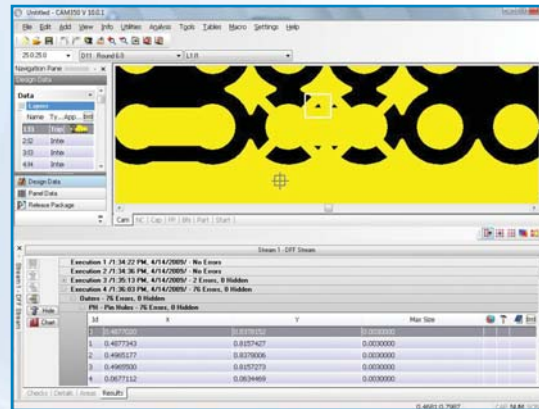


Edit and Optimize

- Edit and generate legacy Gerber data
- Add net and component information to legacy data for Centroid or CAD file creation
 - Easily work with NC data for creating optimized manufacturing outputs
 - Fast generation of subpanels for assembly
- Create optimized Solder Masks, Solder Pastes, and Stencils

Analyze

- Checklist-based Analysis environment
- Analyze data for design and output errors
- Analysis for Buried and Blind Vias
- Find design and manufacturing defects



Compare

- Compare original vs. manufactured designs for differences
- Insure ECO's are reflected in the Gerber data

Document

- Work on the same data seamlessly with BluePrint-PCB
- Read/Write to BluePrint Release packages

Automate

- Macro debug tools for creating automation

Fabricate

- Automate the creation of Fabrication panels
 - Generate electrical Test fixturing and test program
 - Generate automated Flying Probe test program



Blueprint for PCBs® is the only document authoring tool that quickly creates electronic PCB drawings to drive PCB fabrication, assembly and inspection. Blueprint provides a comprehensive solution for manufacturing outputs to include all the deliverables associated with releasing a PCB to manufacturing.

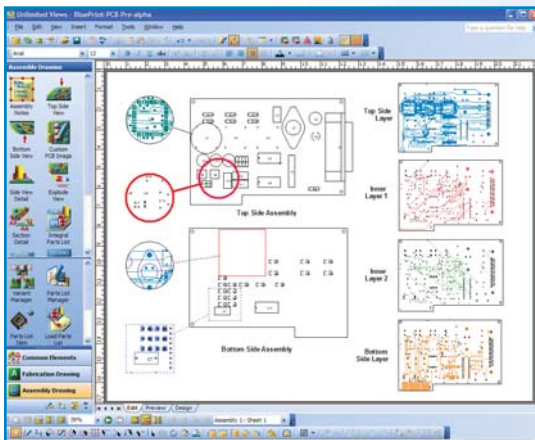
Blueprint imports the PCB CAD database to automatically create and link unlimited PCB views and details while maintaining the design intelligence. It uses a document and sheet based approach allowing you to drag and drop PCB views, details, notes, and tables, onto a drawing sheet, then arrange and format them as needed.

The result is an electronic document which clearly articulates the instructions for successful manufacturing. Blueprint supports the integration of digital multi-media content such as JPEGs, audio files, and video files, plus exotic file importation. Blueprint displays the documentation clearly, so nobody has to hunt for data or guess design intention.

Blueprint's patented technology allows all views, details, and charts of the PCB remain linked to the original PCB CAD data and are instantaneously refreshed whenever the original CAD data is changed in Blueprint.

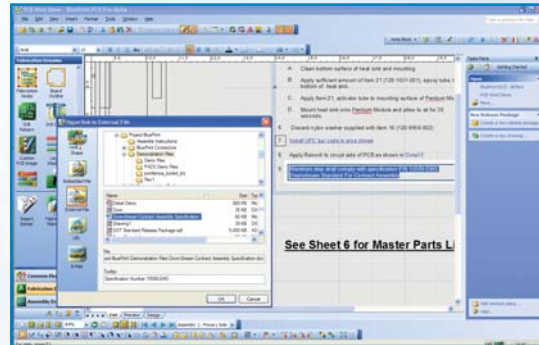
Features and Functionality

Blueprint-PCB comes with the Fabrication Tool Pallet, Assembly Tool Pallet, Insert Object, Web Publisher, Advanced Feature Tool Kit, Assembly Drawing Tool Kit, DXF Interface, Import Gerber, Pack and Release, CSV/ODBC Interface, Advanced Customization Tool Kit, and a choice of one CAD Layout import function.



Import

- Import, drag and drop DXF files for mechanical hardware
- Import parts lists from Enterprise systems via CSV and ODBC
- Inserts Gerber, DXF, PDF, JPEG, BMP, AVI, WAV
- Use PCB CAD data to drive the documentation process
- Gerber files can be imported and used on drawing sheets to document PCB artwork layers



Automate

- Drag and drop automatic formatting of PCB views
- Contains word processing with spell check
- Supports Intelligent note blocks on multiple pages
- Hyperlink notes, callouts, and details
- Automatic drill chart creation
- Support for drill tolerances
- Automatic layer stack up detail creation
- Unlimited PCB views on single sheet (top, bottom, inner layers)
- Easy assembly reference designation placement
- Support for mechanical components in BOM
- No hiding and displaying of layers to produce documentation
- View assembly variances on Assembly drawing
- Customize templates and automation to integrate with specific standards

View and Share

- Real time viewing of PCB documentation (no output required)
- Free Blueprint document viewer download
- Export to HTML for web viewing
- Compress drawings and files with integrated viewer for sharing
- DXF and PDF output options available

Blueprint offers a Panel Drawing add-on option that includes all the necessary tools to quickly create panel documents with dimensions, fiducial and pinning locations, panel level drill charts and note blocks. Define panels using templates, step and repeat automatically, add fiducials, and pinning holes, then drag and drop onto a panel drawing for dimensioning and documentation.

Blueprint is a revolutionary new document authoring tool that automates the PCB documentation process. It is also a state-of-the-art process for sharing and viewing documentation. With Blueprint, DownStream has revolutionized the way PCB Fabrication, Assembly, Panel and Rework documentation is created.

DownStream's - Complete PCB Post-Processing Solution

DownStream's industry-leading CAM350 for PCB fabrication and their documentation tool BluePrint for PCBs have now been integrated and packaged together to deliver the industry's first unified suite of tools for PCB post processing.

This integrated suite of tools unites all PCB post processing tasks, including DRC/DFE analysis with Netlist compare, paste and solder mask generation, Gerber file creation, NC drill and mill creation, assembly panel arrays definition, PCB documentation, and ECO automation.

The unified database allows all necessary outputs to be contained in one electronic file or "Release Package" to drive fabrication, assembly, test, and QA/QC processes anywhere at anytime. Within the electronic release package you can generate and view PCB documents, PCB layout data, generate and/or extract necessary Gerber, drill, and milling files, as well as integrate business file formats such as PDF files, MS Office, DXF files, which may be required to fabricate and assemble the physical PCB.

The combination of CAM350 and BluePrint will support the PCB design flow by providing solutions for these key areas:

- Validation that design data meets fabrication requirements
- Output generation to provide files and documentation to create physical PCBs
- ECO automation to implement and identify ECO changes into a released PCB design
- Data distribution to downstream processes that are charted with building the finished PCB

DownStream Technologies software and services empower engineering organizations to optimize and automate the PCB Release Process. Our tools define how engineering professionals post-process PCB designs to create and distribute all the deliverables required for a complete PCB assembly release package. CAM350® Classic provides verification, optimization and output generation to efficiently drive PCB fabrication. BluePrint for Printed Circuit Boards® works with CAM350 and PCB CAD systems to help users quickly produce comprehensive electronic drawings to drive PCB fabrication, assembly, and inspection processes. By combining CAM350 and BluePrint-PCB, you get the only unified solution focused on all areas and aspects of PCB Post Processing.



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