

# Data Flows

eNewsletter from DownStream Technologies

Spring 2010

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## BluePrint-PCB®

### Maximizing Engineering Value with PCB Documentation Automation

#### DownStream Unites with EETimes...

Join DownStream and EETimes online to explore the latest trend in PCB Documentation. Once a tedious endeavor, creating PCB documentation has become an automated, simplified process resulting in a 50-70% reduction in the time spent creating accurate, detailed documents - when using BluePrint for PCBs.

#### When: June 8th, Tuesday

- 18:00 - Greenwich Mean Time
- 2:00pm - Eastern Daylight Time
- 11:00am - Pacific Daylight Time

#### REGISTER TODAY

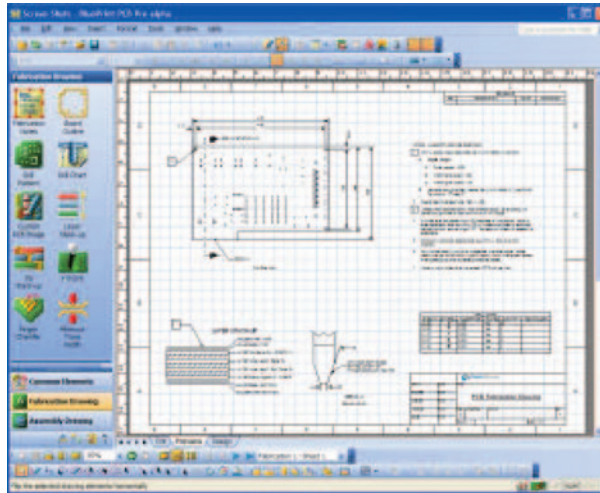
#### Overview

During this informative webinar you will see how BluePrint-PCB can dramatically change the way you create PCB documentation by using intelligent design data to automate the documentation process. Topics to be covered include:

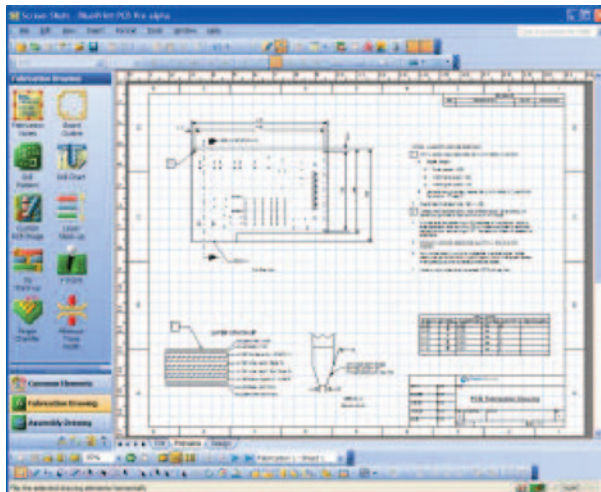
- Creating and using templates to quickly populate a documentation set
- Creating comprehensive PCB Fabrication Drawings
- Implementing engineering change orders (ECOs).

#### QualComm Chooses BluePrint for Global Solution

#### Waters Chooses BluePrint



Fabrication Drawing as seen by BluePrint-PCB



Unlimited PCB Views using BluePrint-PCB

BluePrint-PCB "knows" it is creating a PCB document and imports the entire PCB CAD database once to automatically create and link unlimited PCB views, details and tables. By importing the CAD data you preserve the design intelligence and overcome the constraints imposed by both PCB and mechanical CAD alternatives. The result is an electronic document, which better articulates the instructions for successful PCB manufacturing.

BluePrint-PCB will:

- Use PCB intelligence to create common drawing elements
- Create live and interactive documentation with hyperlinks and multi-media
- Store all information associated with the PCB assembly in one electronic "release package"
- Manage engineering changes (ECOs) quickly and easily
- Allow viewing of documents without the application - via the web, PDF, or a free viewer

With BluePrint, you can create an electronic PCB release package that is more complete than what is being created today. BluePrint also supports the integration of digital multi-media content such as JPEGs, audio files, and even video to better communicate the often-complex instructions needed to fabricate and assemble a PCB.

In addition, BluePrint's hyper-linking capability allows the creation of links between different document elements, external files, URLs and email addresses. With BluePrint, all the data is logically, simply displayed - PCB documentation is live, interactive, and much more informative.

## REGISTER TODAY

### About the Presenter

Rick Almeida, as one of DownStream's founders, oversees company strategy and direction as well as corporate communications and product marketing. Rick was previously vice president of marketing for Innoveda's Product Realization Group charted with delivering high-speed PCB design tools to the electronic market place. Prior to his position with Innoveda, Rick was vice president of worldwide marketing for PADS Software and served on PADS executive staff from 1997 to 2000. Rick was responsible for the acquisition of ACT by PADS Software in 1998.

### Who Should Attend

- Anyone who has responsibility for, or whom is involved in, documenting PCB designs.
- Project Engineers responsible for the finished product
- Engineering and CAD managers who are evaluating ways to improve their process to meet time-to-volume and quality production goals
- Anyone who wants to learn about new developments in design automation tools aimed at the manufacturing and fabrication phases of new product development.

## Demos On YouTube®

DownStream has created new technical demonstrations for both CAM350 and BluePrint, each featuring specific tasks.

**View these detailed product videos on YouTube:**

- How to Compare Two Designs in CAM350
- Design Analysis in CAM350 using Allegro and OrCAD
- Creating a Panel (Assembly) Drawing
- Creating an Assembly Drawing
- Creating a Fabrication Drawing
- Creating Document Templates
- Document Creation using Cadence Allegro

## Did You Know?

If you currently have the latest version of CAM350 installed, you have access to BluePrint as well. The DownStream executable you download contains both BluePrint and CAM350. With the executable already on your computer, it would be easy and free to evaluate BluePrint. All you have to do is **contact sales** and ask them for a 30-day license file. BluePrint is at your fingertips! Simply save your new license file and install BluePrint from the DownStream executable.

### Summary of BluePrint features and functionality:

BluePrint-PCB "knows" it is creating a PCB document and imports the entire PCB CAD database once to automatically create and link unlimited PCB views and details, while at the same time maintaining the design intelligence and overcoming the constraints imposed by both PCB and mechanical CAD alternatives. The result is an electronic document which better articulates the instructions for successful PCB manufacturing.

### BluePrint 2.1 Optimization Release:

- Automatically create PCB views, details, and tables from PCB CAD data
- Remove constraints of PCB CAD but retain design intelligence
- Use PCB intelligence to create common drawing elements
- Create live and interactive documentation with hyperlinks and multi-media
- Store all information in one electronic "release package"
- Manage engineering changes (ECOs) quickly and easily
- Allow viewing of documents without the application

We are currently on BluePrint 2.2. This new release contains software enhancements, updates, and corrections.

Release 2.1 improves BluePrint's performance to better handle large designs and complex drawings. We have also made significant improvements throughout the application.

- Improved speed to place and drag PCB Views
- Improved snapping to PCB View objects
- Improved PCB view highlighting and selection algorithms
- Improved highlighting of copper pours
- Optimized Zoom command
- Improved Exploded View generation
- Optimized display of reference designators
- Faster Link Window generation
- Optimized Drill settings selection in the Format PCB View dialog
- Optimized File Export of DXF and PDF files
- Optimized BluePrint File Save and Open operations
- Optimized Panel Array generation
- Fabrication manager optimization (memory usage)
- Quality improvements for error handling of all import routines
- Quality improvements for undo/redo commands
- Quality improvements to text editor operation
- 30+ defect fixes (see release highlights for details)
- PADS 9.0 ASCII support

#### New Features in BluePrint 2.0 include:

BluePrint-PCB Version 2.0 adds a new Panel Drawing Toolkit, integration to CAM350, plus much more. The new Panel Drawing Toolkit adds a complete suite of tools to help define PCB panels and produce the necessary documentation of panels for fabrication and assembly.

## Product Updates Available

About once every couple of months DownStream releases new product builds for both CAM350 and BluePrint. We do this to keep you up to date with the latest software. As soon as we upgrade our software's stability and usability we supply those updates to you. We do recommend you install these new builds to stay current with our software product and to enjoy the latest technology available to you.

#### CAM350 10.2 Build 389

CAM350 10.2 is a support release for CAM350. Software corrections and enhancements have been made to previously existing functionality, further improving upon CAM350's quality and reliability. This new release includes Gerber import, improvements for polygon self intersection analysis and DRC analysis accuracy updated for polygon outlines with arcs.

New functionality found in CAM350 10.1 includes: Gerber Import and Export improvements, ODB++ Import improvements, Netlist Extract updates, and PADS Import updates.

For specific details please review the [release highlights](#) and download the new [executable](#).

## CAM350 Training

### June 4th – Chicago

DownStream Technologies is holding CAM350 Course focused on Design Verification and PCB Post Processing. This will be a great opportunity to learn all about CAM350 Release 10 and to get more out of your CAM350 software.

This course will cover the process and procedure for using CAM350 to verify data prior to release to Fabrication. Specific features include:

- Getting familiar with the new Graphical User Interface
- Output of data from various CAD systems - using the direct interface
- Gerber identification and import
- Streams Rule Checking
- Netlist Comparison
- Design Rule Checking
- Design for Fabrication
- Putting together the completed design package for Fabrication
- Discover the Universal Release Package Navigator

These are full day course, from 9AM-5PM. Class fee includes course materials, beverages, lunch and all administration fees. Join us to improve upon your skills and become a DownStream product expert – for more details visit [customercare@downstreamtech.com](mailto:customercare@downstreamtech.com)

## Event Schedule

### DownStream Monthly Webinars

Online technical product seminars are scheduled each month for your convenience. CAM350 topics do vary. Please visit us online to view the [current schedule](#).

- June 22nd, Streams Rule Checking Webinar featuring analysis and design verification in CAM350

### BluePrint 2.2 Build 506

BluePrint 2.2.1 includes defect fixes, enhancements and all performance improvements contained in 2.2 and 2.1. The following enhancements are contained in BluePrint 2.2.1:

- New Backdrill Layer Stack-Up
- Board in Side View can now be displayed as unfilled or filled with a color independent of components
- Reference Designators can now be displayed as grouped ranges in the Process Step Chart
- New Dimensioning snap points to the center of lines and the center of closed polygon shapes
- Automation API enhancements

For specific details please review the [release highlights](#) and download the [new executable](#).

## DownStream Tech Tips

There are no new tech tips available at this time, but feel free to browse our previous newsletters to see what past topics have been. Here is a summary.

### BluePrint Tech Tips

- Drill charts in BluePrint
- How to sort particular via counts in the drill table according to thru and blind.
- How to show the start layer and end layer for each via type in your drill chart.
- Shape Fill Tool
- Update Design Variants
- Different Drawing Types
- PCB View Object Display
- BluePrint 2.0 Q&A

### CAM350 Tech Tips

- IPC Netlist Compare in CAM350 10
- Alignment of Gerber Data
- Composites as an Editing Tool
- Altering the Navigation Pane – Layer Bar Classic
- Cadence Gerber and Drill for CAM350

[Click to view past issues](#)