

PDN ANALYZER 2.0

POWERED BY CST®

Visual Power Analysis At Design Time

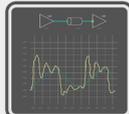
COMMON WAYS TO RESOLVE PDN ISSUES



EXPENSIVE TOOLS



HOPE IT WORKS!



PROTOTYPE



EXPERT ADVICE

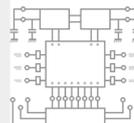


EXPENSIVE AND TIME CONSUMING



TROUBLESHOOT

QUICK AND INEXPENSIVE WAY TO ENSURE PDN QUALITY



DESIGN



LAYOUT



ANALYZE



FIND AND CORRECT PROBLEMS IN THE SAME WORKSPACE...WITHOUT EXPENSIVE EXPERTS OR PROTOTYPES

PDN Analyzer (powered by CST®) shortens your design cycle by enabling all designers to easily identify and preemptively solve Power Delivery Network (PDN) issues during the PCB design process. With a wide range of analysis capabilities, PDN Analyzer makes complicated power delivery issues easy to locate, understand, and resolve without relying on expensive prototypes, complicated tools, or dedicated power integrity engineers.

PDN Analyzer provides a money-saving, easy to set up and use, and powerful PCB PDN design analysis environment that can be leveraged during your entire board layout process. Intimate integration with Altium Designer allows PCB Designers to quickly determine whether or not the PDN topology meets all design requirements while facilitating corrections. With complete control over which nets and components to analyze, PDN Analyzer enables analyses that might otherwise be impossible.

KEY BENEFITS

Visual Power Analysis

- Easily identify and resolve DC voltage and current density issues during your board layout process with no prior experience necessary.

Unified Design & Analysis Environment

- Analyze - Modify - Analyze - Effortlessly merge your analysis and design workflows without any interruption.

Simultaneous Multi-Network Simulation

- Calculate network and return path interactions that simple batch simulation won't provide with true Voltage Regulator Models (VRMs).

Configurable HTML reports

- Provide a record of your simulation work, including sortable tables with voltage and current margins, power consumption data, and custom screenshots.

Product Reliability at a Lower Cost

- Ensure the correct performance of individual supplies within the design, in terms of standing voltage levels, voltage stability, and trace heating/damage without being excessive.

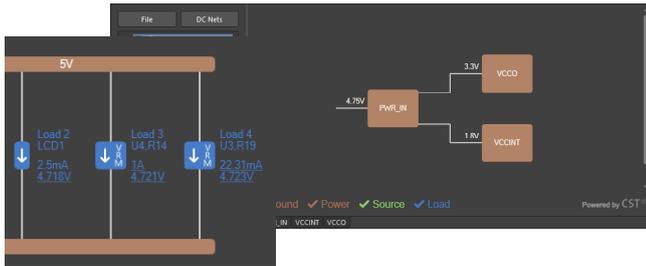
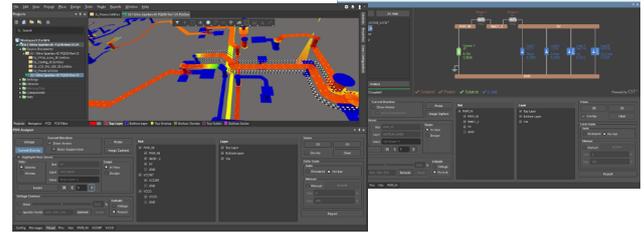
Improved PCB Layout

- Apply design information to create the most effective use of board space and easily identify, locate, correct, and report problematic high current density areas and voltage drop issues.

CORE FEATURES

UNIFIED ANALYSIS ENVIRONMENT

Make the most of your workspace — choose between standard or compact layout, docked within Altium Designer or undocked. PDN Analyzer provides unsurpassed integration and productivity with easy access to PDN setup, batch (corner case) analysis, and simulation results, including visual indication of any violation.

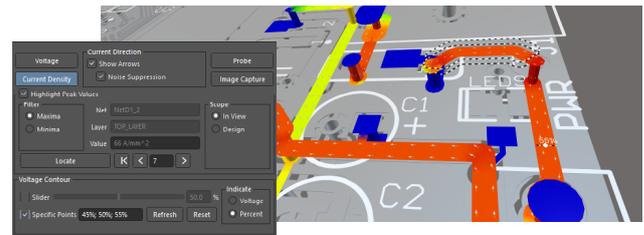


TRUE MULTI-NETWORK SIMULATION

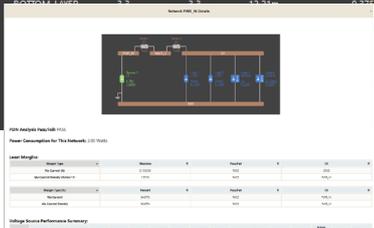
Separately simulating one voltage (PDN) at a time is not only inefficient, but it also neglects any interaction that might occur. Voltages on the ground net, for instance, are a function of all PDNs utilizing a net and are unidentifiable with isolated network simulation. PDN Analyzer's unique Voltage Regulator Models (VRMs) enable these interactions to be captured while simplifying setup and improving simulation speed.

POWERFUL VISUALIZATION FEATURES

Whether you are a seasoned Power Integrity expert or a beginner, gaining insight into your design's voltage and current density distribution, current direction, and "hot-spots" is simple and intuitive. With PDN Analyzer, results are displayed in the Altium Designer PCB editor, showing the power nets alone, or as a rendered overlay against the complete PCB — in 2D or 3D.



Net	X	Y	Layer1	Layer2	Voltage1 (V)	Voltage2 (V)	Current (A)	Current Density (A/mm ²)
VCC0	6524.1	223.932	TOP_LAYER	BOTTOM_LAYER	3.3	3.3	12.21	0.3254
VCC0	6511.3	925.703	TOP_LAYER	TOP_LAYER				
VCC0	5466.03	74.3256	TOP_LAYER	TOP_LAYER				
VCC0	5394.18	1051.69	TOP_LAYER	TOP_LAYER				
VCC0	6236.7	1247.55	TOP_LAYER	TOP_LAYER				
VCC0	5492.6	1567.44	TOP_LAYER	TOP_LAYER				
VCC0	4744.57	1247.55	TOP_LAYER	TOP_LAYER				
VCC0	4211.11	678.656	TOP_LAYER	TOP_LAYER				
VCC0	4211.11	945.389	TOP_LAYER	TOP_LAYER				
VCC0	1012.1	2022.1	TOP_LAYER	TOP_LAYER				

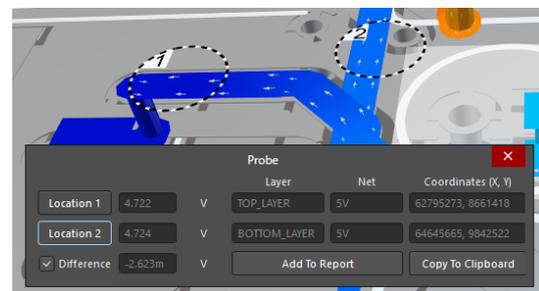


CONFIGURABLE HTML REPORTS

Communication is always difficult. To augment the extensive tabular and visual results, PDN Analyzer allows the user to "back up" all simulation results in the form of an HTML report. The reports include everything from general design data, to hierarchical margins, to sortable tables and screen images with captions. Communicate problems with reports at your next design review, or archive them with your project.

VOLTAGE & CURRENT PROBING

Do your designs get enough power everywhere? Stop the guessing game! PDN Analyzer can interactively measure voltage, current density or via current at any point, single-ended or differentially between two points, right within Altium Designer. Net, layer, and X,Y coordinates are updated in real time, along with the probe value to ensure that the correct point is "picked". The pick points are marked graphically in 2D/3D and can be easily added to the HTML report.



LICENSE TYPES:

- On-Demand
- Standalone
- Private Server

MINIMUM SYSTEM REQUIREMENTS:

- Windows 64-bit system
- Altium Designer 17.0 or later

Want more information? Visit Altium.com/pdna