

## SphinxDC – DC analysis simulator

for Signoff

The BEST just got BETTER!

SphinxDC allows users to expand their analysis down to DC. By simply using a different solver, users can use the Sphinx platform to increase their analysis capability.

### Benefits to users:

The M-FDM methodology is very accurate and efficient, which allows for faster simulation results and more complex design analysis. User is not required to decide between: Frequency OR DC analysis. They can have it all with a single Sphinx platform.

Ensures that suitable DC levels at the voltage and ground terminals are suitable for operation preventing:

- Reliability issues causing functional failures
- Excessive IR drops causing unexpected Joule heating effects
- Signal IR drops causing receiver latching failures, most prominent in meandering or serpentine transmission lines that are difficult to analyze

“What if” analysis is supported by allowing users to modify their existing designs by adding layers, transmission lines and vias. If Users are contemplating migrating a design to another process, DC analysis can be performed first to ensure that the Power Delivery Network (PDN) is capable of supporting current requirements before investing more resources to migrate. Analysis significantly reduces analysis and design verification resources and time required.

As with Sphinx for Signoff, SphinxDC is integrated in our scripting console, Sphinx Console, allowing non-graphics operations to be performed in batch mode requiring less memory and significantly less time to complete especially for repeated operations.

Users can import their design, perform edits, select mesh size and view all design information prior to Frequency and/or DC simulation allowing improved flexibility, accuracy, and transparency in our methods. Both Frequency and DC preparation are done at the same time allowing User to prepare design as intended for both analyses. Review once for both analyses and since it is the same design, the Frequency and DC databases are always synchronized. SAME tools and SAME process reduces time to learn.

Similar to Sphinx for Signoff, SphinxDC allows users to create a condensed Spice circuit for optimized DC analysis of power distribution networks which can be used in any Spice simulator for DC analysis. Allows the representation of sub-networks as a Spice netlist for system level simulation.

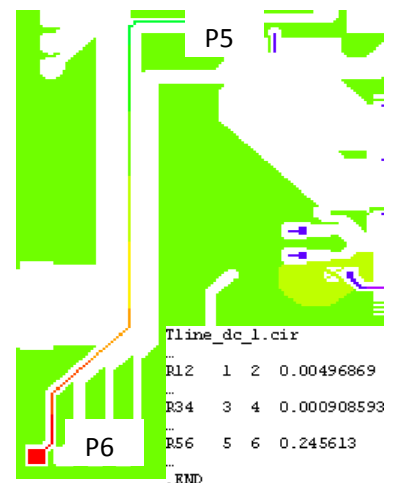
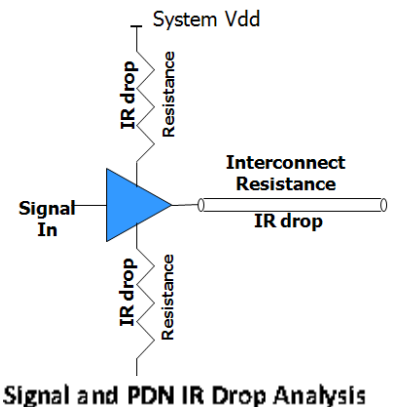
Sphinx supports MCM, BRD, SiP and DXF file formats and can easily be integrated with any existing CAD tool flows.

Support 32 and 64 bit Windows 7, Vista and XP enabling users to analyze large, complex designs.

SphinxDC for Signoff - Why not test drive today?

Available Today – contact [sales@e-systemdesign.com](mailto:sales@e-systemdesign.com)

Patent granted and others pending



### Power Delivery Network Analysis

