HYPERLYNX

Scalable high-speed PCB Simulation Tools

HyperLynx is a complete family of Analysis and Simulation tools for High-Speed electronic design including electrical design rule checking (DRC/ERC), signal integrity (SI), power integrity (PI) with integrated 2D/2.5D/3D electromagnetic modeling (3D EM).

HyperLynx lets you discover and correct problems earlier in your design cycle using advanced simulation techniques to predict how your design will behave.

Why choose HyperLynx?

| **Easy to use**	**Creates a Digital Twin of the product**	**Increases your chance of first-pass**	**Most complete solution for high-speed PCB**
HyperLynx combines ease of use with automated workflows to make high-speed design analysis accessible to mainstream system designers. This allows problems to be identified and resolved early in the design cycle. HyperLynx works with multiple PCB tools and is an ideal addition to any PCB design flow.	Building a "Digital Twin" of the product enables to validate product's performance by means of simulation in respect to manufacturing tolerances and operating corner cases resulting in the launch of fully reliable products that meet the specified operating conditions.	HyperLynx optimizes your design's performance and reliability. Pre-route design simulation lets you explore alternatives to make informed design decisions, while post-route verification lets you perform detailed sign-off analysis before committing a design to fabrication.	The HyperLynx family is provided by Siemens Digital Industries and furnishes a complete analysis flow that combines best-practice design rule checking with comprehensive signal and power integrity simulation. Integrated 3D EM solvers create highly accurate interconnect models.
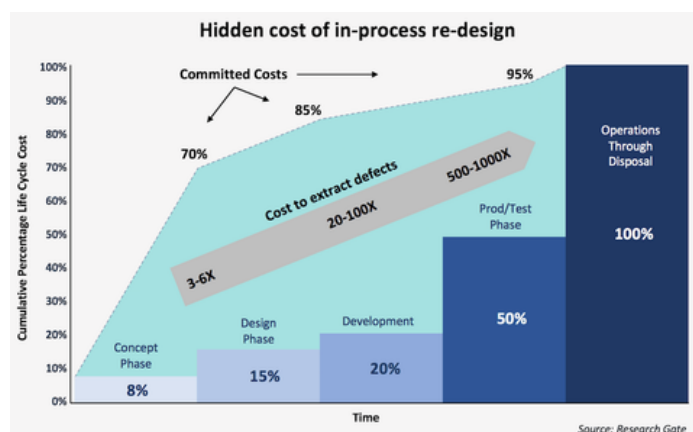
Inevitable re-design cycles in case of errors in physical prototypes lead to higher costs. HyperLynx enables you to reduce costs and get to market faster.

HyperLynx features for the most common problems

HyperLynx Fast 3D Solver

HyperLynx Fast 3D Solver is a 3D Electromagnetic Simulation Software that enables efficient, full package model creation with multi-processing for faster turnaround time. It is ideally suited for power integrity, low-frequency SSN/SSO, and complete-system SPICE model generation while accounting for skin effect impact on resistance and inductance.

HyperLynx Full-Wave Solver

HyperLynx Full Wave Electromagnetic Simulation solves from small, critical structures up to very high frequencies, typically for SerDes channels. Solver jobs can be distributed across all the cores in a computer and across multiple machines. The software enables faster results in solving the most difficult SI, PI, SSN and EMI problems.
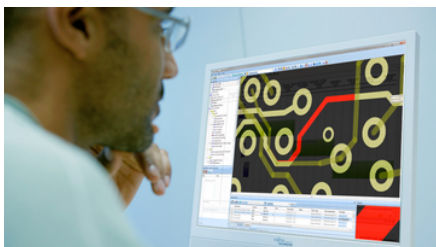
HyperLynx PI

Power Integrity Analysis with HyperLynx PI allows you to maximize design performance and minimize costs by analyzing the DC and AC behavior of your PCB's Power Delivery Network (PDN) in an easy-to-use, "what-if" environment.

HyperLynx DDR

HyperLynx DDR is an easy-to-use DDR simulator, guided by a wizard-based interface, which provides powerful analysis for PCBs with DDR memory greatly reducing validation and debug cycles. HyperLynx DDR Simulate with any number of DRAM devices, from single-memory to multiple-memory modules/slots – including low-power variants.

HyperLynx DRC

HyperLynx DRC Design Rule Check is a **Siemens** tool that provides fast, automated electrical design rule checking and supports iterative design inspection. It ensures design rule compliance with analog, EMI, IC packaging, power integrity, signal integrity and electrical safety requirements.