

HYPERSIM

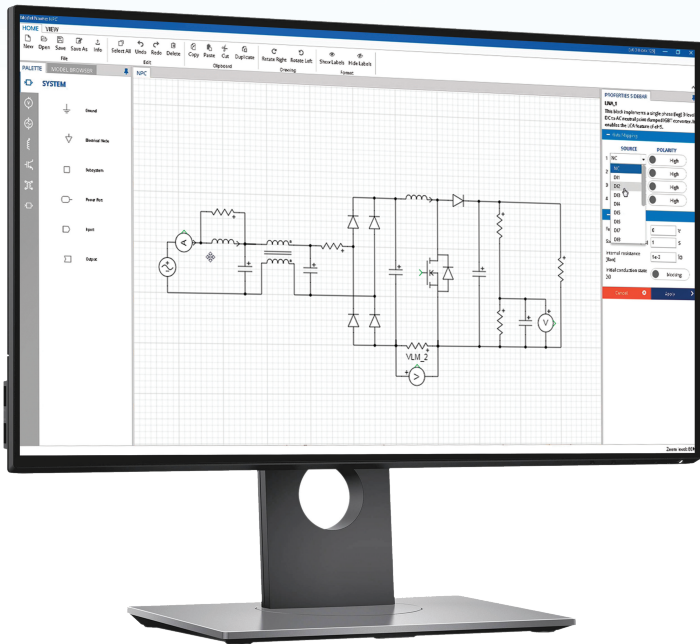
eHS Power Electronics Solver for HYPERSIM®

RUNS MODELS AND SIMULATIONS ON OUR LEADING PLATFORM

OPAL-RT presents **eHS** our Power Electronics Solver on HYPERSIM: a hybrid CPU and FPGA platform showcasing a powerful nanosecond solver.

Our optimized, real-time, power electronics solver (**eHS**) for electrical and electronic test applications, now runs on our flagship simulation tool.

HYPERSIM, the leading platform for power systems, now delivers even more strength and versatility as a high-end simulator.



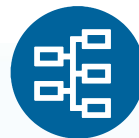
Renewable energy conversion



Industrial drive systems



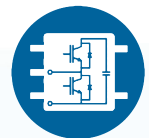
Microgrid



Electric drive transportation simulation



Power electronics research



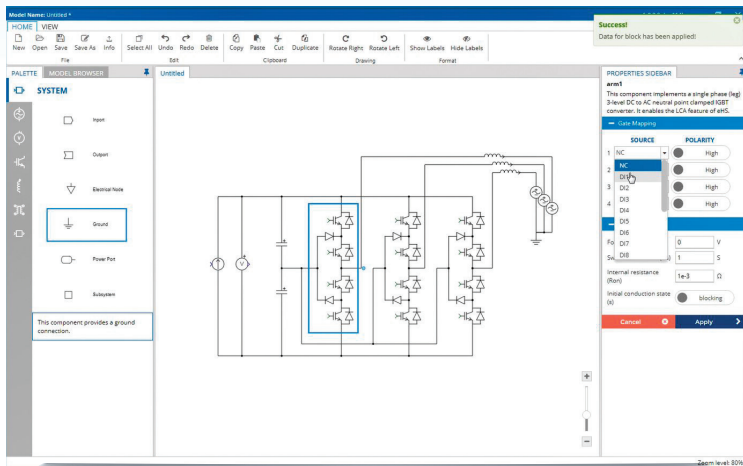
FACTS

Bringing power electronics and power system real-time simulation to the next level



INTRODUCING OPAL-RT'S SCHEMATIC EDITOR

Our new Schematic Editor is a **streamlined user interface** enabling users to bring power electronic models to real-time simulation using the full-featured block set.



- Eliminates costly third-party modelling tools
- Creates professional power electronic circuits
- Manages analog and digital I/O assignment through the interface
- Easily integrates power electronics solving to HYPERSIM

THE BEST OF BOTH WORLDS

eHS x128

- Powerful floating-point solver facilitates simulation of an electric circuit on FPGA, without needing to write mathematical equations.
- Capacity to run up to 144 coupled switches* per eHS core for real time simulation fidelity, without artificial delays.
- PWM frequencies input and output up to 200 kHz, the fastest power electronic solver in the industry.
- Very low latency from PWM inputs to analog output: crucial for the accuracy of fast HIL control systems.

HYPERSIM

- Real-time simulation of vast power systems: more than 5,000 3-phase buses on a single simulator, without sacrificing precision.
- No need to waste time manually splitting models on available cores; HYPERSIM optimizes models to run on available resources.
- Prepare your model on a laptop, offline if desired, and benefit from the full speed of all available cores.
- Test automation tool reports: run thousands of tests overnight and records the results (including mathematical analysis) for later review.

*All eHS versions will be available soon

ABOUT OPAL-RT TECHNOLOGIES

OPAL-RT is the world leader in the development of PC/FPGA Based Real-Time Digital Simulator, Hardware-In-the-Loop (HIL) testing equipment and Rapid Control Prototyping (RCP) systems to design, test and optimize control and protection systems. used in power grids, power electronics, motor drives, automotive industry, trains, aircraft and various industries, as well as R&D centers and universities.



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