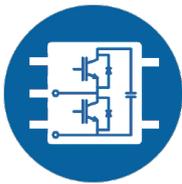


Easily Bring Power Electronics Models to Real-Time Simulation



OPAL-RT's new Schematic Editor is an intuitive user interface for building power electronics and is a part of eHS, the fastest FPGA-Based power electronics toolbox in the industry. It provides an advanced graphical editor and is integrated with OPAL-RT's & NI's real-time simulation platforms.



Design power electronics models with ease through drag and drop components



Interact with a streamlined GUI, and a fast simulation workflow to bring models to real-time simulation



Manage analog and digital I/O assignment through the interface

Button Header

Complete diagram actions quickly and easily.

Library & Model Browser

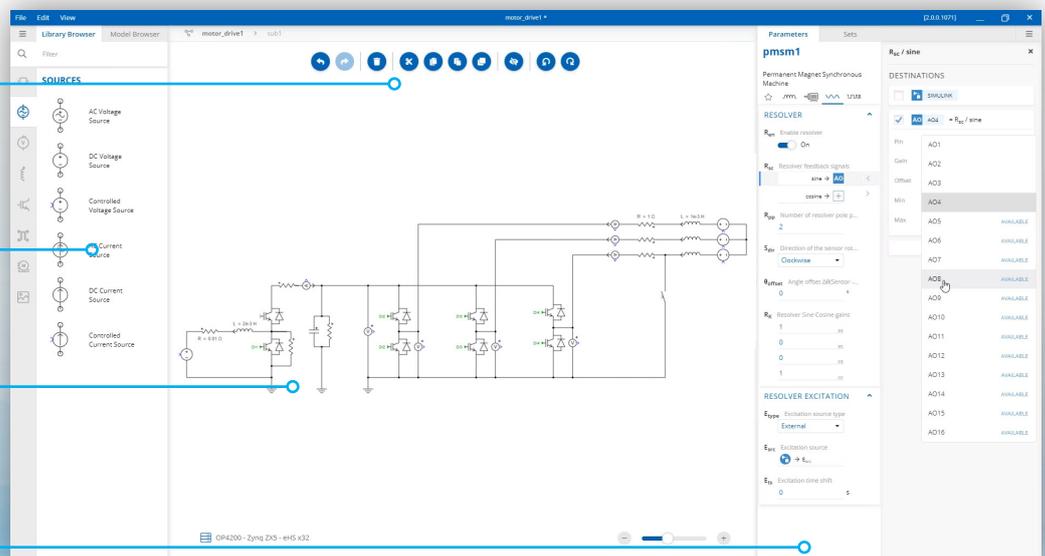
Integrate power electronics models with drag and drop components.

Work Area

Easily assembled and manipulated models.

Parameters Side Bar

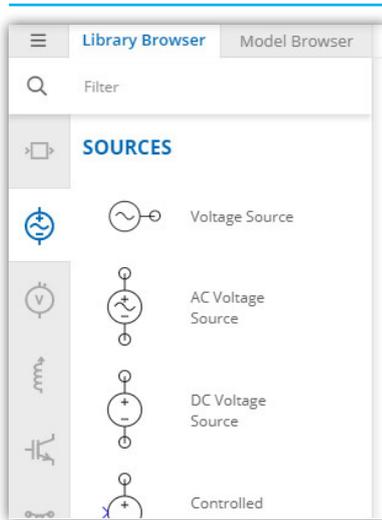
Edit parameters of the selected components.



OPAL-RT's Schematic Editor: Flexible & Intuitive

Library & Model Browser

Easily integrate power electronics models with drag and drop components.



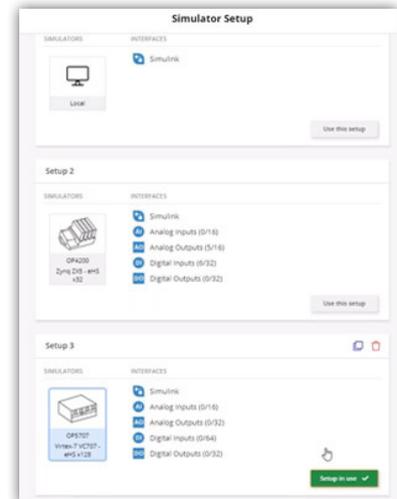
Parameter Sets

Select and apply parameter sets to test the model under various conditions during simulation.

| Parameters | | Sets | | |
|-------------|----------|--------|--------|--------|
| Name | Default | Set 1 | Set 2 | Set 3 |
| Id | 0 | 1 | 2 | 3 |
| arm1 | | | | |
| Gs | 1 [S] | | | |
| Ron | 1e-3 [Ω] | 2e-2 | 3.5e-4 | 3.7e-4 |
| Vf | 0 [V] | | | |
| I1 | | | | |
| L | 1e-3 [H] | 1 | 2 | 3 |
| IO | 0 [A] | | | |
| rlc1 | | | | |
| R | 1 [Ω] | 1.3 | 1.5 | 1.8 |
| L | 1e-3 [H] | 1.1e-3 | 2e-3 | 2.4e-3 |
| IO | 0 [A] | | | |
| C | 1e-5 [F] | | | |
| V0 | 0 [V] | | | |

Real-Time Simulator Setup

Access Setup for connection of analog and digital I/Os to the circuit measurements and control.



eHS: The Fastest FPGA-Based Power Electronics Toolbox in the Industry

Integrated directly with both OPAL-RT's & NI's real-time simulation platforms, eHS (OPAL-RT's FPGA-based Power Electronics Toolbox) is a powerful simulation tool for Hardware-in-the-Loop (HIL) testing.

eHS easily enables the running of test sequences and on-the-fly changes to simulation parameters by using the Test Scenario feature. It allows the test engineer to jump from one set of component values to the next without stopping the simulation, and is the perfect system for all types of electrical conversion test applications.

From Modelling to Real-Time Simulation in Three Steps



1. Develop your power electronics diagram with Schematic Editor, or with your favorite circuit editor*.

2. Then, configure your I/O channels and compile your model for sub-microsecond time steps.

3. Finally, execute the real-time simulation and perform manual and automated tests.

* Supported circuit editors: Simscape Electrical™, PLECS, PSIM and NI Multisim.

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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