

FPGA-Based Power Electronics Add-On for NI VeriStand

Comparison Chart

Features	eHSx64	eHSx128
Targeted platforms	PXle-7868R (1x, 2x)	PXle-7868R + PXle-7976R + PXle-7971
Number of eHS core available	1/2	1/2
Number of inputs	32	128
Number of outputs	32	128
Number of switches	72	144
LCA capability*	Yes	
Maximum number of states**	150	300
Number of resistors	Unlimited	
Switches type supported	IGBT/Diode, Diode, Breaker, Thyristor, Ideal Switch	
Non-switching devices supported	Resistor, Inductor, Capacitor, Ideal Transformer, Mutual inductance, PI Line	
Calculation power	25.6 GFLOPS	51.2 GFLOPS
Maximum number of test scenarios***	Up to 512 scenarios	
Circuit editors compatible	Simscape Electrical™ (formerly SimPowerSystems™ and SimElectronics®), PLECS, PSIM and NI Multisim	

* LCA stands for Loss Compensation Algorithm. This feature optimizes losses for standard topologies such as 2-level converter and NPC 3-level converter arms.

** Estimated values. The maximum number of states depends on the number of inputs and outputs that needs to be computed as well. There is no hard coded limit.

*** The number of scenario available for a given circuit depends on the circuit complexity.

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.