FPGA-Based Power Electronics Add-On for NI VeriStand

Comparison Chart

Features	eHSx64	eHSx128
Targeted platforms	PXIe-7868R (1x, 2x)	PXIe-7868R + PXIe-7976R + PXIe-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.