

NEWS RELEASE

Power Integrations' New SCALE-iFlex LT Plug-and-Play Gate Driver Improves EconoDUAL IGBT Module Performance by 20%

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New gate driver eliminates one in six modules; substantially reduces system complexity

SAN JOSE, Calif.--(BUSINESS WIRE)-- Power Integrations (Nasdaq: **POWI**), the leader in gate-driver technology for medium- and high-voltage inverter applications, today announced its new plug-and-play **SCALE-iFlex™ LT** dual gate-drivers. The new drivers improve the performance of multiple parallel EconoDUAL modules by 20%, allowing users to eliminate one of every six modules from power inverters and converter stacks. In addition to saving the cost of the driver and module, this reduces control complexity and costs related to modules, wiring, hardware, and heatsinking. SCALE-iFlex LT targets multiple applications in renewable energy generation and storage, and is particularly applicable to offshore wind turbines in the 3 to 5 MW range.

SCALE-iFlex LT plug-and-play gate driver improves IGBT module performance by 20%; targeting multiple applications in renewable energy generation and storage, and is particularly applicable to offshore wind turbines in the 3 to 5 MW range. (Graphic: Business Wire)

Thorsten Schmidt, product marketing manager at Power Integrations commented: "Dynamic and static current sharing is critical for robust

operation of modules arranged in parallel. For the same power output, systems using SCALE-iFlex LT require just five parallel modules whereas competitive approaches need six. This substantial saving of cost and complexity is achieved by guaranteeing less than 20 ns of variance in turn-on and turn-off commands between modules and less than 20 A of variance between modules when conducting the rated 600 A. This allows the modules to operate reliably without current derating, which is obligatory with less advanced driver solutions."

Up to six EconoDUAL 3, or equivalent, power modules can be paralleled from the same Isolated Master Control (IMC) unit which has a more compact outline than conventional products. The Module Adapted Gate drivers (MAGs), which fit the footprint of the EconoDUAL module, each featuring two SCALE-2 ASICs – one per channel – to optimize symmetrical paralleling, efficiency and protection.

The new **SCALE-iFlex LT** gate-driver modules reduce switching losses by three to five percent, due to the fast turn-on and turn-off of the SCALE-2 ASIC which features an integrated booster stage. Power Integrations' Advanced Active Clamping (AAC) protection enables higher DC link voltages to be achieved. A full suite of other protection features, including short-circuit, are provided. Drivers feature reinforced isolation to 1700 V and may be ordered naked or conformally coated.

As well as renewable energy, other applications include power quality, commercial air-conditioning units and medium-voltage drives. The new SCALE-iFlex LT gate drivers are available now. For more information, please visit www.power.com/scale-iflex-lt.

About Power Integrations

Power Integrations, Inc. is a leading innovator in semiconductor technologies for high-voltage power conversion. The company's products are key building blocks in the clean-power ecosystem, enabling the generation of renewable energy as well as the efficient transmission and consumption of power in applications ranging from milliwatts to megawatts. For more information please visit www.power.com.

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