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CSE: HEAT
OTCQB: HLRTF
FRA: 7HI

Hillcrest Energy Technologies to Launch FPGA-Based Control System

VANCOUVER, BC, November 7, 2024 – Hillcrest Energy Technologies (CSE: HEAT) (OTCQB: HLRTF) (FRA: 7HI), a pioneering force in power electronics, is thrilled to announce the anticipated launch of its FPGA-based control system for Zero Voltage Switching (ZVS) inverters by the end of this year. The ability to offer this control system in addition to the microcontroller option currently available for Hillcrest’s ZVS inverters satisfies a need expressed by several customers and is expected to generate additional commercial opportunities for the Company.

Revolutionizing ZVS Inverters with FPGA Technology

The new FPGA-based control system is specifically designed to optimize the performance of Hillcrest’s ZVS inverters, which are widely recognized for their ability to minimize switching losses and improve overall efficiency. By integrating Field-Programmable Gate Array (FPGA) technology, Hillcrest has developed a control system that allows for real-time processing and dynamic adjustment, ensuring that the ZVS inverter operates at peak performance under all conditions.

“Over the past year, we’ve fielded numerous requests from potential customers for an FPGA-based control system and we are proud to announce the expected delivery of this new option by the end of this year. Completion of this project represents yet another significant advancement in the ZVS inverter technology, offering enhanced efficiency, precision, and reliability for various high-performance power applications,” stated Hillcrest Chief Commercialization Officer, James Bolen.

Key Features and Benefits

Enhanced Efficiency: The FPGA-based control system maximizes the inherent advantages of ZVS technology which eliminates switching losses and increases overall system efficiency.

Real-Time Adaptive Control: Leveraging the inherent abilities of FPGAs, the system provides real-time adaptive control, allowing for precise modulation and adjustment based on varying load conditions.

Improved Reliability: The advanced ZVS algorithms implemented on the FPGA enhance the reliability and longevity of the inverter by optimizing the timing of the switching events, thereby reducing stress on the components.

Versatile Application: Suitable for a broad range of applications, including renewable energy systems, electric vehicles, and industrial power supplies, the FPGA-based control system offers expanded flexibility and scalability.

A Step Forward in Power Electronics

With the introduction of this FPGA-based control system for ZVS inverters, Hillcrest continues to lead the way in developing innovative solutions that meet the evolving needs of the power electronics industry. This new control system option underscores the Company's commitment to pushing the boundaries of technology and delivering products that offer superior performance and energy efficiency.

"Our new FPGA-based control system for ZVS inverters is a testament to our dedication to innovation and excellence in power electronics," said Don Currie, CEO of Hillcrest Energy Technologies Ltd. "This technology not only enhances the efficiency and reliability of ZVS inverters but also opens up new possibilities for energy management across a wide range of applications. We are proud to offer a solution that can contribute to more sustainable and efficient energy systems."

The FPGA-based control system for ZVS inverters will be available to satisfy customer requests by the end of the year. To book a demonstration or to learn more, please contact info@hillcrestenergy.tech.

About Hillcrest Energy Technologies Ltd.

Hillcrest Energy Technologies is a clean technology company focused on providing advanced power conversion technologies and digital control systems for next-generation powertrains and grid-connected renewable energy systems. From concept to commercialization, Hillcrest is investing in the development of energy solutions that will power a more sustainable and electrified future. Hillcrest is publicly traded on the CSE under the symbol "HEAT," on the OTCQB Venture Market as "HLRTF" and on the Frankfurt Exchange as "7HI". For more information, please visit: <https://hillcrestenergy.tech/>.

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