



onsemi and Ampt Collaboration Increases Efficiency for Utility Solar Providers

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onsemi's EliteSiC family of silicon carbide (SiC) technologies enhance performance of Ampt's DC optimizers

PHOENIX & FORT COLLINS, Colo.--(BUSINESS WIRE)--Jan. 5, 2023-- **onsemi** (Nasdaq: ON), a leader in intelligent power and sensing technologies, and **Ampt LLC**, the world's number one DC optimizer company for large-scale photovoltaic (PV) solar and energy storage systems, today announced their collaboration to meet the high demand for DC string optimizers. Ampt uses onsemi's [N-Channel SiC MOSFET](#), part of the EliteSiC family of silicon carbide (SiC) technologies, in its DC string optimizers for critical power switching applications.

Ampt string optimizers are used in large-scale PV power plants, enabling lower-cost and higher performing solar and DC-coupled energy storage systems that are collocated within the solar power plant. The string optimizers deliver power from the PV array at a high and fixed voltage for system voltages ranging from 600 to 1500 VDC, reducing the overall current requirements and cost of the power plant. Ampt optimizers enable higher round-trip – charging and discharging – efficiency in the energy storage system and solar power plant by leveraging onsemi's latest SiC MOSEFT technology with lowest ON resistance and switching losses.

"Incorporating onsemi's EliteSiC technology into our DC optimizers helps utility scale solar developers and owners improve their project economics," said Levent Gun, CEO of Ampt. "Clearly, the product performance was a critical decision point for us, but onsemi's technical support during the design phase and their ongoing supply assurance to support Ampt's rapid scaling are the hallmarks of a strong partner."

The EliteSiC device offers an $R_{DS(on)}$ of 80 m Ω nominally and a low gate charge (Qg) value of 56 nC along with lower Rg of 1.70hms. It is capable of operating at junction temperatures of 175°C, reducing the thermal management requirements in applications, resulting in smaller, lower cost solutions.

"The combination of performance and reliability of our EliteSiC technology enables efficient and dependable DC optimizers and is what an industry leader such as Ampt expects," said Simon Keeton, executive vice president and general manager, Power Solutions Group, onsemi. "We look forward to a continued collaboration on new products that drive renewable energy applications forward on our journey to a sustainable ecosystem."

About onsemi

onsemi (Nasdaq: ON) is driving disruptive innovations to help build a better future. With a focus on automotive and industrial end-markets, the company is accelerating change in megatrends such as vehicle electrification and safety, sustainable energy grids, industrial automation, and 5G and cloud infrastructure. **onsemi** offers a highly differentiated and innovative product portfolio, delivering intelligent power and sensing technologies that solve the world's most complex challenges and leads the way to creating a safer, cleaner, and smarter world. **onsemi** is recognized as a Fortune 500[®] company and included in the S&P 500[®] index. Learn more about **onsemi** at www.onsemi.com.

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About Ampt

Ampt delivers innovative power conversion and communication technology that are used to lower the cost and improve performance of new PV systems, repower existing systems, and enable lower cost DC-coupled storage. With installations and experience serving markets around the world, Ampt is the number one DC optimizer company for large-scale systems. The company is headquartered in Fort Collins, Colorado and has sales and support locations in North America, Europe, and Japan as well as representation in Asia, Australia, and the Middle East. For more information, visit www.ampt.com and follow Ampt@LinkedIn.

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