onsemi and Schaeffler Expand Collaboration with New EliteSiC-based PHEV Platform

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Traction inverter solution will use onsemi's next-generation EliteSiC to enable longer driving range and enhanced reliability for plug-in hybrid EVs

SCOTTSDALE, Ariz., July 24, 2025 (GLOBE NEWSWIRE) -- onsemi (Nasdaq: ON) today announced an expanded collaboration with leading motion technology company Schaeffler through a new design win that leverages onsemi's next-generation EliteSiC product line of silicon carbide MOSFETs. The onsemi solution will power the Schaeffler traction inverter for a leading global automaker's cutting-edge plug-in hybrid electric vehicle (PHEV) platform.

onsemi's EliteSiC technology offers significantly lower conduction losses and superior short-circuit robustness, enabling a compact, thermally efficient inverter design that enhances overall system performance. This silicon carbide-based solution offers the lowest on-state resistance to provide highest peak power compared to other SiC solutions in its class. These benefits allow Schaeffler to deliver an innovative traction inverter system that achieves measurable benefits to the end customer, including:

- Longer driving range, enabled by higher energy conversion efficiency
- Enhanced reliability, for consistent operation with lower maintenance
- Optimized form factor, allowing greater flexibility in vehicle design

"The traction inverter is at the heart of every electrified drivetrain, and onsemi's EliteSiC solution plays a vital role in achieving the efficiency and performance targets that our customer demands," said Christopher Breitsameter, Head of Business Division Controls at Schaeffler.

As automakers increasingly prioritize energy efficiency and performance, the industry is turning to more advanced hybrid architectures even in cost-sensitive EV platforms, a market traditionally dominated by insulated-gate bipolar transistors (IGBTs). onsemi's role as an industry leader in silicon carbide positions it at the forefront of this transition, enabling Schaeffler to deliver an EV system that meets stringent performance and packaging requirements.

"As the exclusive silicon carbide supplier for this program, onsemi continues to strengthen its position as a trusted innovation partner for leading global automotive players," said Simon Keeton, Group President, Power Solutions Group, onsemi. "Our industry-leading silicon carbide semiconductor technology delivers unmatched efficiency, thermal performance, and power density—key enablers for next-generation electric powertrain systems not only for battery electric vehicles, but also for plug-in hybrid platforms."

This new milestone builds on the existing long-term collaboration between onsemi and Schaeffler (formerly Vitesco Technologies), extending the companies' multi-year collaboration and reinforcing their shared commitment to delivering high-efficiency electric mobility solutions.

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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 included in the Nasdaq-100 Index® and S&P 500® index. Learn more about **onsemi** at www.onsemi.com.

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