Visteon®

NEWS RELEASE

Supporting AutoTech's Electric Evolution with Innovation and Talent

2021-07-02

By Dr. Tao Wang, Visteon electrification lead

As the global automotive industry undergoes a once-in-a-century transformation, Visteon is using its **automotive electronics capability** to support the global growth of electric vehicles.

I arrived here after more than 10 years of designing, developing and improving General Motors' electrification strategy and around a decade of experience in energy storage and locomotive propulsion systems at General Electric. Using those experiences and the knowledge I've gained to cultivate a larger electrification capability at Visteon is an exciting opportunity that will support a multitude of automakers around the world.

As our company's electrification business evangelist, I am responsible for developing our global strategy for technologies related to electrified system. Our goal is to support the electrification revolution of our global automotive customers. We are working to build on our core expertise in battery management systems (BMS) and grow Visteon's capabilities beyond the **wireless BMS we announced last year** into a SmartBMS solution, capable of multi-dimensional battery environmental monitoring and advanced prognostic features.

WHAT IS BMS?

Visteon's wireless **BMS technology** replaces traditional wired connections with a highly secure and reliable wireless communication technology. Its components – the wireless cell monitoring units, a wireless network control unit,

and a battery control and vehicle interface unit – allow battery packs to be assembled without the need for a low-voltage wiring harness.

The system provides a platform to deliver highly accurate battery cell measurement, along with maximum energy use per cell required for better vehicle range. It supports multiple charging protocols and is intended to meet cost, weight and packaging requirements. We applied our cockpit electronics experience, **cybersecurity** and vehicle interface control modules to offer a holistic wireless BMS that improves time-to-market, design flexibility, battery pack energy density and manufacturing speed.

However, we don't do this alone. Automakers and battery cell suppliers typically develop the software algorithms that act on the information provided by the cell monitoring units. We integrate these algorithms into our system as part of the overall design and manufacture of the BMS solution.

WHO IS USING IT?

General Motors is our first wireless BMS customer and has scheduled our system to launch on multiple electrified models. Our solution will help ensure the scalability of the Ultium batteries across GM's future lineup, covering all brands and vehicle segments, from heavy-duty trucks to performance vehicles. A second global OEM followed suit and will use our wireless BMS on its EVs with launches starting in 2023. We are very excited about these wins, and look forward to presenting this cutting-edge solution to other automakers.

Our wireless BMS is quickly becoming a technology differentiator and market disrupter, validating our belief that this solution is a high-volume business opportunity in an electric vehicle market that will expand rapidly over the next 15 years. As our automotive customers work toward an electrified future, we anticipate our BMS expertise will lead to an array of additional business opportunities.

AUTOMOTIVE ELECTRONICS THAT ARE LARGELY POWERTRAIN AGNOSTIC

We are in a good positon to support the industry's shift to electrification because our cockpit electronics solutions – digital clusters, displays, infotainment, SmartCore domain controllers, etc. – are primarily powertrain agnostic. They work seamlessly for EVs as well as traditional gasoline and diesel-powered vehicles.

Our products are already on some of the world's most popular EVs including the **Renault Zoe**, which was the best-

selling EV in Europe last year. This year, our products will launch on multiple models based on new electric vehicle platforms including the BEV3 from GM, the PMA platform from Geely, and Nissan's new EV platform.

As global automakers continue to invest significantly in electrification and consumer demand continues to grow for more EV options, the number of EV models is expected to grow from about 140 to about 450 in 2025. By 2030, automakers expect to make more than 530 electric models available for sale as EVs grow to represent 25 percent of the total market.

RECRUITING TALENT TO DRIVE OUR SUCCESS

During this transition away from traditional internal combustion powertrains, Visteon is building its electrification team with the goal of expanding our business beyond battery management. Ultimately, our success will be driven by talent. This is why we are seeking leaders who can proactively identify and act on global opportunities – people who can build the kind of strategic partnerships required to establish our global electrification business growth.

We have already begun business development activities in Europe and China. In addition, we are currently exploring opportunities with charging and high-power electronics modules to expand our electrification influence. We will seek to extend our collaboration with key cell suppliers and technology leaders to better define platforms for broader application and develop state-of-the-art solutions to drive down component costs as we continue to transform Visteon into a groundbreaking technology company.

We look forward to providing automakers with advanced technologies that will shape and drive their electrified future and enable the growth of our company and employees. In so doing, we will help transform the automotive industry and our world.

LinkedIn

Twitter

Facebook

Email