



Press Release

March 13, 2026

Marelli's Zone Control Unit honored as "Engineering Product of the Year" at the Digital Engineering Awards 2026

Marelli's Zone Control Unit (ZCU) has received the "Commendable" honor in the "Engineering Product of the Year" category at the Digital Engineering Awards 2026, which recognizes global excellence in engineering innovation and digital transformation across the mobility industry. The award ceremony, hosted by L&T Technology Services in association with ISG and CNBC-TV18, took place in Boston, Massachusetts, USA, on March 12, 2026.

The ZCU was selected for its breakthrough role in simplifying vehicle electrical and electronic (E/E) architecture, reducing system complexity, and accelerating the transition toward software-defined vehicles through a unified, scalable, and future-ready platform. By moving beyond traditional domain-based architectures, Marelli's solution delivers full cross-domain control through a single Electronic Control Unit (ECU), enabling seamless communication across multiple vehicle zones while ensuring safe operations and high-speed data exchange.

*"This recognition for our Zone Control Unit makes me and all of us at Marelli truly proud," said **Ravi Tallapragada, President of Marelli's Electronics business.** "It reflects the impact of our work on supporting the industry's transition toward software-defined vehicles. By bringing cross-domain control into a single, scalable platform, our ZCU enables vehicle makers to innovate at speed. I want to congratulate our global engineering teams, whose dedication and expertise made this achievement possible."*

Marelli's ZCU supports next generation ethernet capabilities, virtualization technologies, hardware accelerators, remote-control protocols, and safety compliant software — essential enablers as next generation software-defined vehicles demand higher data throughput, increased connectivity, updateability and more advanced software integration. In addition, the ZCU accommodates 48V system requirements with dedicated power input and e-fuse-protected power output.

By replacing numerous dedicated ECUs and simplifying wiring layouts, the ZCU reduces wiring harness weight by approximately 30 percent compared to existing zonal control systems. This streamlined design lowers system complexity and enables a more efficient E/E architecture for future vehicles.

Using a service-oriented architecture (SOA), the ZCU allows each ECU to expose services that other modules can subscribe to, decoupling software development and improving scalability across different vehicle segments and markets. This approach enhances design flexibility and supports ongoing feature evolution throughout the vehicle's lifecycle. These architectural advantages also help vehicle makers shorten development cycles and simplify their supply chains.

Built on Marelli's EliteZone platform, the ZCU integrates next-generation microcontrollers, smart power switches, and communication interfaces into a unified solution that supports the transition toward software-defined vehicle ready architectures for vehicle makers worldwide.



Technical capabilities of the Marelli Zone Control Unit:

- Support for fail safe isolated multi-domain applications
- Processing performance up to 6 KDMIPS (Kilo Dhrystone Million Instructions Per Second)
- Two port Gigabit Ethernet (GbE)
- More than 20 CAN (Controller Area Network) and LIN (Local Interconnect Network) interfaces
- Integrated hypervisor
- Integrated Data Routing Engine
- Support for functional safety up to ASIL D (Automotive Safety Integrity Level D)

About Marelli

Marelli is a global mobility technology supplier to the automotive industry. With a strong and established track record in innovation and manufacturing excellence, our mission is to transform the future of mobility through working with customers and partners to create a safer, greener, and better-connected world. With around 40,000 employees worldwide, the Marelli footprint includes over 150 sites globally.