

MotionIQ™

CUTTING-EDGE SUITE: INTELLIGENT MOTION CONTROL SOFTWARE SOLUTIONS

Shaping the future of the software-defined chassis

Nexteer's MotionIQ™ software suite streamlines 'by-wire' chassis control, development and vehicle health-monitoring workflows into a single suite, delivering significant cost and time savings for OEMs across the automotive, off-road, commercial vehicle and other adjacent mobility sectors.

We're not just CREATING intelligent software solutions - we're rethinking how we DELIVER. Our agile, flexible approach allows us to quickly adapt to customers' software strategies, ensuring seamless collaboration – and tailored solutions that align with unique development goals.



MotionIQ/Control™

ELEVATE PERFORMANCE. ENHANCE SAFETY.

Advanced vehicle dynamics functions transform safety, performance & driving comfort through intelligent motion control software

SOLUTIONS: Steer-by-Brake, Quiet Wheel™ Steering, Hands-Off Detection, Road Surface Detection

- Revolutionizes "behind-the-wheel" experiences:
 Delivers enhanced performance, safety & comfort
- Brand differentiation: Enables OEMs to deliver tailored driving experiences that excite consumers

- Hardware-agnostic for seamless integration:
 Enables OTA updates & meets unique hardware requirements (ECUs, actuators, domain control units, high-performance computers, etc.)
- Award-winning software solutions: Many solutions are already deployed in vehicles on the road through Nexteer's EPS programs, as well as SbW development programs



MotionIQ/Health™

MONITOR MORE. MAINTAIN LESS.

Prognostics software enables smarter, data-driven maintenance that prevents failures before they happen & keeps vehicles on the road longer

SOLUTIONS: Prognostics, Tire Health& Tire Parameter Detection

- Enables proactive scheduled maintenance:
 Predicting issues before they occur allows for enhanced convenience & consumer satisfaction
- Improved vehicle uptime: Proactive maintenance is critical for fleets (buses, trucks, delivery vehicles) to prevent costly downtime & repairs
- Additional safety layer: Provides additional safety "layer" to complement hardware redundancies



MotionIQ/Dev™

DESIGN SMARTER. DEVELOP FASTER.

Advanced software tools – backed by Nexteer's systems integration & software development expertise – for speed-to-market & reduced costs

- Design It. Build It. No Coding Required:
 Our Model-Based Development Tool accelerates steering feature development from days to minutes through automated coding & integration
 - Empowers OEMs to safely design their own in-house steering features & seamlessly integrate – all in a model-based environment
 - Reduces costs, shortens production lead times & minimizes error-prone manual coding

- Early system-level verification: Complete testing & validation capabilities – with platforms ranging from Hardware-in-the-Loop simulation to Virtual ECU tools – for greater cost & time efficiencies
- Software development process: Certified ASIL D compliant with the ISO 26262 Functional Safety Standard and successfully assessed for ASPICE compliance
- Comprehensive systems engineering support:
 Dedicated to fostering strong partnerships
 by providing software development, integration, validation & systems engineering support
 with agility, responsiveness & quality

Nexteer, Your Motion Control Software Partner with Safety-Critical Expertise

- Proven industry leadership: 115+ million Electric Power Steering Systems with varying levels of software & cybersecurity per OEM requirements
- Global in-house ownership: Software design, development, testing & validation adheres to stringent levels of quality & compliance with customer specifications, industry protocols & regulations
- Vehicle integration & systems engineering: Decades of expertise in end-to-end integration of embedded automotive software - from stand-alone tools to full turn-key solutions



MotionIQ Software - The INTELLIGENCE POWERING Nexteer's Steering & Motion-by-Wire SOLUTIONS



Complete Electric Power Steering Suite

Modular, High Availability & High Output Options

Steer-by-Wire

In-house Handwheel Actuator, Roadwheel Actuator, Systems Software & Integration



Rear-Wheel Steering

Legacy as a pioneer of RWS-for-mass-production



Brake-by-Wire

Delivers digital, highprecision braking powered by actuators at each wheel

