



ZF and Mobileye Safety Technology Chosen by Toyota

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New deal extends both companies' reach in advanced driver-assistance solutions globally.

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What's New: ZF and Mobileye, an Intel company have been chosen by Toyota Motor Corp to develop advanced driver-assistance systems (ADAS) for use in multiple vehicle platforms starting in the next few years. As part of the agreement, ZF, one of the world's largest producers of automotive cameras driven by Mobileye technology, will also supply its Gen 21 mid-range radar and be responsible for the integration of camera and radar in Toyota vehicles.

"Mobileye is delighted to be working with ZF to develop leading driver-assistance and safety technology for Toyota, the world's largest automaker."

—Professor Amnon Shashua, senior vice president of Intel and president and CEO of Mobileye

Why It Matters: Mobileye and ZF continue to be a winning combination for the world's largest automakers because of their innovative approach to improving road safety with computer vision and machine learning-based sensing, localization, mapping and best-in-class lateral vehicle control technology for systems such as lane keeping/lane centering. This new relationship with Toyota, the world's largest automaker, marks the first time that ZF and Mobileye have been nominated with their ADAS systems for Toyota and significantly extends the reach of Mobileye and ZF safety technology to enhance safety and driver convenience functions on world roadways.

"ZF looks forward to working closely with Toyota and Mobileye to develop advanced safety systems designed to meet advanced global safety regulations," said Christophe Marnat, executive vice president, Electronics and ADAS division at ZF. "Our innovative technologies will deliver outstanding performance and robustness for fusion-based systems and ADAS functions."

How It Works: ZF and Mobileye will collaborate closely to produce advanced camera technology integrated with ZF radar technology to power key advanced driver-assistance platforms in Toyota vehicles. Mobileye's EyeQ®4, one of the most advanced application-specific vision computing system-on-chip (SoC) currently available, will be combined with ZF's Gen 21 mid-range radar technology to precisely interpret the environment around Toyota vehicles. Together, these technologies will help prevent and mitigate collisions while yielding best-in-class lateral and longitudinal vehicle control.

Mobileye's EyeQ4 applies enhanced computational capabilities with computer vision algorithms while rapidly processing information from the vehicle's front-facing camera. With a variety of feature sets including vehicle detection from any angle and next-generation lane detection, EyeQ4 enables automakers to take a major step forward in autonomy, achieving the ability to support and enhance complicated driving tasks.

ZF's Gen21 mid-range radar is a high-performance 77 GHz front radar designed to meet 2022+ Euro NCAP 5-Star Safety Ratings and enable L2/L2+ Automated Driving functions. It is scalable to vehicle manufacturer needs and offers both a wide field of view at low speeds to assist in pedestrian detection to support systems like automatic emergency braking (AEB) and a longer detection range at high speeds for systems like adaptive cruise control.