

Mobileye EyeQ6 Lite Launches to Speed ADAS Upgrades Worldwide

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Latest generation of pioneering system-on-chip and software already set to enable safety and convenience in 46 million vehicles

JERUSALEM--(BUSINESS WIRE)--Apr. 17, 2024-- Mobileye announced today it has delivered the first production-candidate hardware and software of its new EyeQTM6 Lite system-on-chip to its customers, which will power advanced driver-assistance systems in multiple models launching this year. This milestone marks the beginning of the EyeQ6 family, with the EyeQ6L already set to be installed in 46 million vehicles over the next few years – becoming the global auto industry's ADAS solution of choice from the start. It will be followed by the EyeQ6 High advanced system-on-chip, on track to launch in early 2025.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20240417952266/en/



The EyeQ6L will power advanced driver-assistance systems in multiple models launching this year (Photo: Mobileye)

The EyeQ6L builds on Mobileye's 25 years of pioneering work in automotive safety, computer vision, chip design and machine learning, which enabled the widespread adoption of automatic forward collision warning and emergency braking across the automotive industry. To date, more than 170 million vehicles worldwide have been built with Mobileye technology inside.

"With the EyeQ6L, the team has once again delivered a system-on-chip that enables sizable gains in performance, safety, and comfort features to our customers, without a material increase in price, as has been our pledge for many years," said Prof. Amnon Shashua, founder and CEO of Mobileye. "We know the power of ADAS to save lives and reduce traffic accidents globally, and with the EyeQ6L, automakers can meet regulatory requirements while delivering meaningful technology improvements to end users."

Many studies have found notable safety benefits from key ADAS technologies. The AAA Foundation for Traffic Safety has said technologies available today could prevent 37 million crashes, 14 million injuries and

nearly 250,000 deaths in the United States over the next 30 years if made standard on all vehicles. Other research by the Insurance Institute for Highway Safety has found that automatic emergency braking reduces front to rear crashes by 50 percent, and injury crashes by 57 percent, while pedestrian AEB cuts crashes by 27 percent and lane-departure warning reduces injury crashes by 21 percent. While about 7 out of 10 new vehicles worldwide are sold with some level of ADAS technology today, that share is lower in many high-volume markets, including China and India, where the full benefit of ADAS remains untapped.

Automotive safety advocates and regulators around the world have recognized the power of ADAS to save lives and reduce crashes, and the EyeQ6L was designed to meet not only current standards but future ones as well, from the European Union's General Safety Regulation and new car assessment programs (NCAPs) in dozens of countries, to U.S. regulations and insurance industry assessments, as well as ASIL-B level safety.

Benefits and Features for Drivers Worldwide

The EyeQ6L combines Mobileye's experience in designing automotive-grade processors and artificial intelligence/machine learning algorithms with its expertise in custom integrated software that optimizes performance and energy efficiency. Designed with two CPU cores and five high-compute density accelerators, the EyeQ6L provides 4.5 times more computing power than the EyeQ4M, at roughly half the physical space, with similar levels of power consumption – key elements for automotive use. The chip also improves pixel segmentation capabilities through a dynamic neural network with more than double the point density of EyeQ4M.

The EyeQ6L enables systems that can capture much more detailed data of the world around them with an 8-megapixel camera and 120-degree lateral field of vision, a 20-degree increase over the camera available with the EyeQ4M. The increased vision data also powers new environmental sensing and range capabilities; with EyeQ6L, vehicles can sense when roads are dry, wet or snowy and adjust emergency stopping distances accordingly, as well as detecting many types of objects at greater distances. The camera and processor updates enable several advancements to automatic emergency braking systems, such as an increased ability to monitor and react to other vehicles, pedestrians, or random road objects in complex situations – like a piece of furniture falling off a truck in an adjacent lane, or a cow sitting in the vehicle's path.

Mobileye has been an industry leader in pedestrian and cyclist detection, and the EyeQ6 builds on that record through new sensing and software

capabilities, improving vehicle response. The hardware and software power of EyeQ6L also enables upgrades to functions such as lane-keeping assist and automated lane change systems that can find not only the center of the current lane, but the next two lanes on either side of travel. Automated cruise control systems using EyeQ6 can now sense an upcoming curve and slow the vehicle as needed for passenger comfort.

Last year, Mobileye rolled out Intelligent Speed Assist upgrades for its EyeQ4M that could meet European standards for automatically reading and understanding speed limit signs – whether permanent or temporary signs. The EyeQ6L goes a step further by reading key text phrases on signage, like a speed limit that's only active on weekday mornings, or a city entrance sign that implies a lower speed limit. All this uses only computer vision and on-board software – not GPS or other external data sources.

"This is only the start of our journey with the EyeQ6L," said Nimrod Nehushtan, Executive Vice President of Business Development and Strategy for Mobileye. "Through continuous development, tools like EyeQ Kit™ and the ability to use over-the-air software updates, the EyeQ6 family has the ability to serve the industry for many years to come, making driving safer and more convenient for millions."

The other member of the EyeQ6 family, the EyeQ6 High, is set to enter series production early next year and power all of Mobileye's advanced automated driving technologies – from Mobileye SuperVision™ for hands-off, eyes-on driving, through Mobileye Chauffeur™ for hands-off, eyes-of driving, and Mobileye Drive™ autonomous driving in specified domains.

About Mobileye

Mobileye (Nasdaq: MBLY) leads the evolution of mobility with our autonomous driving and driver-assistance technologies, based on world-renowned expertise in artificial intelligence, computer vision, mapping, and integrated hardware and software. Since our founding in 1999, Mobileye has enabled the wide adoption of advanced driver-assistance systems while pioneering groundbreaking technologies such as REM™ crowdsourced mapping, True Redundancy™ sensing, Responsibility-Sensitive Safety™ (RSS™) driving policy and Driving Experience Platform (DXP). These technologies suppo a product portfolio structured for scale and designed to unlock the full potential of mobility, offering a range of solutions from premium ADAS to autonomous vehicles. By the end of 2023, about 170 million vehicles worldwide have been equipped with Mobileye technology. In 2022, Mobileye listed as an independent company separate from Intel (Nasdaq: INTC), which retains majority ownership. For more information, visit https://www.mobileve.com.

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ii https://www.iihs.org/media/290e24fd-a8ab-4f07-9d92-737b909a4b5e/HvOHjw/Topics/ADVANCED%20DRIVER%20ASSISTANCE/IIHS-HLDI-CA-benefits.pdf