MOBILEYE FACTS

- Founded in 1999 in Israel, Mobileye is still headquartered in Jerusalem, Israel.
- Mobileye has an innovation center in Jerusalem where nearly all of its engineers are located.
- Mobileye's technology was first launched on the roads with BMW, General Motors, and Volvo in 2007.
- Since then, after validating the accuracy and quality of our technology with more and more customers, Mobileye has secured production programs with 25+ automakers, in all regions, representing the vast majority of the auto industry.
- Listed on NYSE under ticker MBLY since August of 2014.
- Mobileye currently has approximately 660 employees, approximately 470 of which are working on Research & Development (as of 2016 year-end).
- At its core, Mobileye is a software company. But we also have a team of semiconductor engineers that designs the semiconductor chip on which our software is deployed.
- Mobileye's software-on-chip product called EyeQ® is the intelligence within cameras that enables Driver-Assist technology like Automatic Emergency Braking for Vehicles and Pedestrians, Lane Keeping and Support, Advanced Adaptive Cruise Control, Traffic Sign Recognition among many others.
- To date, Mobileye has launched three generations of EyeQ®, with EyeQ®4 (launching in 2018) and EyeQ®5 (2020) each already with booked customers. Due to a proprietary chip architecture, the EyeQ® family has extremely high computing density (operations per silicon area), resulting in low power consumption (<5 watts in all generations) which is required in the automotive industry. All EyeQ® software-on-chips were designed in partnership with ST Microelectronics N.V., who is also producing the chips to automotive grade quality.
- Revenue has increased from $19 million in 2011 to $358 million in 2016.
- We have sold approx 16 million chips in our history. This means 16 mln vehicles are on the road with our technology.

NEED TO KNOW

- Mobileye is the global leader in the development of computer vision technology for Advanced Driver Assistance Systems (ADAS) and autonomous driving.
- Today, Mobileye produces software that supports all major safety and convenience-related ADAS functions from a single camera sensor.
- Beyond ADAS, Mobileye designs AI software trained through deep learning to address the three pillars of autonomous driving: Sensing, Mapping (through REM™), and Driving Policy.
- Thanks to 17 years of R&D, 25+ automotive partners, 470 R&D employees, a 24 million mile database of full video collected through extreme prototype-testing, 16 million vehicles on the road and tens of millions pixels gathered per second, Mobileye is in pole position to be a critical enabler of Autonomous Driving.
- Mobileye is growing rapidly. We produced 1 million chips from 2007 to 2012. In 2016, we produced nearly 6 million – further penetration of ADAS technology promises continued growth.
- The first, truly crowd-sourced, high definition mapping technology called Road Experience Management (REM™) means that no road will be off limits to autonomous. Mobileye is mapping the world's roadways.

- Crowd-sourcing is enabled due to the rapidly increasing adoption of ADAS systems on vehicles, enabled by cameras on-board. Given that Mobileye has very high market share in this field, we are in best position to process the data collected by these cameras into a map that is a prerequisite for future autonomous vehicles.
- Mobileye technology processes data from 360-degree camera coverage around the vehicle to build an environmental model of the objects to be avoided, the free-space to operate, and the safe path to follow.
- Our technology is built to meet rigorous automotive-grade quality and safety standards.

MOBILEYE PARTNERSHIPS

- As our technology helps move the marketplace towards higher levels of automation, Mobileye has evolved from supplier to partner.
- Mobileye has ADAS programs with more than 25 automakers around the world, 5 programs for Level 3 Semi-Autonomous, and 5 programs for Level 4 Autonomous Vehicles, including with BMW and Delphi.
- In global collaboration with automakers, and through the data collected from millions of camera-equipped vehicles, Mobileye is teaching AI how to navigate our world.
- The road to autonomous enablement is collective intelligence and Mobileye has the most prolific industry partners.

HOW MOBILEYE TECHNOLOGY ADDRESSES THE 3 PILLARS OF AUTONOMOUS DRIVING

SENSING

- Reaching Level 3-5 Autonomous capability requires better cameras, faster chips, and the software inside to process an unfathomable amount of data into an understandable model of the environment around a vehicle. To interpret the world around the vehicle just like the human eye does.
- Mobileye works with its imaging partners to design better cameras. Today's cameras collect about 50 million pixels per second – tomorrow's will collect about 250 million pixels per second.
- To process the massive increase in data, Mobileye has developed our next-generation EyeQ®4 advanced vision computing Software on Chip (SoC) which processes 2.5 trillion operations per second (Tera-OPS) vs. 0.3 on EyeQ®3. EyeQ®5 in 2020 will process 12+ Tera-OPS. And thanks to proprietary accelerator cores, these chips are very efficient in terms of power consumption…3-4 watts for EyeQ®4 and 5 watts for EyeQ®5.
- Due to the need for 360-degree vision coverage for Level 3-5 autonomous capability, cars will have more cameras – 8 cameras that see in all directions, even better than the human eye.
- Mobileye's next generation software will be the only one able to identify objects in 3D – instead of just seeing rear and front of vehicles, we can identify all sides, to better understand angle and direction.
- Improved software through new deep learning techniques allows Mobileye to better classify road boundaries – vehicles can determine a safe path even on roads with no lane markings, at night, or covered with snow.
- And to detect difficult to see objects like cyclists and small objects on the road.

MAPPING

- High-precision maps (significantly more accurate than GPS) are a prerequisite for safe autonomous driving. And these maps must be rapidly updating to reflect the constant changes in the environment ("Time to Reflect Reality" must be short).

- Crowd-sourcing is a must. Mobileye is the only company we know of with both the crowd (millions of camera-equipped ADAS vehicles) and the ingenuity to compress the data small enough to communicate over wireless networks (10kb per km / entire US map on ~64gb's of data).
- 16 million ADAS vehicles are already equipped with Mobileye cameras and chips – these are the types of vehicles that will become the data collectors that build the crowd-sourced, rapidly updating autonomous map. And because these vehicles were going on the road anyway, REM™ is an extremely low-cost solution.
- We have secured commitments to generate REM data out of camera-equipped ADAS vehicles from multiple automakers (totaling 2 million vehicles harvesting data by 2018 year-end), multiple commitments to use REM data for localization mapping (beginning with a Level 3 program with an Asian OEM in 2018), and commitments to allow us to merge REM-generated data from multiple automakers to create the Global RoadBook™ (agreements with Volkswagen and BMW announced in February 2017).

DRIVING POLICY

- Our Deep Network-enabled Reinforcement Learning algorithms form the basis of a new class of machine intelligence – one capable of mimicking true human driving capabilities while maintaining strict functional safety boundaries. Mobileye has named this Driving Policy.
- Mobileye have a unique approach to the development of Driving Policy technology – the last piece of the autonomous driving puzzle. This technology will teach autonomous vehicles human intuition (i.e. cultural driving habits) to go along with their super-human ability to see in all directions and react in microseconds.
- Autonomous vehicles need to be endowed with the artificial intelligence to safely interact and negotiate with the other vehicles on the road.
- Along with our proven legacy in vision sensor processing and a unique mapping solution, Mobileye's approach to Driving Policy was an important factor in us securing 5 fully-autonomous vehicle programs (including partnerships with BMW and Delphi).