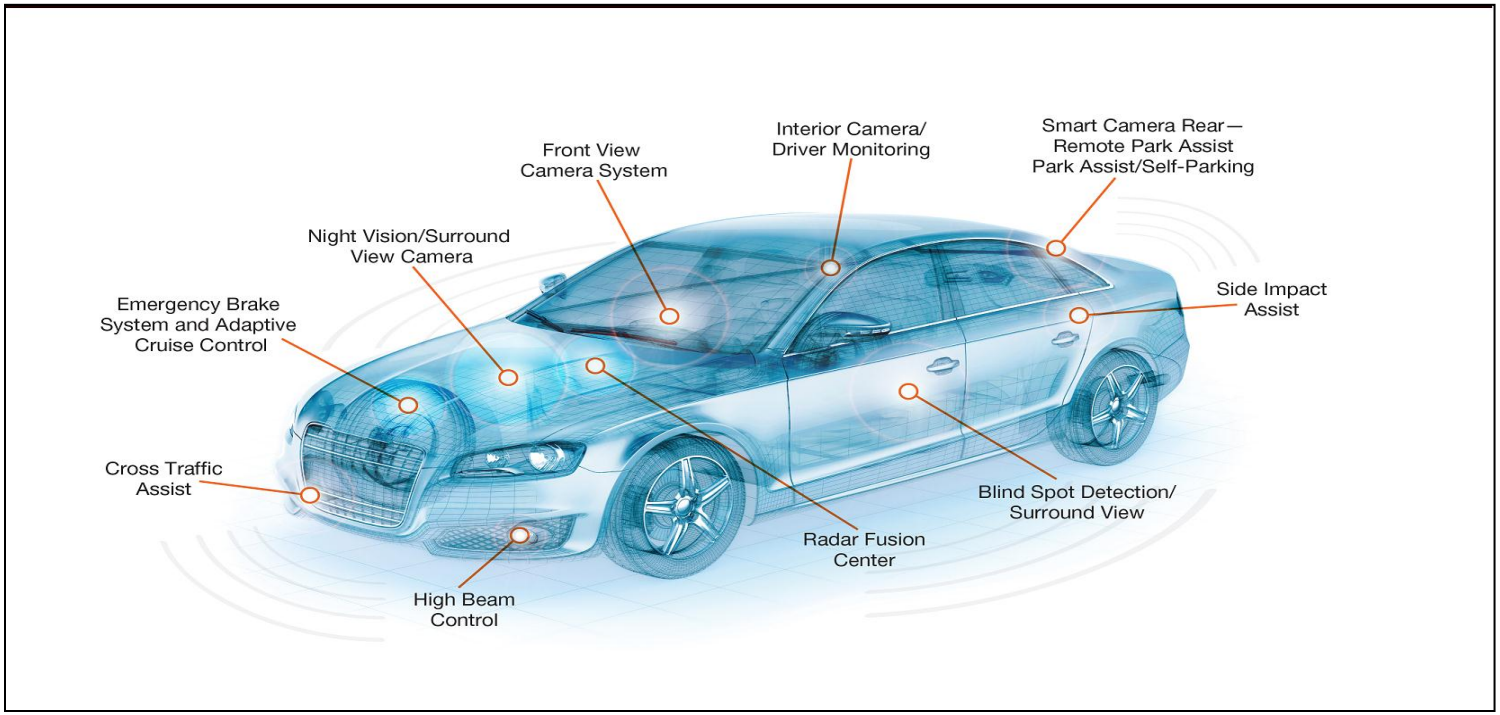
Global Advanced Driver Assistance System (ADAS) Market-Focus on Autonomous Semiconductor (2016-20)

August 2016



Daedal Research

View Report Details

Scope of the Report

The report titled "Global Advanced Driver Assistance System - Focus on Autonomous Semiconductor: Size, trends and Forecasts (2016-2020)", provides an in-depth analysis of the global autonomous driving market with focus on ADAS functions, components and applications. The report also provides an insight on use of semiconductors in autonomous driving and ADAS. Growth of ADAS and Autonomous driving Semiconductor market has also been forecasted for the period 2016-2020, taking into consideration the previous growth patterns, the growth drivers and the current and future trends. The report also includes detailed analysis of leading players in the autonomous semiconductor ADAS industry including Mobileye N.V., NXP Semiconductor N.V. and NVIDIA Corporation on the basis of attributes such as business overview, recent developments, financials and strategies adopted by the market leaders in order to ensure growth, sustainability, etc.

Company Coverage

- Mobileye N.V.
- NXP Semiconductor N.V.
- NVIDIA Corporation

Executive Summary

Autonomous vehicles refer to driverless cars which are capable of sensing the environment without human intervention. Autonomous driving can be fully autonomous or semi autonomous, depending on the control provided to the driver. Advanced Driver Assistance

Systems, or ADAS, are systems which helps the driver in the driving process. These are also known as level 1 autonomous driving. ADAS is the predecessor to autonomous driving as the growth and development of ADAS has been enabling the development of autonomous driving. ADAS applications, sensors and cameras monitor and collect data about the vehicle and surrounding environment, while processors are used to process the data and communicate to the rest of the car to act accordingly.

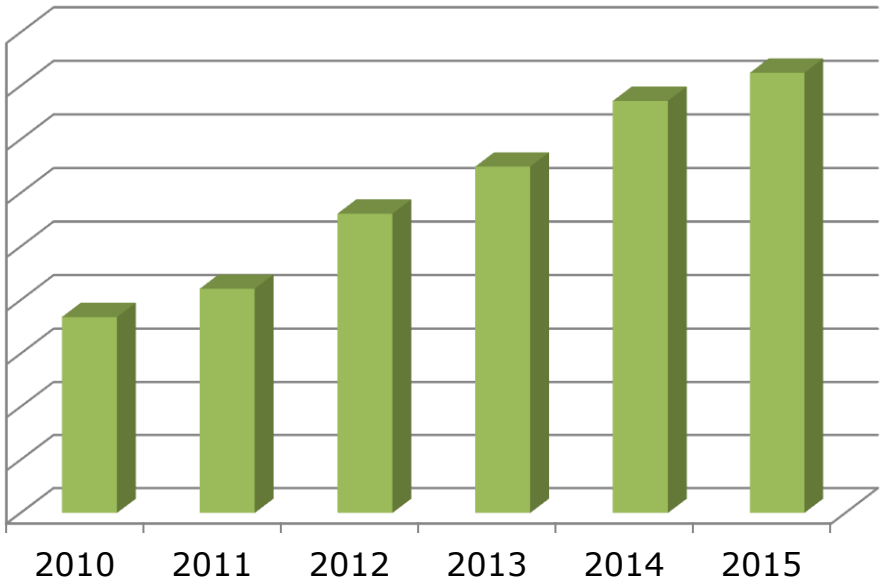
ADAS constitutes of major sensors like ultrasonic, camera and radar; actuators like ESC and EPS; and Systems like SPAS, LKAS, SCC and PCS. Some of the well-known and widely accepted ADAS features like Adaptive cruise control (ACC), Lane departure warning system (LDWS), Lane change assistance, Park assist, Collision avoidance system (Pre-crash system), etc. provide convenience and safety.

Global advanced driver assistance systems market is driven by subsequent rise in ADAS penetration in new vehicles, Strong focus on safety accompanied by government support and increase in driving experience provided by ADAS. However, factors such as limited functionality of sensors, system testing and validation challenge associated with ADAS, environmental impact on performance of ADAS and stringent demand for Semiconductor components are posing challenge to growth of the industry. Key trends prevailing in the industry includes focus of semiconductor companies on autonomous driving and Partnerships/Investments for Autonomous Driving Technology.

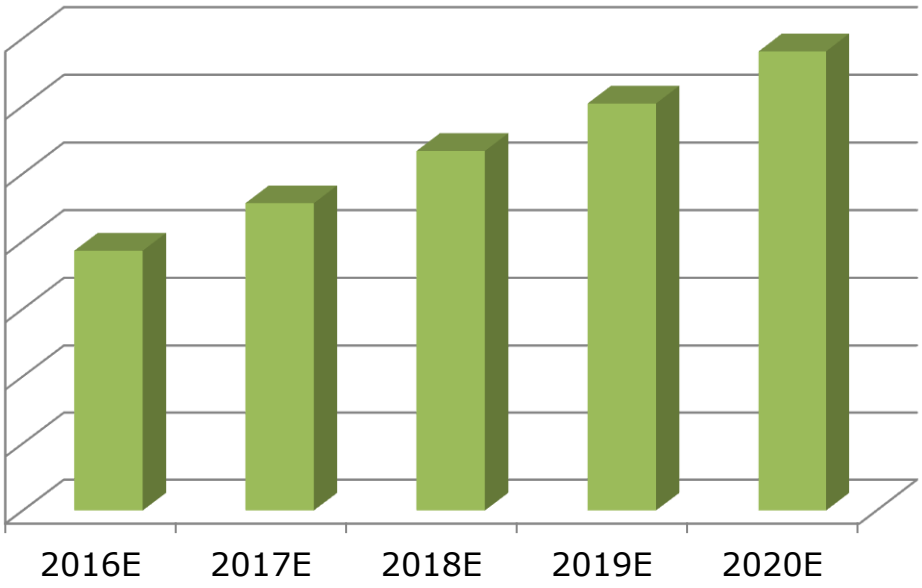
Global ADAS Semiconductor Market: Overview

Advanced Driver Assistance Systems, or ADAS, are systems which helps the driver in the driving process. The system increases car safety and road safety when designed with a safe Human-Machine Interface. Some of the common examples of such a system are adaptive cruise control and lane-keeping form the basis of highway auto-pilot, a semi-autonomous driving function.

Global ADAS Semiconductor Market Size by Value; 2010-2015 (US$ Billions)



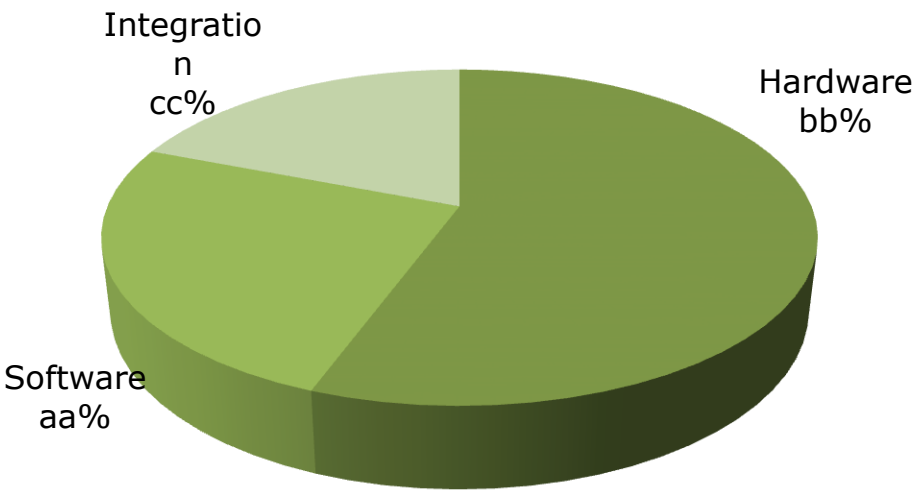
Global ADAS Semiconductor Market Size by Value Forecasted; 2016E-2020E (US$ Billions)



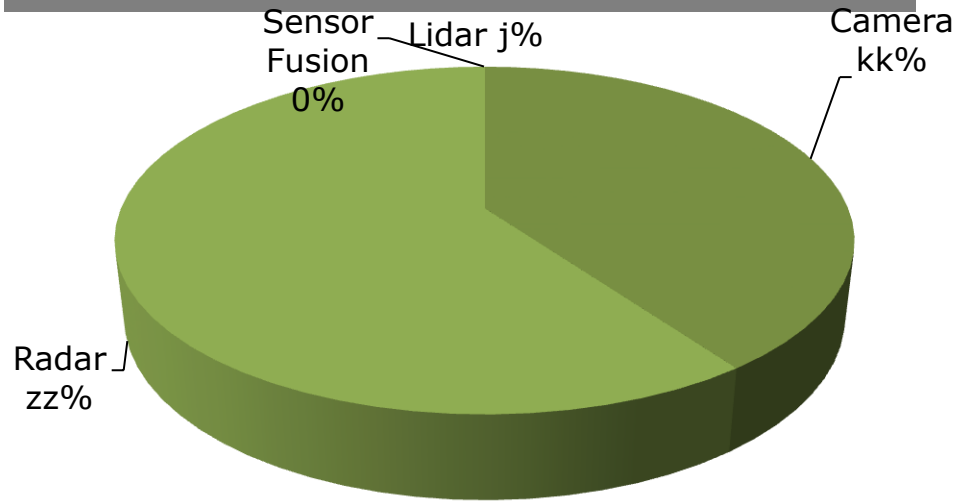
- Market size of global ADAS semiconductor market by value is expected to reach to US$…… billion in the year 2020, from US$…… billion in 2014 by growing at a CAGR of……%.
- Growth in the market is due to …….

Global Semiconductor Content by Segments

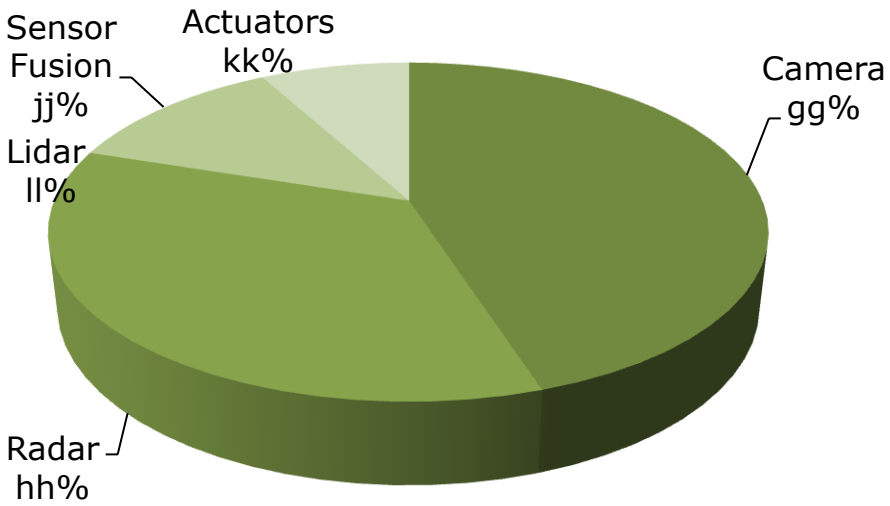
Global Autonomous System Content Share in ADAS, 2015 (US$/Vehicle)



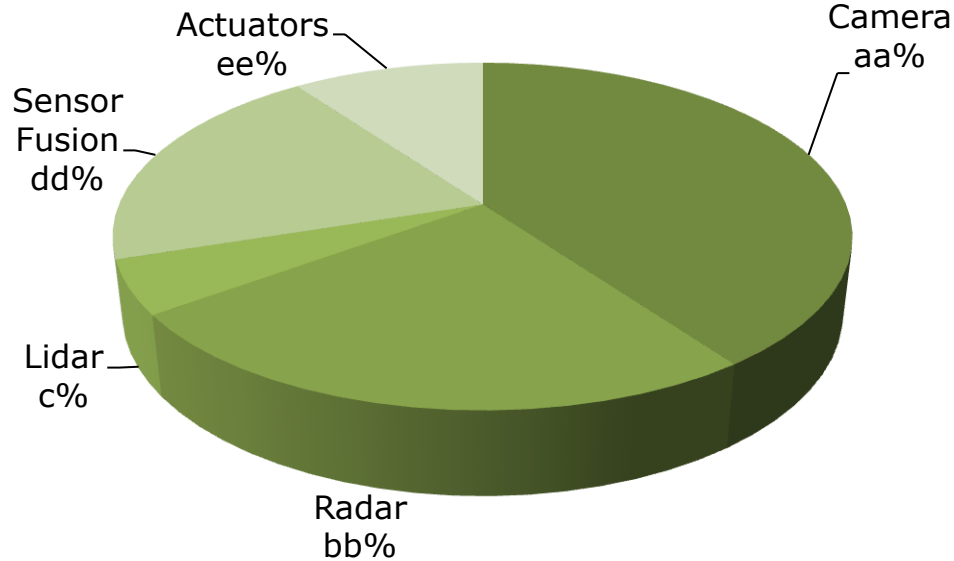
ADAS Semiconductor Content in Partial automation (Level 2), 2015



ADAS Semiconductor Content in High automation (Level 3), 2015



ADAS Semiconductor Content in Full automation (Level 4), 2015



Global ADAS Market Trends

Semiconductor Companies Focusing on Autonomous Driving

- .....
- .....
- .....
- .....
- .....

Partnerships/Investments for Autonomous Driving Technology

- .....
- .....
- .....
- .....
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