

# Global ADAS Market with Focus on Autonomous Semiconductor (2016-2020)

https://marketpublishers.com/r/G3B86944B37EN.html

Date: July 2016 Pages: 67 Price: US\$ 800.00 (Single User License) ID: G3B86944B37EN

# Abstracts

Scope of the Report

The report titled "Global Advanced Driver Assistance System (ADAS) Market with Focus on Autonomous Semiconductor (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.



# Contents

## **1. EXECUTIVE SUMMARY**

# 2. INTRODUCTION

- 2.1 Autonomous Driving: Introduction
- 2.1.1 Overview
- 2.1.2 Levels of Vehicle Autonomy
- 2.1.3 Benefits of Autonomous Driving
- 2.2 ADAS: Introduction
  - 2.2.1 Overview
  - 2.2.2 ADAS Applications
  - 2.2.3 ADAS Components
  - 2.2.4 ADAS Function Analysis
  - 2.2.5 Classification of ADAS Functionalities by Purpose
  - 2.2.6 ADAS Technology Analysis
  - 2.2.6 ADAS Technology Analysis
  - 2.2.7 ADAS Sensor and Application Map
  - 2.2.8 Summary of Image Sensors used in Autonomous Driving

# 3. GLOBAL MARKET ANALYSIS

- 3.1 Global ADAS Market: An Analysis
  - 3.1.1 Global ADAS Market Size by Volume
  - 3.1.2 Global ADAS Semiconductor Market Size by Value
  - 3.1.3 Global ADAS Semiconductor Market Size by Value Forecasted
  - 3.1.4 Global Autonomous Driving Semiconductor Market Size by Value Forecasted
- 3.1.5 Global Autonomous Driving Semiconductor Market Size by Volume Forecasted
- 3.2 Global ADAS Market Share: An Analysis
  - 3.2.1 Global Autonomous System Content Share in ADAS, 2015 (US\$/Vehicle)
  - 3.2.2 ADAS Semiconductor Content in Partial Automation (Level 2)
  - 3.2.3 ADAS Semiconductor Content in High Automation (Level 3)
  - 3.2.4 ADAS Semiconductor Content in Full Automation (Level 4)

# 4. MARKET DYNAMICS

#### 4.1 Growth Drivers

4.1.1 Rise in ADAS Penetration in New Vehicle



- 4.1.2 Strong focus on safety
- 4.1.3 Government Support
- 4.1.4 Increase in driving experience
- 4.2 Challenges
  - 4.2.1 Limited functionality of sensors
  - 4.2.2 System testing and validation challenge
  - 4.2.3 Environmental impact
  - 4.2.4 Stringent demand for Semiconductor components
- 4.3 Market Trends
- 4.3.1 Semiconductor Companies Focusing on Autonomous Driving
- 4.3.2 Partnerships/Investments for Autonomous Driving Technology

## 5. COMPETITIVE LANDSCAPE

#### 6. COMPANY PROFILE

- 6.1 Mobileye N.V.
  - 6.1.1 Business Overview
  - 6.1.2 Financial Overview
  - 6.1.3 Business Strategy
- 6.2 NXP Semiconductor N.V.
  - 6.2.1 Business Overview
  - 6.2.2 Financial Overview
- 6.2.3 Business Strategy
- 6.3 NVIDIA Corporation
  - 6.3.1 Business Overview
  - 6.3.2 Financial Overview
  - 6.3.3 Business Strategy



# **List Of Figures**

### LIST OF FIGURES

Table 1: Definition of Different Levels of Autonomy, and Associated Benefits and Requirements Table 2: Benefits of Autonomous Driving Figure 1: Components of Advanced Driver Assistance Systems Table 3: Classification of ADAS Functionalities by Purpose Table 4: ADAS Technology Advantages & Disadvantages Figure 2: ADAS Sensor and Application Map Table 5: Summary of Image Sensors Used in Autonomous Driving Figure 3: Global ADAS Market Size by Volume; 2013-20E (Million Units) Figure 4: Global ADAS Semiconductor Market Size by Value; 2010-2015 (US\$ Billions) Figure 5: Global ADAS Semiconductor Market Size by Value Forecasted; 2016E-2020E (US\$ Billions) Figure 6: Global Autonomous Driving Semiconductor TAM by Value Forecasted; 2017E-2020E (US\$ Millions) Figure 7: Global Autonomous Driving Semiconductor TAM by Volume Forecasted; 2017E-2020E (Millions) Figure 8: Global Autonomous System Content Share in ADAS, 2015 (US\$/Vehicle) Figure 9: ADAS Semiconductor Content in Partial automation (Level2), 2015 Figure 10: ADAS Semiconductor Content in High automation (Level 3), 2015 Figure 11: ADAS Semiconductor Content in Full automation (Level 4), 2015 Figure 12: ADAS Semiconductor Content in Full automation (Level 4), 2015 Table 6: EURO NCAP (New Car Assessment Program) Safety Standards Table 7: Government Spending Towards Autonomous Driving Table 8: Challenges for Semiconductor Producers and OEMs Table 9: Semiconductor Companies Focusing on Autonomous Driving Table 10: List of Recently Announced Partnerships/Investments for Autonomous Driving Table 11: Cooperating and Non-Cooperating Parts Suppliers Technology Figure 13: Mobileye N.V. Revenue, FY2011-FY2015 (US\$ Millions) Figure 14: Mobileye N.V. Revenue by Business Segment (FY2015) Figure 15: NXP Semiconductor Revenue, FY2012-FY2015 (US\$ Billions) Figure 16: NXP Semiconductor Revenue by Business Segment, FY2015 Figure 17: NVIDIA Corporation Revenue by Business Segments; FY2016 Figure 18: NVIDIA Corporation Revenue; FY2014-16 (US\$ Billions)



# I would like to order

Product name: Global ADAS Market with Focus on Autonomous Semiconductor (2016-2020) Product link: <u>https://marketpublishers.com/r/G3B86944B37EN.html</u>

Price: US\$ 800.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

# Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/G3B86944B37EN.html</u>