

# **Automotive Cybersecurity Market by Form (In-Vehicle, External Cloud Services), Offering (Hardware & Software), Security, Vehicle Type, Application, Propulsion, Vehicle Autonomy, Approach, EV Application and Region - Global Forecast to 2028**

<https://marketpublishers.com/r/AE4ACB59D0EEN.html>

Date: June 2023

Pages: 350

Price: US\$ 4,950.00 (Single User License)

ID: AE4ACB59D0EEN

## **Abstracts**

The global automotive cybersecurity market size is projected to grow from USD 2.5 billion in 2023 to USD 6.0 billion by 2028, at a CAGR of 18.5%. Rising demand for connected vehicles has increased the electronic content per vehicle. This raised a vehicle's vulnerability against a cyber-attack, which has increased the demand for automotive cybersecurity solutions across the globe. Moreover, the advent of software-defined vehicles and rising sales of electric vehicles are also expected to bolster the revenue growth of the automotive cybersecurity market in the coming years globally. The automotive cybersecurity market, however, is expected to witness a significant boost in the coming years owing to the increase in vehicle production in different countries, the launch of UNECE WP.29 regulation as well as various government regulations that have compelled automotive OEMs to install additional safety systems in vehicles for better safety.

The wireless network security segment is estimated to grow at a higher CAGR during the forecast period

During the forecast period, the wireless network security segment is anticipated to be the fastest-growing security type segment of the global automotive cybersecurity market. This segment will likely witness significant growth in the Asia Pacific region, followed by Europe and North America regions. . This is owing to the incorporation of V2X technology in vehicles and the rising demand for connected vehicles. Wireless network security solutions help to protect respective wireless networks from

unauthorized access attempts. Wireless network security is typically delivered through wireless devices such as wireless switches and wireless routers that encrypt and secure wireless communications. All these factors above are expected to bolster the revenue growth for wireless network security segment of the automotive cybersecurity market during the forecast period.

ADAS & safety system segment is likely to dominate the automotive cybersecurity market during the forecast period

The ADAS & safety segment is expected to have significant growth opportunities in the automotive cybersecurity market during the forecast period. The demand for ADAS is increasing rapidly, particularly in emerging economies such as India and China, driven by improving road safety standards, supporting legislation, and consumer awareness. Several countries in Europe, North America, and Asia Pacific have introduced regulations that mandate incorporating various types of ADAS in passenger cars and commercial vehicles. For instance, from July 2022, European Commission introduced new "Vehicle General Safety Regulation". It introduced a range of mandatory advanced driver assistant systems to improve road safety and enable fully driverless vehicles in the European Union. Therefore, government mandates and increasing awareness of vehicle safety are expected to fuel the demand for ADAS & safety systems. The need for automotive cybersecurity solutions is also anticipated to grow globally rapidly during the forecast period.

Asia Pacific shows high growth potential for automotive cybersecurity market

Asia Pacific is projected to have largest share in the global automotive cybersecurity market during the forecast period. In Asia Pacific region, countries such as China, Japan, and South Korea are expected to take the lead in autonomous driving technology in the coming years. Leading automotive manufacturers in this region, such as Toyota, Honda, and Hyundai, leverage the advantages of safety systems and have made essential safety features a standard across their models. The anticipated rise in the penetration of autonomous vehicles coupled with increasing adoption of ADAS equipped vehicles would also support the growth of the automotive cybersecurity market in Asia Pacific region. This in turn is expected to create opportunities for stakeholders in the automotive cybersecurity ecosystem. All these aforementioned factors are expected to bolster the revenue growth of the automotive cybersecurity market in Asia Pacific region during the forecast period.

In-depth interviews were conducted with CEOs, marketing directors, other innovation

and technology directors, and executives from various key organizations operating in the automotive cybersecurity market. The break-up of the primaries is as follows:

By Company Type: Automotive Cybersecurity Solution Providers – 40%, OEMs – 35%, Tier 1 – 15%, and Tier 2 – 10%,

By Designation: C Level Executives – 23%, Manager – 43%, and Executives – 34%

By Region: Europe – 30%, North America – 25%, Asia Pacific – 25%, and RoW – 20%

The automotive cybersecurity market comprises major manufacturers such as Continental AG (Germany), Robert Bosch GmbH (Germany), Harman International (US), DENSO Corporation (Japan), Aptiv PLC (Ireland), Garrett Motion Inc. (Switzerland), Renesas Electronics Corporation (Japan), Karamba Security (Israel), SafeRide Technologies (Israel), Arilou Technologies (Israel), GuardKnox Cyber Technologies Ltd. (Israel), Upstream Security Ltd. (Israel), etc.

#### Research Coverage:

The study covers the automotive cybersecurity market across various segments. It aims at estimating the market size and future growth potential of this market across different segments such as application, offering, form type, security type, vehicle type, propulsion type, vehicle autonomy, EV application, and region. The study also includes an in-depth competitive analysis of key market players, their company profiles, key observations related to product and business offerings, recent developments, and acquisitions.

This research report categorizes Automotive Cybersecurity Market by Application (Telematics, Communication Systems, ADAS & Safety, Infotainment, Body Control & Comfort, and Powertrain Systems), Form Type (In-Vehicle, and External Cloud Services), Security Type (Application Security, Wireless Network Security, and Endpoint Security), Vehicle Type (Passenger Vehicles, Light Commercial Vehicles, and Heavy Commercial Vehicles), Offering (Hardware, and Software), Vehicle Autonomy (Non-Autonomous Vehicles, Semi-Autonomous Vehicles, and Autonomous Vehicles), Propulsion Type (ICE vehicles and Electric Vehicles), EV Application (Charging Management, Telematics, Battery Management & Powertrain Systems, Infotainment, ADAS & Safety, Communication Systems, and Body Control & Comfort), Approach

(Intrusion Detection System, and Security Operation Center), and Region (Asia Pacific, Europe, North America and Rest of the World).

The report's scope covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the automotive cybersecurity market. A detailed analysis of the key industry players provides insights into their business overview, solutions, and services; key strategies; contracts, partnerships, agreements, new product & service launches, mergers and acquisitions, and recent developments associated with the automotive cybersecurity market. Competitive analysis of SMEs/startups in the automotive cybersecurity market ecosystem is covered in this report.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall automotive cybersecurity market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also helps stakeholders understand the market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Increased use of electronics per vehicle & growing number of connected cars, rising sales of electric vehicles, significantly growing global automotive V2X market), restraints (High costs of automotive cybersecurity solutions, growing complexity in vehicle electronic system, complex ecosystem with multiple stakeholders), opportunities (Advent of software-defined vehicles, growing cloud-based applications in automotive industry, exceptional technological development in autonomous vehicle space, introduction of electric vehicle wireless battery management system), and challenges (Discrepancies related to pricing strategies among stakeholders, time lag in delivery of cybersecurity updates) influencing the growth of the automotive cybersecurity market

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the automotive cybersecurity market

**Market Development:** Comprehensive information about lucrative markets – the report analyses the automotive cybersecurity market across varied regions.

**Market Diversification:** Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the automotive cybersecurity market

**Competitive Assessment:** In-depth assessment of market shares, growth strategies, and service offerings of leading players like Continental AG (Germany), Robert Bosch GmbH (Germany), Harman International (US), DENSO Corporation (Japan), and Aptiv PLC (Ireland), among others in the automotive cybersecurity market

## Contents

### 1 INTRODUCTION

#### 1.1 STUDY OBJECTIVES

#### 1.2 MARKET DEFINITION

TABLE 1 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY ICE AND EV APPLICATIONS

TABLE 2 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY VEHICLE TYPE

TABLE 3 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY SECURITY TYPE

TABLE 4 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY VEHICLE AUTONOMY

TABLE 5 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY OFFERING

TABLE 6 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY FORM TYPE

TABLE 7 AUTOMOTIVE CYBERSECURITY MARKET DEFINITION, BY PROPULSION TYPE

#### 1.3 INCLUSIONS AND EXCLUSIONS

TABLE 8 AUTOMOTIVE CYBERSECURITY MARKET: INCLUSIONS AND EXCLUSIONS

#### 1.4 MARKET SCOPE

FIGURE 1 AUTOMOTIVE CYBERSECURITY MARKET SEGMENTATION

##### 1.4.1 REGIONS COVERED

##### 1.4.2 YEARS CONSIDERED

#### 1.5 CURRENCY CONSIDERED

TABLE 9 USD EXCHANGE RATES

#### 1.6 STAKEHOLDERS

#### 1.7 SUMMARY OF CHANGES

### 2 RESEARCH METHODOLOGY

#### 2.1 RESEARCH DATA

FIGURE 2 AUTOMOTIVE CYBERSECURITY MARKET: RESEARCH DESIGN

FIGURE 3 RESEARCH METHODOLOGY MODEL

##### 2.1.1 SECONDARY DATA

###### 2.1.1.1 List of key secondary sources

###### 2.1.1.2 Key data from secondary sources

##### 2.1.2 PRIMARY DATA

**FIGURE 4 BREAKDOWN OF PRIMARY INTERVIEWS**

## 2.1.2.1 List of primary participants

**2.2 MARKET SIZE ESTIMATION****FIGURE 5 RESEARCH METHODOLOGY: HYPOTHESIS BUILDING**

## 2.2.1 RECESSION IMPACT ANALYSIS

## 2.2.2 DEMAND-SIDE APPROACH

**FIGURE 6 AUTOMOTIVE CYBERSECURITY MARKET: DEMAND-SIDE APPROACH**

## 2.2.3 BOTTOM-UP APPROACH

**FIGURE 7 AUTOMOTIVE CYBERSECURITY MARKET SIZE ESTIMATION****METHODOLOGY: BOTTOM-UP APPROACH****FIGURE 8 AUTOMOTIVE CYBERSECURITY MARKET SIZE ESTIMATION  
APPROACH**

## 2.2.4 TOP-DOWN APPROACH

**FIGURE 9 AUTOMOTIVE CYBERSECURITY MARKET SIZE ESTIMATION****METHODOLOGY: TOP-DOWN APPROACH****FIGURE 10 AUTOMOTIVE CYBERSECURITY MARKET: RESEARCH DESIGN AND  
METHODOLOGY****2.3 DATA TRIANGULATION****FIGURE 11 AUTOMOTIVE CYBERSECURITY MARKET: DATA TRIANGULATION****2.4 FACTOR ANALYSIS****FIGURE 12 FACTOR ANALYSIS FOR MARKET SIZING: DEMAND AND SUPPLY  
SIDES****2.5 RESEARCH ASSUMPTIONS****2.6 RESEARCH LIMITATIONS****3 EXECUTIVE SUMMARY****FIGURE 13 AUTOMOTIVE CYBERSECURITY MARKET OVERVIEW****FIGURE 14 KEY PLAYERS OPERATING IN AUTOMOTIVE CYBERSECURITY  
MARKET, BY REGION****FIGURE 15 AUTOMOTIVE CYBERSECURITY MARKET, BY REGION, 2023–2028****FIGURE 16 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE TYPE,  
2023–2028****FIGURE 17 AUTOMOTIVE CYBERSECURITY MARKET, BY APPLICATION TYPE,  
2023–2028****4 PREMIUM INSIGHTS****4.1 ATTRACTIVE OPPORTUNITIES FOR KEY PLAYERS IN AUTOMOTIVE***Automotive Cybersecurity Market by Form (In-Vehicle, External Cloud Services), Offering (Hardware & Software),...*



## CYBERSECURITY MARKET

FIGURE 18 INCREASING INCLINATION TOWARD ADAS TECHNOLOGY AND AUTONOMOUS MOBILITY TO DRIVE MARKET

### 4.2 AUTOMOTIVE CYBERSECURITY MARKET, BY REGION

FIGURE 19 ASIA PACIFIC TO DOMINATE AUTOMOTIVE CYBERSECURITY MARKET IN 2023

### 4.3 AUTOMOTIVE CYBERSECURITY MARKET, BY APPLICATION

FIGURE 20 ADAS & SAFETY SEGMENT TO HOLD LARGEST MARKET SHARE DURING FORECAST PERIOD

### 4.4 AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING

FIGURE 21 SOFTWARE SEGMENT TO DOMINATE AUTOMOTIVE CYBERSECURITY MARKET DURING FORECAST PERIOD

### 4.5 AUTOMOTIVE CYBERSECURITY MARKET, BY FORM TYPE

FIGURE 22 IN-VEHICLE SEGMENT TO LEAD AUTOMOTIVE CYBERSECURITY MARKET DURING FORECAST PERIOD

### 4.6 AUTOMOTIVE CYBERSECURITY MARKET, BY SECURITY TYPE

FIGURE 23 APPLICATION SECURITY SEGMENT TO LEAD AUTOMOTIVE CYBERSECURITY MARKET DURING FORECAST PERIOD

### 4.7 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE TYPE

FIGURE 24 PASSENGER VEHICLES SEGMENT TO DOMINATE AUTOMOTIVE CYBERSECURITY MARKET DURING FORECAST PERIOD

### 4.8 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE AUTONOMY

FIGURE 25 SEMI-AUTONOMOUS VEHICLES SEGMENT TO DOMINATE AUTOMOTIVE CYBERSECURITY MARKET DURING FORECAST PERIOD

### 4.9 AUTOMOTIVE CYBERSECURITY MARKET, BY PROPULSION TYPE

FIGURE 26 ELECTRIC VEHICLES SEGMENT TO GROW AT HIGHER RATE THAN ICE VEHICLES SEGMENT DURING FORECAST PERIOD

### 4.10 AUTOMOTIVE CYBERSECURITY MARKET, BY EV APPLICATION

FIGURE 27 CHARGING MANAGEMENT SEGMENT TO GROW AT HIGHEST RATE FROM 2023 TO 2028

## 5 MARKET OVERVIEW

### 5.1 INTRODUCTION

FIGURE 28 AUTOMOTIVE CONNECTIVITY ECOSYSTEM

### 5.2 MARKET DYNAMICS

FIGURE 29 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES IN AUTOMOTIVE CYBERSECURITY MARKET

#### 5.2.1 DRIVERS



5.2.1.1 Increased use of electronics per vehicle and growing number of connected cars

FIGURE 30 DATA FROM AUTONOMOUS VEHICLES

5.2.1.2 Electric vehicles more vulnerable to cyberattacks

FIGURE 31 GLOBAL BEV AND PHEV SALES, 2018–2022

FIGURE 32 MONETARY EV INCENTIVES IN WESTERN EUROPE

TABLE 10 MAJOR ANNOUNCEMENTS ON ELECTRIFICATION, 2021–2022

5.2.1.3 Reinforcement of mandates by regulatory bodies for vehicle data protection

FIGURE 33 CYBER VULNERABILITIES IN VEHICULAR ECOSYSTEM

TABLE 11 BASE STANDARDS FOR SECURITY AND PRIVACY DEVELOPED BY EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE

FIGURE 34 LEVEL OF COMMITMENT FOR CYBERSECURITY, BY COUNTRY (2022)

5.2.1.4 Rapidly growing automotive V2X market

FIGURE 35 KEY ELEMENTS OF V2X

FIGURE 36 COMPARISON BETWEEN 4G AND 5G NETWORKS FOR CONNECTED CARS

TABLE 12 THREATS AND COUNTERMEASURES FOR DIFFERENT OSI LAYERS FOR V2X COMMUNICATION

## 5.2.2 RESTRAINTS

5.2.2.1 High cost of automotive cybersecurity solutions

TABLE 13 MAJOR VEHICLE RECALLS, BY OEM, 2015-2021

5.2.2.2 Complex ecosystem with multiple stakeholders

5.2.2.3 Growing complexity in vehicle electronic systems

FIGURE 37 COMPLEXITY DRIVERS IN CAR ELECTRONIC SYSTEMS

## 5.2.3 OPPORTUNITIES

5.2.3.1 Advent of software-defined vehicles

FIGURE 38 CONVENTIONAL VEHICLES VS. SOFTWARE-DEFINED VEHICLES

5.2.3.2 Growing cloud-based applications in automotive sector

5.2.3.3 Exceptional technological developments in autonomous vehicle space

FIGURE 39 LEVELS OF AUTONOMOUS DRIVING

TABLE 14 VEHICLES WITH LEVEL-2 AND LEVEL-3 AUTONOMY (2019–2022)

5.2.3.4 Introduction of wireless battery management systems

## 5.2.4 CHALLENGES

5.2.4.1 Discrepancies related to pricing strategies among stakeholders

5.2.4.2 Time lag in delivery of cybersecurity updates

## 5.2.5 IMPACT OF MARKET DYNAMICS

TABLE 15 AUTOMOTIVE CYBERSECURITY MARKET: IMPACT OF MARKET DYNAMICS

## 5.3 ECOSYSTEM ANALYSIS

FIGURE 40 AUTOMOTIVE CYBERSECURITY MARKET: ECOSYSTEM ANALYSIS  
TABLE 16 AUTOMOTIVE CYBERSECURITY MARKET: ROLE OF COMPANIES IN ECOSYSTEM

5.4 SUPPLY CHAIN ANALYSIS

FIGURE 41 AUTOMOTIVE CYBERSECURITY MARKET: SUPPLY CHAIN ANALYSIS

5.4.1 AUTOMOTIVE CYBERSECURITY SOLUTION PROVIDERS

5.4.2 TIER 2 SUPPLIERS

5.4.3 TIER 1 SUPPLIERS

5.4.4 OEMS

5.4.5 END USERS

5.5 TRENDS AND DISRUPTIONS IMPACTING MARKET

FIGURE 42 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS

5.6 REGULATORY LANDSCAPE

FIGURE 43 AUTOMOTIVE CYBERSECURITY MARKET: SAFETY AND SECURITY STANDARDS

TABLE 17 AUTOMOTIVE CYBERSECURITY STANDARDS

5.6.1 UNECE WP.29 REGULATION

FIGURE 44 UNECE'S 1958 AGREEMENT

TABLE 18 WP.29 REGULATION APPROVAL PARTS

5.6.2 ISO/SAE DIS 21434 STANDARD

5.6.3 AIS 140 STANDARD

FIGURE 45 GUIDELINES AND BENEFITS OF AIS 140 STANDARD

TABLE 19 IMPORTANT REQUIREMENTS OF AIS 140 STANDARD

5.6.4 LIST OF KEY REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 20 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 21 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 22 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.7 PATENT ANALYSIS

5.7.1 INTRODUCTION

FIGURE 46 PUBLICATION TRENDS (2015–2022)

5.7.2 LEGAL STATUS OF PATENTS (2012–2022)

FIGURE 47 LEGAL STATUS OF PATENTS FILED IN AUTOMOTIVE CYBERSECURITY MARKET (2012–2022)

5.7.3 TOP PATENT APPLICANTS (2012–2022)

FIGURE 48 AUTOMOTIVE CYBERSECURITY MARKET: TOP 10 PATENT

## APPLICANTS

### TABLE 23 AUTOMOTIVE CYBERSECURITY MARKET: PATENT ANALYSIS (COMPLETED PATENTS)

#### 5.8 CASE STUDY ANALYSIS

5.8.1 GUARDKNOX DEMONSTRATED HOW HACKER COULD TAKE CONTROL OF VEHICLE

5.8.2 MICROSAR EVALUATION PACKAGE HELPED RENESAS RUN SOFTWARE SAFELY

5.8.3 VECTOR INFORMATIK GMBH DEVELOPED FIRMWARE FOR SECURED COMMUNICATION

5.8.4 VECTOR INFORMATIK GMBH'S OTA HELPED WM MOTOR FOR SOFTWARE UPDATES

5.8.5 ARGUS CYBER SECURITY COLLABORATED WITH ERICSSON TO DELIVER BIG DATA-ENABLED CYBERSECURITY SOLUTIONS FOR CONNECTED VEHICLES

5.8.6 VECTOR INFORMATIK, ALONG WITH INFINEON TECHNOLOGIES, PROVIDED SOLUTIONS FOR CYBERATTACKS

5.8.7 INCREASING SECURITY AND EFFICIENCY OF TRUST FRAMEWORK FOR V2X OF SAVARI

#### 5.9 AUTOMOTIVE CYBERSECURITY MARKET, SCENARIOS (2023–2028)

##### TABLE 24 AUTOMOTIVE CYBERSECURITY MARKET SCENARIO, BY REGION, 2023–2028 (USD MILLION)

###### 5.9.1 MOST LIKELY SCENARIO

##### TABLE 25 MOST LIKELY SCENARIO, BY REGION, 2023–2028 (USD MILLION)

###### 5.9.2 OPTIMISTIC SCENARIO

##### TABLE 26 OPTIMISTIC SCENARIO, BY REGION, 2023–2028 (USD MILLION)

###### 5.9.3 PESSIMISTIC SCENARIO

##### TABLE 27 PESSIMISTIC SCENARIO, BY REGION, 2023–2028 (USD MILLION)

#### 5.10 KEY CONFERENCES AND EVENTS IN 2023–2024

##### TABLE 28 AUTOMOTIVE CYBERSECURITY MARKET: KEY CONFERENCES AND EVENTS

## 6 TECHNOLOGY ANALYSIS

### 6.1 INTRODUCTION

FIGURE 49 MAJOR AUTOMOTIVE CYBERATTACKS, 2010–2025

FIGURE 50 AUTOMOTIVE CYBERSECURITY DEFENSE FRAMEWORK

### 6.2 AUTOMOTIVE CYBERSECURITY THREATS AND SOLUTIONS

TABLE 29 AUTOMOTIVE CYBERSECURITY THREATS AND SOLUTIONS ACROSS APPLICATIONS UNDER STRIDE MODEL

**TABLE 30 COMPARISON OF AUTOMOTIVE SECURITY MODELS****6.3 CYBERSECURITY FOR INTELLIGENT TRANSPORTATION SYSTEMS****6.3.1 COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS****FIGURE 51 ELEMENTS OF COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS****6.3.1.1 Stakeholders****TABLE 31 ROLE OF STAKEHOLDERS IN COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS****6.3.1.2 Standards****TABLE 32 STANDARDS OF COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS****TABLE 33 TEST SPECIFICATION FOR COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS****6.3.1.3 Services****TABLE 34 SERVICES UNDER COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS****6.3.1.4 Security policies****FIGURE 52 COOPERATIVE INTELLIGENT TRANSPORT SYSTEM SECURITY MODEL****6.3.1.5 Data protection policies****6.3.1.6 Recent developments****TABLE 35 RECENT DEVELOPMENTS IN COOPERATIVE INTELLIGENT TRANSPORT SYSTEMS (2017–2021)****6.3.2 EUROPEAN NETWORK AND INFORMATION SECURITY AGENCY****TABLE 36 EUROPEAN NETWORK AND INFORMATION SECURITY AGENCY STANDARDS****6.3.3 EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE****TABLE 37 EUROPEAN TELECOMMUNICATIONS STANDARDS****6.4 SYSTEM-ON-CHIP AND AUTOMOTIVE CYBERSECURITY****FIGURE 53 AUTOMOTIVE SYSTEM-ON-CHIP ARCHITECTURE FOR HUMAN-MACHINE INTERFACE****6.4.1 AUTOMOTIVE SYSTEM-ON-CHIP: USE CASES****6.4.1.1 Integrated platform for integrated solutions****6.4.1.2 Advanced connectivity technologies****6.4.1.3 CVSoC with cognitive computing capabilities****6.4.1.4 Cryptography for V2X communications****6.4.2 KEY FOCUS AREAS, CURRENT CONCERNS, AND FUTURE OUTLOOK****TABLE 38 AUTOMOTIVE CYBERSECURITY MARKET: KEY FOCUS AREAS, CURRENT CONCERNS, AND FUTURE OUTLOOK, 2019 AND BEYOND****7 AUTOMOTIVE CYBERSECURITY MARKET, BY APPLICATION TYPE**

## 7.1 INTRODUCTION

### 7.1.1 OPERATIONAL DATA

FIGURE 54 CYBERSECURITY FROM ECU CONSOLIDATION PERSPECTIVE

FIGURE 55 DOMAIN CENTRALIZATION ARCHITECTURE

FIGURE 56 ADAS & SAFETY SEGMENT TO LEAD AUTOMOTIVE CYBERSECURITY MARKET IN 2023–2028

TABLE 39 AUTOMOTIVE CYBERSECURITY MARKET, BY APPLICATION TYPE, 2018–2022 (USD MILLION)

TABLE 40 AUTOMOTIVE CYBERSECURITY MARKET, BY APPLICATION TYPE, 2023–2028 (USD MILLION)

FIGURE 57 COMPARISON OF CODING REQUIRED FOR VARIOUS VEHICLES

## 7.2 TELEMATICS

### 7.2.1 GROWING DEMAND FROM COMMERCIAL VEHICLES TO DRIVE MARKET

TABLE 41 TELEMATICS CYBERSECURITY MARKET, BY REGION, 2018–2022 (USD MILLION)

TABLE 42 TELEMATICS CYBERSECURITY MARKET, BY REGION, 2023–2028 (USD MILLION)

## 7.3 COMMUNICATION SYSTEMS

7.3.1 INCREASING DEMAND FOR HIGH-END COMMUNICATION PLATFORMS TO CONTRIBUTE TO MARKET GROWTH

TABLE 43 DIFFERENT IN-VEHICLE AND EXTERNAL NETWORKS

FIGURE 58 EXAMPLE OF REMOTE DIAGNOSTIC SERVICE

TABLE 44 COMMUNICATION SYSTEMS CYBERSECURITY MARKET, BY REGION, 2018–2022 (USD MILLION)

TABLE 45 COMMUNICATION SYSTEMS CYBERSECURITY MARKET, BY REGION, 2023–2028 (USD MILLION)

## 7.4 ADAS & SAFETY

### 7.4.1 GOVERNMENT FOCUS ON VEHICLE SAFETY TO DRIVE MARKET

TABLE 46 VEHICLES WITH ADAS FEATURES IN INDIA

TABLE 47 ADAS & SAFETY CYBERSECURITY MARKET, BY REGION, 2018–2022 (USD MILLION)

TABLE 48 ADAS & SAFETY CYBERSECURITY MARKET, BY REGION, 2023–2028 (USD MILLION)

## 7.5 INFOTAINMENT

7.5.1 GROWING DEMAND FROM PASSENGER AND COMMERCIAL VEHICLES TO DRIVE MARKET

TABLE 49 INFOTAINMENT CYBERSECURITY MARKET, BY REGION, 2018–2022 (USD MILLION)

TABLE 50 INFOTAINMENT CYBERSECURITY MARKET, BY REGION, 2023–2028  
(USD MILLION)

#### 7.6 BODY CONTROL & COMFORT

7.6.1 RISING DEMAND FOR PREMIUM AND LUXURY CARS TO DRIVE DEMAND

TABLE 51 BODY CONTROL & COMFORT CYBERSECURITY MARKET, BY REGION,  
2018–2022 (USD MILLION)

TABLE 52 BODY CONTROL & COMFORT CYBERSECURITY MARKET, BY REGION,  
2023–2028 (USD MILLION)

TABLE 53 TOP 25 COUNTRIES WITH HIGHEST LUXURY CAR DENSITY

TABLE 54 TOP 20 LUXURY CARS IN INDIA

#### 7.7 POWERTRAIN SYSTEMS

7.7.1 RISING DEMAND FOR BETTER FUEL ECONOMY AND LESS VEHICLE  
EMISSION TO DRIVE MARKET

TABLE 55 POWERTRAIN SYSTEM CYBERSECURITY MARKET, BY REGION,  
2018–2022 (USD MILLION)

TABLE 56 POWERTRAIN SYSTEM CYBERSECURITY MARKET, BY REGION,  
2023–2028 (USD MILLION)

#### 7.8 KEY PRIMARY INSIGHTS

### **8 AUTOMOTIVE CYBERSECURITY MARKET, BY SECURITY TYPE**

#### 8.1 INTRODUCTION

FIGURE 59 APPLICATION SECURITY TO BE LARGEST SEGMENT DURING  
FORECAST PERIOD

TABLE 57 AUTOMOTIVE CYBERSECURITY MARKET, BY SECURITY TYPE,  
2018–2022 (USD MILLION)

TABLE 58 AUTOMOTIVE CYBERSECURITY MARKET, BY SECURITY TYPE,  
2023–2028 (USD MILLION)

##### 8.1.1 OPERATIONAL DATA

TABLE 59 ATTACK VECTORS AND SECURITY TYPE REQUIREMENTS

#### 8.2 APPLICATION SECURITY

8.2.1 GROWING PENETRATION OF ADAS FEATURES AND IN-CAR  
ELECTRONICS TO SUPPORT MARKET

FIGURE 60 SECURITY RISKS OF AUTOMOTIVE ELECTRONIC SYSTEMS

TABLE 60 AUTOMOTIVE APPLICATION CYBERSECURITY MARKET, BY REGION,  
2018–2022 (USD MILLION)

TABLE 61 AUTOMOTIVE APPLICATION CYBERSECURITY MARKET, BY REGION,  
2023–2028 (USD MILLION)

#### 8.3 WIRELESS NETWORK SECURITY



8.3.1 ADVANCEMENTS IN INFORMATION TECHNOLOGY TO DRIVE MARKET  
TABLE 62 ATTACK FEASIBILITY RATING BASED ON INTERFACE  
TABLE 63 AUTOMOTIVE WIRELESS NETWORK CYBERSECURITY MARKET, BY  
REGION, 2018–2022 (USD MILLION)  
TABLE 64 AUTOMOTIVE WIRELESS NETWORK CYBERSECURITY MARKET, BY  
REGION, 2023–2028 (USD MILLION)

#### 8.4 ENDPOINT SECURITY

8.4.1 DEPLOYMENT OF SOFTWARE IN VEHICLES AND INCREASING SAFETY  
CONCERNS AMONG OEMS TO INCREASE DEMAND  
TABLE 65 AUTOMOTIVE ENDPOINT CYBERSECURITY MARKET, BY REGION,  
2018–2022 (USD MILLION)  
TABLE 66 AUTOMOTIVE ENDPOINT CYBERSECURITY MARKET, BY REGION,  
2023–2028 (USD MILLION)

#### 8.5 KEY PRIMARY INSIGHTS

### 9 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE AUTONOMY

#### 9.1 INTRODUCTION

9.1.1 OPERATIONAL DATA  
TABLE 67 DIFFERENT LEVELS OF VEHICLE AUTONOMY  
FIGURE 61 AUTOMATION LEVELS OF AUTONOMOUS CARS  
FIGURE 62 VARIOUS ATTACK SURFACES OF CONNECTED VEHICLES  
TABLE 68 ATTACK SURFACES AND POSSIBLE THREATS  
FIGURE 63 SEMI-AUTONOMOUS VEHICLES TO HOLD LARGEST MARKET SHARE  
DURING FORECAST PERIOD  
TABLE 69 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE AUTONOMY,  
2018–2022 (USD MILLION)  
TABLE 70 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE AUTONOMY,  
2023–2028 (USD MILLION)

#### 9.2 NON-AUTONOMOUS VEHICLES

9.2.1 RISING FOCUS ON DEVELOPING HARDWARE SECURITY MODULES AND  
NETWORK SECURITY TO DRIVE MARKET

#### 9.3 SEMI-AUTONOMOUS VEHICLES

9.3.1 INCREASING ADOPTION OF ADAS, V2P, AND V2V TECHNOLOGIES TO  
RESULT IN SOARING DEMAND FOR CYBERSECURITY SOLUTIONS AMONG  
OEMS

TABLE 71 ACCIDENTAL ASSISTANCE PROVIDED BY ADAS FEATURES  
FIGURE 64 EVOLUTION OF AUTOMATED SAFETY TECHNOLOGIES

#### 9.4 AUTONOMOUS VEHICLES



9.4.1 GROWING AUTONOMY LEVELS TO INCREASE VEHICLE VULNERABILITY  
TABLE 72 LIST OF SOME POPULAR SELF-DRIVING VEHICLES BY GLOBAL COMPANIES

TABLE 73 EXPECTED TECHNOLOGY VS. CURRENT TECHNOLOGY READINESS LEVEL OF AUTONOMOUS VEHICLES

FIGURE 65 AUTOMOTIVE SYSTEM AND HIERARCHICAL CLASSIFICATION OF AUTONOMOUS VEHICLE FROM SECURITY VIEWPOINT

TABLE 74 AUTOMOTIVE SYSTEM ARCHITECTURE VS. SECURITY OF EACH LEVEL

9.5 KEY PRIMARY INSIGHTS

## **10 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE TYPE**

### **10.1 INTRODUCTION**

TABLE 75 L2: LAUNCH OF NEW SELF-DRIVING CARS, 2021–2022

FIGURE 66 PASSENGER VEHICLES TO CAPTURE LARGEST MARKET SHARE DURING FORECAST PERIOD

TABLE 76 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE TYPE, 2018–2022 (USD MILLION)

TABLE 77 AUTOMOTIVE CYBERSECURITY MARKET, BY VEHICLE TYPE, 2023–2028 (USD MILLION)

### **10.2 PASSENGER VEHICLES**

10.2.1 GROWING FOCUS ON ADAS, V2V, AND V2I TECHNOLOGIES TO ACCELERATE MARKET GROWTH

TABLE 78 POPULAR PASSENGER CAR MODELS EQUIPPED WITH V2X

TABLE 79 SYSTEMATIC DERIVATION AND COMPARISON OF CYBERSECURITY RISKS FOR PASSENGER VEHICLES

TABLE 80 AUTOMOTIVE CYBERSECURITY MARKET IN PASSENGER VEHICLES, BY REGION, 2018–2022 (USD MILLION)

TABLE 81 AUTOMOTIVE CYBERSECURITY MARKET IN PASSENGER VEHICLES, BY REGION, 2023–2028 (USD MILLION)

### **10.3 LIGHT COMMERCIAL VEHICLES**

10.3.1 GROWING SALES OF HIGH-END LIGHT COMMERCIAL VEHICLES TO DRIVE MARKET

TABLE 82 AUTOMOTIVE CYBERSECURITY MARKET IN LIGHT COMMERCIAL VEHICLES, BY REGION, 2018–2022 (USD MILLION)

TABLE 83 AUTOMOTIVE CYBERSECURITY MARKET IN LIGHT COMMERCIAL VEHICLES, BY REGION, 2023–2028 (USD MILLION)

### **10.4 HEAVY COMMERCIAL VEHICLES**

10.4.1 GROWING PENETRATION OF V2X TECHNOLOGY TO DRIVE DEMAND FOR AUTOMOTIVE CYBERSECURITY SOLUTIONS

FIGURE 67 EXAMPLE OF ELEMENTS REQUIRED TO AUTOMATE TRUCK

FIGURE 68 DEPLOYMENT ROAD MAP FOR AUTONOMOUS TRUCKS

TABLE 84 SYSTEMATIC DERIVATION AND COMPARISON OF CYBERSECURITY RISKS FOR HEAVY-DUTY VEHICLES

TABLE 85 AUTOMOTIVE CYBERSECURITY MARKET IN HEAVY COMMERCIAL VEHICLES, BY REGION, 2018–2022 (USD MILLION)

TABLE 86 AUTOMOTIVE CYBERSECURITY MARKET IN HEAVY COMMERCIAL VEHICLES, BY REGION, 2023–2028 (USD MILLION)

10.5 KEY PRIMARY INSIGHTS

## **11 AUTOMOTIVE CYBERSECURITY MARKET, BY PROPULSION TYPE**

### **11.1 INTRODUCTION**

#### **11.1.1 OPERATIONAL DATA**

FIGURE 69 NEW PASSENGER CAR REGISTRATIONS IN EUROPE, BY FUEL TYPE

TABLE 87 CARS EQUIPPED WITH V2X (BY PROPULSION)

FIGURE 70 ICE VEHICLES TO DOMINATE MARKET DURING FORECAST PERIOD

TABLE 88 AUTOMOTIVE CYBERSECURITY MARKET, BY PROPULSION TYPE, 2018–2022 (USD MILLION)

TABLE 89 AUTOMOTIVE CYBERSECURITY MARKET, BY PROPULSION TYPE, 2023–2028 (USD MILLION)

### **11.2 ICE VEHICLES**

11.2.1 INCREASING ADOPTION OF ADAS AND OTHER CONNECTED FEATURES TO PROPEL DEMAND FOR AUTOMOTIVE CYBERSECURITY SOLUTIONS IN CONVENTIONAL VEHICLES

### **11.3 ELECTRIC VEHICLES**

#### **11.3.1 INCREASING SALES OF ELECTRIC VEHICLES TO DRIVE MARKET**

11.4 KEY PRIMARY INSIGHTS

## **12 AUTOMOTIVE CYBERSECURITY MARKET, BY FORM TYPE**

### **12.1 INTRODUCTION**

FIGURE 71 IN-VEHICLE SEGMENT TO DOMINATE MARKET DURING FORECAST PERIOD

TABLE 90 AUTOMOTIVE CYBERSECURITY MARKET, BY FORM TYPE, 2018–2022 (USD MILLION)

TABLE 91 AUTOMOTIVE CYBERSECURITY MARKET, BY FORM TYPE, 2023–2028

(USD MILLION)

12.1.1 OPERATIONAL DATA

FIGURE 72 CLOUD SERVICE IMPLICATIONS

12.2 IN-VEHICLE

12.2.1 GROWING PENETRATION OF CONNECTED VEHICLES AND  
AUTONOMOUS MOBILITY TO DRIVE MARKET

TABLE 92 ATTACKER PROFILE VS. SERIOUSNESS OF THREATS

FIGURE 73 SAMPLE ARCHITECTURE OF IN-VEHICLE NETWORK

TABLE 93 AUTOMOTIVE IN-VEHICLE CYBERSECURITY MARKET, BY REGION,  
2018–2022 (USD MILLION)

TABLE 94 AUTOMOTIVE IN-VEHICLE CYBERSECURITY MARKET, BY REGION,  
2023–2028 (USD MILLION)

12.3 EXTERNAL CLOUD SERVICES

12.3.1 INCREASING CLOUD CONNECTIVITY FEATURES TO DRIVE DEMAND  
TABLE 95 AUTOMOTIVE EXTERNAL CLOUD SERVICE CYBERSECURITY MARKET,  
BY REGION, 2018–2022 (USD MILLION)

TABLE 96 AUTOMOTIVE EXTERNAL CLOUD SERVICE CYBERSECURITY MARKET,  
BY REGION, 2023–2028 (USD MILLION)

12.4 KEY PRIMARY INSIGHTS

## **13 AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING**

### **13.1 INTRODUCTION**

FIGURE 74 AUTOMOTIVE SOFTWARE AND E/E MARKET, 2020–2030 (USD  
BILLION)

13.1.1 OPERATIONAL DATA

TABLE 97 SUPPLIERS OF HARDWARE AND SOFTWARE

FIGURE 75 SOFTWARE SEGMENT TO DOMINATE MARKET DURING FORECAST  
PERIOD

TABLE 98 AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022  
(USD MILLION)

TABLE 99 AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028  
(USD MILLION)

### **13.2 HARDWARE**

13.2.1 CAPABILITY TO PROTECT VEHICLES FROM UNAUTHORIZED ACCESS TO  
DRIVE MARKET

FIGURE 76 ECU/DCU MARKET, BY DOMAIN REVENUE SHARE, 2020–2030 (USD  
BILLION)

TABLE 100 AUTOMOTIVE CYBERSECURITY HARDWARE MARKET, BY REGION,

2018–2022 (USD MILLION)

TABLE 101 AUTOMOTIVE CYBERSECURITY HARDWARE MARKET, BY REGION,  
2023–2028 (USD MILLION)

13.3 SOFTWARE

13.3.1 GROWING COMPLEXITY OF IN-VEHICLE ARCHITECTURE TO INCREASE  
VEHICLE'S VULNERABILITY AGAINST CYBERATTACKS

FIGURE 77 GLOBAL AUTOMOTIVE SOFTWARE MARKET, 2020–2030 (USD  
BILLION)

TABLE 102 AUTOMOTIVE CYBERSECURITY SOFTWARE MARKET, BY REGION,  
2018–2022 (USD MILLION)

TABLE 103 AUTOMOTIVE CYBERSECURITY SOFTWARE MARKET, BY REGION,  
2023–2028 (USD MILLION)

13.4 KEY PRIMARY INSIGHTS

## **14 AUTOMOTIVE CYBERSECURITY MARKET, BY EV APPLICATION**

14.1 INTRODUCTION

FIGURE 78 AUTOMOTIVE CYBERSECURITY MARKET, BY EV APPLICATION, 2023  
VS. 2028

TABLE 104 AUTOMOTIVE CYBERSECURITY MARKET, BY EV APPLICATION,  
2018–2022 (USD MILLION)

TABLE 105 AUTOMOTIVE CYBERSECURITY MARKET, BY EV APPLICATION,  
2023–2028 (USD MILLION)

14.2 CHARGING MANAGEMENT

14.3 TELEMATICS

14.4 COMMUNICATION SYSTEMS

14.5 BATTERY MANAGEMENT & POWERTRAIN SYSTEMS

14.6 INFOTAINMENT

14.7 ADAS & SAFETY

14.8 BODY CONTROL & COMFORT

14.9 KEY PRIMARY INSIGHTS

## **15 AUTOMOTIVE CYBERSECURITY MARKET, BY APPROACH**

15.1 INTRUSION DETECTION SYSTEM

FIGURE 79 SPOOFING MESSAGE INSERTED BY ATTACKER ELECTRONIC  
CONTROL UNIT

FIGURE 80 INTRUSION DETECTION SYSTEM FOR AUTOMOTIVE CONTROLLER  
AREA NETWORK BUS SYSTEM

FIGURE 81 STRUCTURE OF AUTOMOTIVE IDS

TABLE 106 COMPANIES AND THEIR IDS SOLUTIONS

15.2 SECURITY OPERATION CENTER

15.2.1 KEY FUNCTIONS OF SECURITY OPERATION CENTER

15.2.2 USE CASES OF SECURITY OPERATION CENTER

FIGURE 82 ESCRYPT SECURITY OPERATION CENTER PLATFORM

15.3 KEY PRIMARY INSIGHTS

## **16 AUTOMOTIVE CYBERSECURITY MARKET, BY REGION**

16.1 INTRODUCTION

FIGURE 83 ASIA PACIFIC TO BE LARGEST AND FASTEST-GROWING MARKET DURING FORECAST PERIOD

TABLE 107 AUTOMOTIVE CYBERSECURITY MARKET, BY REGION, 2018–2022 (USD MILLION)

TABLE 108 AUTOMOTIVE CYBERSECURITY MARKET, BY REGION, 2023–2028 (USD MILLION)

16.2 ASIA PACIFIC

16.2.1 RECESSION IMPACT ANALYSIS

FIGURE 84 ASIA PACIFIC: AUTOMOTIVE CYBERSECURITY MARKET SNAPSHOT

TABLE 109 ASIA PACIFIC: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2018–2022 (USD MILLION)

TABLE 110 ASIA PACIFIC: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

16.2.2 CHINA

16.2.2.1 Developed V2X networking to drive market

TABLE 111 C-V2X-EQUIPPED VEHICLES LAUNCHED IN CHINA

TABLE 112 CHINA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 113 CHINA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

TABLE 114 NEW L2 LAUNCHES IN CHINA, 2021–2022

TABLE 115 VEHICLE LAUNCHES WITH ADAS FEATURES IN CHINA, 2021–2022

16.2.3 INDIA

16.2.3.1 Government initiatives regarding intelligent transport systems and electric mobility to drive demand for cybersecurity solutions

TABLE 116 INDIA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 117 INDIA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING,

2023–2028 (USD MILLION)

#### 16.2.4 JAPAN

16.2.4.1 Introduction of cybersecurity supply-chain risk management and mandate on Cyber-Physical Security Framework to propel market

TABLE 118 NEW L2 LAUNCHES IN JAPAN, 2021–2022

TABLE 119 JAPAN: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 120 JAPAN: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.2.5 SOUTH KOREA

16.2.5.1 Stepwise approach to implement UNECE WP.29 regulations to propel market

TABLE 121 SOUTH KOREA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 122 SOUTH KOREA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

TABLE 123 VEHICLE LAUNCHES WITH ADAS FEATURES IN SOUTH KOREA, 2021–2022

#### 16.2.6 REST OF ASIA PACIFIC

TABLE 124 REST OF ASIA PACIFIC: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 125 REST OF ASIA PACIFIC: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

### 16.3 EUROPE

#### 16.3.1 RECESSION IMPACT ANALYSIS

FIGURE 85 EUROPE: AUTOMOTIVE CYBERSECURITY MARKET, 2023 VS. 2028 (USD MILLION)

TABLE 126 EUROPE: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2018–2022 (USD MILLION)

TABLE 127 EUROPE: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

#### 16.3.2 GERMANY

16.3.2.1 High demand for premium cars to drive market

TABLE 128 SEMI-AUTONOMOUS CARS LAUNCHED/UNDER DEVELOPMENT IN EUROPE, 2021–2022

TABLE 129 VEHICLE LAUNCHES WITH ADAS FEATURES IN GERMANY, 2021–2022

TABLE 130 GERMANY: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 131 GERMANY: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING,

2023–2028 (USD MILLION)

#### 16.3.3 FRANCE

16.3.3.1 Focus on deployment of ADAS features by OEMs to drive market

TABLE 132 SEMI-AUTONOMOUS CARS LAUNCHED/UNDER DEVELOPMENT IN FRANCE, 2021–2023

TABLE 133 VEHICLE LAUNCHES WITH ADAS FEATURES IN FRANCE, 2021–2022

TABLE 134 FRANCE: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 135 FRANCE: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.3.4 UK

16.3.4.1 Rising demand for connected vehicles to catalyze demand for automotive cybersecurity solutions

TABLE 136 VEHICLE LAUNCHES WITH ADAS FEATURES IN UK, 2020–2022

TABLE 137 UK: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 138 UK: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.3.5 RUSSIA

16.3.5.1 Investments in automotive sector by major manufacturers to drive market

TABLE 139 RUSSIA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 140 RUSSIA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.3.6 TURKEY

16.3.6.1 Implementation of UN regulations to boost market

TABLE 141 TURKEY: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 142 TURKEY: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.3.7 REST OF EUROPE

TABLE 143 REST OF EUROPE: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 144 REST OF EUROPE: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

### 16.4 NORTH AMERICA

#### 16.4.1 RECESSION IMPACT ANALYSIS

FIGURE 86 NORTH AMERICA: AUTOMOTIVE CYBERSECURITY MARKET SNAPSHOT



TABLE 145 NORTH AMERICA: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2018–2022 (USD MILLION)

TABLE 146 NORTH AMERICA: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

#### 16.4.2 US

16.4.2.1 Increasing adoption of connected cars to support market

TABLE 147 US: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 148 US: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

TABLE 149 LAUNCH OF SEMI-AUTONOMOUS CARS IN US, 2021–2023

#### 16.4.3 CANADA

16.4.3.1 Focus on autonomous driving to favor market growth

TABLE 150 CANADA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 151 CANADA: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.4.4 MEXICO

16.4.4.1 Growth in export sales of LCVs with connectivity features to boost market

TABLE 152 MEXICO: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 153 MEXICO: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

### 16.5 REST OF THE WORLD (ROW)

#### 16.5.1 RECESSION IMPACT ANALYSIS

FIGURE 87 ROW: AUTOMOTIVE CYBERSECURITY MARKET, 2023 VS. 2028

TABLE 154 ROW: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2018–2022 (USD MILLION)

TABLE 155 ROW: AUTOMOTIVE CYBERSECURITY MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

#### 16.5.2 BRAZIL

16.5.2.1 Adoption of advanced technologies to drive market

TABLE 156 BRAZIL: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2018–2022 (USD MILLION)

TABLE 157 BRAZIL: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING, 2023–2028 (USD MILLION)

#### 16.5.3 SOUTH AFRICA

16.5.3.1 Government initiatives for increasing electric vehicle sales to propel market

TABLE 158 SOUTH AFRICA: AUTOMOTIVE CYBERSECURITY MARKET, BY

OFFERING, 2018–2022 (USD MILLION)

TABLE 159 SOUTH AFRICA: AUTOMOTIVE CYBERSECURITY MARKET, BY  
OFFERING, 2023–2028 (USD MILLION)

16.5.4 OTHERS

TABLE 160 OTHERS: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING,  
2018–2022 (USD MILLION)

TABLE 161 OTHERS: AUTOMOTIVE CYBERSECURITY MARKET, BY OFFERING,  
2023–2028 (USD MILLION)

## **17 COMPETITIVE LANDSCAPE**

17.1 OVERVIEW

17.2 MARKET RANKING ANALYSIS

FIGURE 88 AUTOMOTIVE CYBERSECURITY MARKET: MARKET RANKING 2022

17.3 REVENUE ANALYSIS OF TOP 5 PLAYERS

FIGURE 89 AUTOMOTIVE CYBERSECURITY MARKET: REVENUE ANALYSIS OF  
TOP 5 PLAYERS, 2020–2022

17.4 MARKET SHARE ANALYSIS

FIGURE 90 AUTOMOTIVE CYBERSECURITY MARKET SHARE ANALYSIS, 2022

17.5 COMPANY EVALUATION QUADRANT

17.5.1 STARS

17.5.2 EMERGING LEADERS

17.5.3 PERVASIVE PLAYERS

17.5.4 PARTICIPANTS

FIGURE 91 AUTOMOTIVE CYBERSECURITY MARKET: COMPANY EVALUATION  
QUADRANT, 2022

TABLE 162 AUTOMOTIVE CYBERSECURITY MARKET: COMPANY FOOTPRINT,  
2022

TABLE 163 AUTOMOTIVE CYBERSECURITY MARKET: SOLUTION TYPE  
FOOTPRINT, 2022

TABLE 164 AUTOMOTIVE CYBERSECURITY MARKET: REGIONAL FOOTPRINT,  
2022

17.6 START-UP/SME EVALUATION QUADRANT

17.6.1 PROGRESSIVE COMPANIES

17.6.2 RESPONSIVE COMPANIES

17.6.3 DYNAMIC COMPANIES

17.6.4 STARTING BLOCKS

FIGURE 92 AUTOMOTIVE CYBERSECURITY MARKET: START-UP/SME  
EVALUATION QUADRANT, 2022

## 17.7 START-UP/SME FOOTPRINT

TABLE 165 START-UPS/SMES: REGIONAL FOOTPRINT

TABLE 166 START-UPS/SMES: COMPANY SOLUTION TYPE FOOTPRINT

TABLE 167 START-UPS/SMES: COMPANY FOOTPRINT

## 17.8 COMPETITIVE SCENARIO

TABLE 168 PRODUCT LAUNCHES, 2021–2023

### 17.8.1 DEALS

TABLE 169 DEALS, 2021–2023

### 17.8.2 EXPANSIONS

TABLE 170 EXPANSIONS, 2021–2023

TABLE 171 AUTOMOTIVE CYBERSECURITY MARKET: LIST OF KEY START-UPS/SMES

TABLE 172 AUTOMOTIVE CYBERSECURITY MARKET: COMPETITIVE BENCHMARKING OF KEY START-UPS/SMES

## 18 COMPANY PROFILES

(Business Overview, Products/Solutions/Services Offered, Recent Developments, MnM view (Key strengths/Right to win, Strategic choices made, Weakness/competitive threats)\*

### 18.1 KEY PLAYERS

#### 18.1.1 CONTINENTAL AG

TABLE 173 CONTINENTAL AG: COMPANY OVERVIEW

FIGURE 93 CONTINENTAL AG: COMPANY SNAPSHOT

FIGURE 94 CONTINENTAL AG: BUSINESS LOCATIONS AND EMPLOYEES (AS OF DECEMBER 2022)

TABLE 174 CONTINENTAL AG: PRODUCTS OFFERED

TABLE 175 CONTINENTAL AG: MAJOR SUPPLY AGREEMENTS

TABLE 176 CONTINENTAL AG: KEY CUSTOMERS

TABLE 177 CONTINENTAL AG: PRODUCT DEVELOPMENTS

TABLE 178 CONTINENTAL AG: DEALS

TABLE 179 CONTINENTAL AG: OTHERS

#### 18.1.2 ROBERT BOSCH GMBH

TABLE 180 ROBERT BOSCH GMBH: COMPANY OVERVIEW

FIGURE 95 ROBERT BOSCH GMBH: COMPANY SNAPSHOT

TABLE 181 ROBERT BOSCH GMBH: PRODUCTS OFFERED

TABLE 182 ROBERT BOSCH GMBH: PRODUCT DEVELOPMENTS

TABLE 183 ROBERT BOSCH GMBH: DEALS

TABLE 184 ROBERT BOSCH GMBH: OTHERS

### 18.1.3 HARMAN INTERNATIONAL

TABLE 185 HARMAN INTERNATIONAL: COMPANY OVERVIEW

FIGURE 96 HARMAN INTERNATIONAL: COMPANY SNAPSHOT

TABLE 186 HARMAN INTERNATIONAL: MAJOR SUPPLY AGREEMENTS

TABLE 187 HARMAN INTERNATIONAL: KEY CUSTOMERS

TABLE 188 HARMAN INTERNATIONAL: PRODUCTS OFFERED

TABLE 189 HARMAN INTERNATIONAL: PRODUCT DEVELOPMENTS

TABLE 190 HARMAN INTERNATIONAL: DEALS

TABLE 191 HARMAN INTERNATIONAL: OTHERS

### 18.1.4 DENSO CORPORATION

TABLE 192 DENSO CORPORATION: COMPANY OVERVIEW

FIGURE 97 DENSO CORPORATION: COMPANY SNAPSHOT

TABLE 193 DENSO CORPORATION: PRODUCTS OFFERED

TABLE 194 DENSO CORPORATION: KEY CUSTOMERS

TABLE 195 DENSO CORPORATION: SALES BREAKDOWN BY OEMS (AS OF MARCH 2022)

TABLE 196 DENSO CORPORATION: MAJOR SUBSIDIARIES AND AFFILIATES

TABLE 197 DENSO CORPORATION: PRODUCT DEVELOPMENTS

TABLE 198 DENSO CORPORATION: DEALS

TABLE 199 DENSO CORPORATION: OTHERS

### 18.1.5 APTIV PLC

TABLE 200 APTIV PLC: COMPANY OVERVIEW

FIGURE 98 APTIV PLC: COMPANY SNAPSHOT

TABLE 201 APTIV PLC: KEY CUSTOMERS

TABLE 202 APTIV PLC: SALES RATIO TO MAJOR CUSTOMER (AS OF DECEMBER 2022)

TABLE 203 APTIV PLC: MAJOR SUPPLY AGREEMENTS

TABLE 204 APTIV PLC: COMPETITORS IN OPERATING BUSINESS SEGMENTS

TABLE 205 APTIV PLC: PRODUCTS OFFERED

TABLE 206 APTIV PLC: PRODUCT DEVELOPMENTS

TABLE 207 APTIV PLC: DEALS

TABLE 208 APTIV PLC: OTHERS

### 18.1.6 GARRETT MOTION INC.

FIGURE 99 GARRETT MOTION INC.: EMPLOYEES PER COUNTRY (AS OF DECEMBER 2022)

TABLE 209 GARRETT MOTION INC.: COMPANY OVERVIEW

FIGURE 100 GARRETT MOTION INC.: COMPANY SNAPSHOT

TABLE 210 GARRETT MOTION INC.: PRODUCTS OFFERED

TABLE 211 GARRETT MOTION INC.: PRODUCT DEVELOPMENTS

TABLE 212 GARRETT MOTION INC.: DEALS

TABLE 213 GARRETT MOTION INC.: OTHERS

#### 18.1.7 RENESAS ELECTRONICS CORPORATION

TABLE 214 RENESAS ELECTRONICS CORPORATION: COMPANY OVERVIEW

FIGURE 101 RENESAS ELECTRONICS CORPORATION: COMPANY SNAPSHOT

TABLE 215 RENESAS ELECTRONICS CORPORATION: PRODUCTS OFFERED

TABLE 216 RENESAS ELECTRONICS CORPORATION: PRODUCT DEVELOPMENTS

TABLE 217 RENESAS ELECTRONICS CORPORATION: DEALS

#### 18.1.8 NXP SEMICONDUCTORS

TABLE 218 NXP SEMICONDUCTORS: COMPANY OVERVIEW

FIGURE 102 NXP SEMICONDUCTORS: COMPANY SNAPSHOT

TABLE 219 NXP SEMICONDUCTORS: MAJOR SUPPLY AGREEMENTS

TABLE 220 NXP SEMICONDUCTORS: KEY CUSTOMERS

TABLE 221 NXP SEMICONDUCTORS: PRODUCTS OFFERED

TABLE 222 NXP SEMICONDUCTORS: PRODUCT DEVELOPMENTS

TABLE 223 NXP SEMICONDUCTORS: DEALS

TABLE 224 NXP SEMICONDUCTORS: OTHERS

#### 18.1.9 LEAR CORPORATION

TABLE 225 LEAR CORPORATION: COMPANY OVERVIEW

FIGURE 103 LEAR CORPORATION: COMPANY SNAPSHOT

TABLE 226 LEAR CORPORATION: MAJOR SUPPLY AGREEMENTS

TABLE 227 LEAR CORPORATION: KEY CUSTOMERS

TABLE 228 LEAR CORPORATION: PRODUCTS OFFERED

TABLE 229 LEAR CORPORATION: DEALS

#### 18.1.10 VECTOR INFORMATIK GMBH

TABLE 230 VECTOR INFORMATIK GMBH: COMPANY OVERVIEW

TABLE 231 VECTOR INFORMATIK GMBH: PRODUCTS OFFERED

TABLE 232 VECTOR INFORMATIK GMBH: PRODUCT DEVELOPMENTS

TABLE 233 VECTOR INFORMATIK GMBH: DEALS

TABLE 234 VECTOR INFORMATIK GMBH: OTHERS

### 18.2 OTHER KEY PLAYERS

#### 18.2.1 KARAMBA SECURITY

TABLE 235 KARAMBA SECURITY: COMPANY OVERVIEW

#### 18.2.2 SHEELDS

TABLE 236 SHEELDS: COMPANY OVERVIEW

#### 18.2.3 SAFERIDE TECHNOLOGIES

TABLE 237 SAFERIDE TECHNOLOGIES: COMPANY OVERVIEW

#### 18.2.4 GUARDKNOX CYBER TECHNOLOGIES LTD.

TABLE 238 GUARDKNOX CYBER TECHNOLOGIES LTD.: COMPANY OVERVIEW

18.2.5 UPSTREAM SECURITY LTD.

TABLE 239 UPSTREAM SECURITY LTD.: COMPANY OVERVIEW

18.2.6 BROADCOM INC.

TABLE 240 BROADCOM INC.: COMPANY OVERVIEW

18.2.7 AIRBIQUITY INC.

TABLE 241 AIRBIQUITY INC.: COMPANY OVERVIEW

18.2.8 GREEN HILLS SOFTWARE

TABLE 242 GREEN HILLS SOFTWARE: COMPANY OVERVIEW

18.2.9 BLACKBERRY CERTICOM

TABLE 243 BLACKBERRY CERTICOM: COMPANY OVERVIEW

18.2.10 REAL-TIME INNOVATIONS

TABLE 244 REAL-TIME INNOVATIONS: COMPANY OVERVIEW

18.2.11 IRDETO

TABLE 245 IRDETO: COMPANY OVERVIEW

18.2.12 STMICROELECTRONICS N.V.

TABLE 246 STMICROELECTRONICS N.V.: COMPANY OVERVIEW

18.2.13 ID QUANTIQUE

TABLE 247 ID QUANTIQUE: COMPANY OVERVIEW

18.2.14 ATOS SE

TABLE 248 ATOS SE: COMPANY OVERVIEW

18.2.15 AVL SOFTWARE AND FUNCTIONS GMBH

TABLE 249 AVL SOFTWARE AND FUNCTIONS GMBH: COMPANY OVERVIEW

18.2.16 COMBITECH AB

TABLE 250 COMBITECH AB: COMPANY OVERVIEW

18.2.17 AUTOCRYPT CO., LTD.

TABLE 251 AUTOCRYPT CO., LTD.: COMPANY OVERVIEW

18.2.18 AUTOTALKS

TABLE 252 AUTOTALKS: COMPANY OVERVIEW

18.2.19 CYBELLUM

TABLE 253 CYBELLUM: COMPANY OVERVIEW

18.2.20 C2A-SEC LTD

TABLE 254 C2A-SEC LTD: COMPANY OVERVIEW

18.2.21 CYMOTIVE TECHNOLOGIES

TABLE 255 CYMOTIVE TECHNOLOGIES: COMPANY OVERVIEW

18.2.22 THALES GROUP

TABLE 256 THALES GROUP: COMPANY OVERVIEW

\*Details on Business Overview, Products/Solutions/Services Offered, Recent Developments, MnM view (Key strengths/Right to win, Strategic choices made,

Weakness/competitive threats)\* might not be captured in case of unlisted companies.

## **19 RECOMMENDATIONS BY MARKETSANDMARKETS**

19.1 ASIA PACIFIC TO BE MAJOR MARKET FOR AUTOMOTIVE CYBERSECURITY SOLUTIONS

19.2 INCREASING FOCUS ON SEMI-AUTONOMOUS VEHICLES TO DRIVE DEMAND FOR AUTOMOTIVE CYBERSECURITY SOLUTIONS

19.3 ADAS AND SAFETY DRIVING TO EMERGE AS KEY APPLICATION SEGMENT

19.4 CONCLUSION

## **20 APPENDIX**

20.1 KEY INSIGHTS OF INDUSTRY EXPERTS

20.2 DISCUSSION GUIDE

20.3 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

20.4 CUSTOMIZATION OPTIONS

20.5 RELATED REPORTS

20.6 AUTHOR DETAILS



## I would like to order

Product name: Automotive Cybersecurity Market by Form (In-Vehicle, External Cloud Services), Offering (Hardware & Software), Security, Vehicle Type, Application, Propulsion, Vehicle Autonomy, Approach, EV Application and Region - Global Forecast to 2028

Product link: <https://marketpublishers.com/r/AE4ACB59D0EEN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/AE4ACB59D0EEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:

Last name:

Email:

Company:

Address:

City:

Zip code:

Country:

Tel:

Fax:

Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970