Global and China Automotive Semiconductor Industry Report, 2016-2020

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STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

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Abstract

Automotive semiconductors were mostly used in niche markets like high-end luxury cars in the early days and have penetrated into the low-end markets at a faster pace in recent years. As high-end configurations become standard ones, such as reversing camera, automatic emergency call system, and ubiquitous driver assistance system, automotive semiconductor production has increased, with global automotive semiconductor market size reaching USD29.2 billion in 2015, up 4.3% from a year ago. Being more intelligent, the automobile has higher requirements on active safety, communication & navigation, vision technology, recognition technology, infotainment, comfort, and environmental friendliness, thus creating a huger demand for automotive semiconductors applied for safety control, on-board electronics and so forth. It is expected that the world's automotive semiconductors will be worth USD 37 billion in 2020, a CAGR of 4.8% compared with 2015. As the world's largest automobile producer and consumer market, China has seen a ballooning automotive semiconductor market, thanks to booming semiconductor and automobile industries. Chinese automotive semiconductor market size was USD4.622 billion in 2015, sharing 15.8% of the global market, and is expected to hit USD8.011 billion in 2020, representing a CAGR of 11.6% during 2015-2020.

Automotive semiconductors can be divided into five categories: Power semiconductors, Sensors, Processors (Main for MCU), ASSP (mainly Connectivity and Amplifier), and Logic and others. In a conventional vehicle, semiconductors cost about USD320 with Power ones making up 26% and Sensors 16%; in a HEV, semiconductors cost USD690 or so with Power ones accounting for up to 75%; in an EV, semiconductors cost roughly USD700 with Power ones occupying 55%.

Globally, safety system, powertrain, automotive audio & video, chassis system, and body electronics are main application fields with a market size of USD4.9 billion, USD4.8 billion, USD5.2 billion, USD4.5 billion, and USD4.4 billion in 2015, respectively, seizing 16.8%, 16.4%, 17.8%, 15.4%, and 15.1% (81.5% in total) of automotive semiconductor market size.

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Global Automotive Semiconductor Market Size, 2012-2020E

Source: Global and China Automotive Semiconductor Industry Report, 2016-2020 Jan. 2017 ResearchInChina

Regarding competitive landscape, global automotive semiconductor industry is less concentrated with top5 automotive semiconductor companies (NXP, Infineon, Renesas, STMicroelectronics, and Texas Instruments) acquiring a combined 49.6% market share in 2015. NXP, with a 14.2% market share, finds a leading edge in automotive audio& video system and ADAS and some advantage in processor market after the acquisition of Freescale; Infineon, with an about 10.4% market share, is competitive in the fields of automotive sensor (#2), microcontroller (#3), and power semiconductor (#1); Renesas, with a 10.3% market share, enjoys a leadership in processor field; STMicroelectronics, with a 7.7% market share, is to some extent advantageous in segments like power semiconductor, short-range radar, and vision processing; Texas Instruments, with a 7.0% market share, focuses on industrial fields and doesn't stand out in automotive field although with a more complete product line.

Global and China Automotive Semiconductor Industry Report, 2016-2020 highlights the following:
◆Global semiconductor industry (market size, competitive landscape, etc.);
◆Global and China automobile industry (automobile production and sales, ownership, competitive landscape, etc.);
◆Global and China automotive semiconductor market size, competitive landscape, market segments, etc.);
◆Global automotive semiconductor segments (sensor, processor, and power semiconductor (application, market size, competitive landscape, etc.));
◆13 automotive semiconductor companies (Infineon, NXP, Texas Instruments, ON Semiconductor, ROHM Semiconductor, Renesas, STMicroelectronics, Bosch Semiconductors & Sensors, Melexis, Sensata, Fuji Electric, Murata, and TDK) (profile, financial position, production & sales, major customers, main products, R&D, production bases, technological features, etc.)

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