

Global Market of Key Devices/Components for ADAS: Key Research Findings 2016

◆ Research Outline

Yano Research Institute has conducted a study on the global market of key devices/components for ADAS (Advanced Driving Assistant Systems) with the following conditions:

1. Research period: From March to June, 2016
2. Research targets: Manufacturers of semiconductors, car electronics, and automobiles
3. Research methodologies: Face-to-face interviews, surveys via telephone/email, and literature research

What are Key Devices/Components for ADAS (Advanced Driving Assistant Systems)?

ADAS (Advanced Driving Assistant Systems) are the systems designed to avoid car accidents by sensing the surrounding environment of a car through sensor devices installed in front, side and/or rear parts of the car body. Several advanced driving assistant functions have been developed, which include LKS (Lane Keeping Support), ACC (Adaptive Cruise Control), AEB (Automatic Emergency Braking), and TSR (Traffic Sign Recognition).

Key devices/components for ADAS in this research indicate infrared laser, night visions, ultrasonic sensors, and a variety of sensor units equipped in front, side and/or rear parts of car body. The sensor units include; millimeter-wave radar systems on 76/77GHz frequency band; near- millimeter-wave radar systems on 24/25GHz frequency band; and cameras (CCD/CMOS sensors) for ADAS. All such devices and components are assumed to be equipped in commercial vehicles weighing 3.5 tons or less.

◆ Key Findings

■ Size of Global Market of ADAS Key Devices/Components in 2015 Attained 432.7 Billion Yen

Size of the global market of key devices/components for ADAS rose by 39.5% to achieve 432.779 billion yen, based on the shipment value of car-parts manufacturers (Tier1). Due to rapid increase of ADAS-equipped car models in U.S., Europe, and Japan, the market now has entered full-fledged, expanding phase in 2015.

■ CAGR of Global Market of ADAS Key Devices/Components from 2014 to 2020 Expected to be 29.3%, Market Size to Achieve 1,447.5 Billion Yen by 2020

While NCAP (New Car Assessment Program) of both Euro and Japan start AEB pedestrian tests from 2016, the United States Department of Transportation announced standard equipment of AEB in vehicles. This should encourage more cars to be standardly equipped with AEB in U.S., Europe, and Japan during the period between 2016 and 2018. Subsequently, the market size in 2020 is expected to attain 1,447.555 Billion yen.

■ CAGR of Camera Units for ADAS from 2014 to 2020 Expected to be 43.6%, Global Market Size to Expand to 680.0 Billion Yen

Among various key devices and components for ADAS, cameras for ADAS are required to be equipped on the front of a car body in U.S., Europe, and Japan, aiming to support AEB pedestrian. In order to enable automatic driving functions, the cameras for ADAS have improved the performance and increased the number to be equipped in a single car. Therefore, CAGR of cameras for ADAS is likely to be 43.6% from 2014 to 2020, which leads to the global market size of camera units for ADAS to expand to 680.030 billion yen by 2020.

◆ **Report format:**

Published report: “ADAS (Advanced Driving Assistant System) Device/Components Market 2016”

Issued on: June 28, 2016

Language: Japanese

Format: 149 pages in A4 format

Price: 130,000 yen (The consumption tax shall additionally be charged for the sales in Japan.)

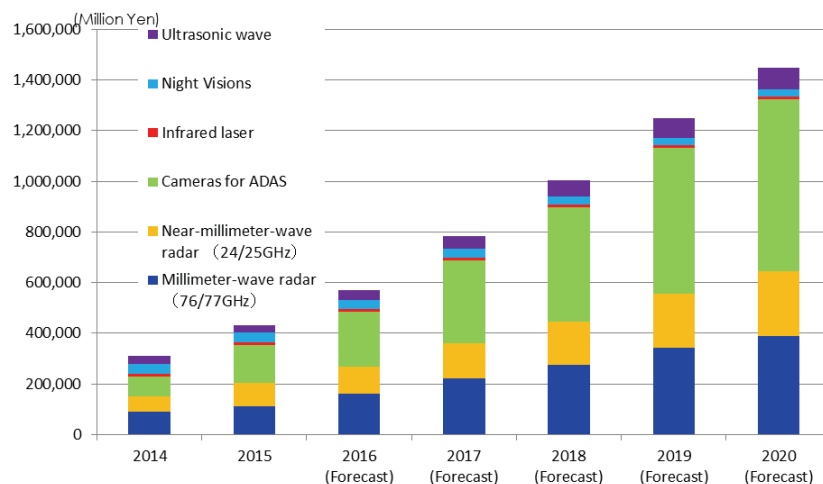
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■ **Figure & Table 1: Forecast of Global Market Size of Key Devices/Components for ADAS**



	2014	2015	2016 (Forecast)	2017 (Forecast)	2018 (Forecast)	2019 (Forecast)	2020 (Forecast)	CAGR (2014-2020)
Millimeter-wave radar (76/77GHz)	89,216	111,367	160,832	222,700	275,490	341,352	388,416	27.8%
Y-o-Y	-	124.8%	144.4%	138.5%	123.7%	123.9%	113.8%	
Near-millimeter-wave radar (24/25GHz)	63,066	91,245	108,950	136,800	171,072	216,192	255,360	26.2%
Y-o-Y	-	144.7%	119.4%	125.6%	125.1%	126.4%	118.1%	
Cameras for ADAS	77,640	151,185	214,340	326,760	451,880	575,510	680,030	43.6%
Y-o-Y	-	194.7%	141.8%	152.4%	138.3%	127.4%	118.2%	
Infrared laser	10,294	10,818	11,340	11,125	10,626	9,889	9,713	-1.0%
Y-o-Y	-	105.1%	104.8%	98.1%	95.5%	93.1%	98.2%	
Night Visions	39,900	38,400	36,600	35,850	29,510	28,470	28,210	-5.6%
Y-o-Y	-	96.2%	95.3%	98.0%	82.3%	96.5%	99.1%	
Ultrasonic wave	30,218	29,764	39,266	49,581	65,934	78,490	85,826	19.0%
Y-o-Y	-	98.5%	131.9%	126.3%	133.0%	119.0%	109.3%	
Global Market Size (Total)	310,334	432,779	571,328	782,816	1,004,512	1,249,903	1,447,555	29.3%
Y-o-Y	-	139.5%	132.0%	137.0%	128.3%	124.4%	115.8%	

Estimated by Yano Research Institute

Notes:

1. The market size is based on the shipment value of automobile parts manufacturers (Tier1).
2. The numerical values in 2016 and beyond are forecast.
3. Cameras for ADAS do not include those view-cameras for parking assist functions.
4. Key devices/components for ADAS in this research indicate infrared laser, night visions, ultrasonic sensors, and a variety of sensor units equipped in front, side and/or rear parts of car body. The sensor units include; millimeter-wave radar systems on 76/77GHz frequency band; near- millimeter-wave radar systems on 24/25GHz frequency band; and cameras (CCD/CMOS sensors) for ADAS. All such devices and components are assumed to be equipped in commercial vehicles weighing 3.5 tons or less.