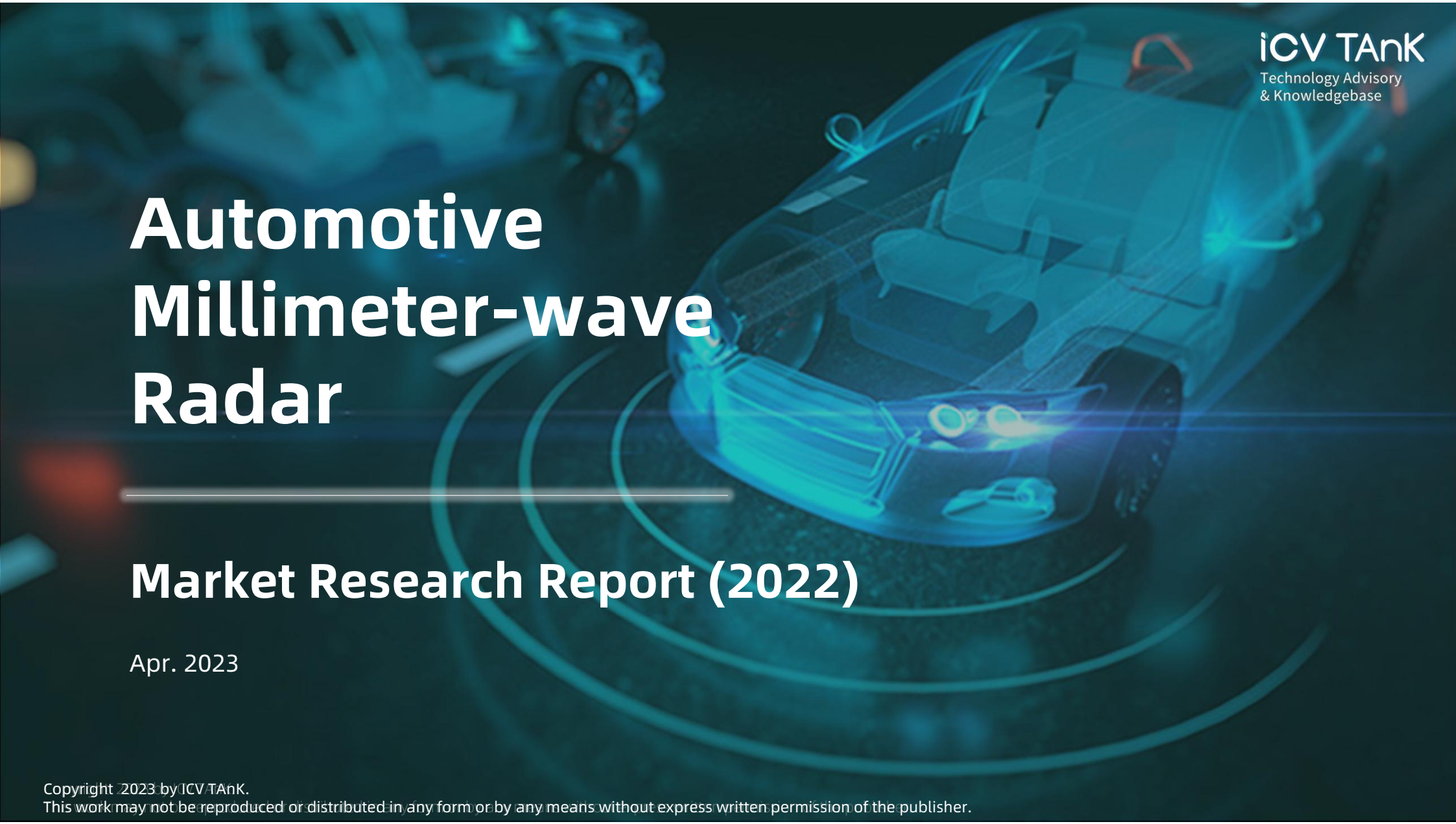

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Automotive Millimeter-wave Radar

Market Research Report (2022)

Apr. 2023

Methodology

Industry research: By conducting interviews with relevant companies, consumers, and industry experts, we aim to understand the demand, trends, and scale of the market.

Data analysis: By collecting, organizing, and analyzing market data, including market size, growth rate, pricing trends, consumer preferences, and more, we aim to understand the current status and development trends of the market.

Competitive analysis: By analyzing information such as competitor's products, prices, and market share, we aim to understand the competitive landscape in the market and our own strengths and weaknesses.

Technical analysis: By evaluating the technical requirements and development trends of the market, including the advantages and disadvantages of single photon detector technology characteristics, we aim to gain insights into the market's direction.

Regional analysis: By understanding factors such as local consumer demands and policy environments, we aim to identify regional differences in markets and potential for development.

Introduction

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The automotive millimeter-wave (mmWave) radar is based on electromagnetic waves with a frequency of 77 GHz, which provides high precision and accuracy in object detection. This technology has a wide range of applications, including adaptive cruise control, collision avoidance systems, blind-spot detection, lane departure warning, and automatic emergency braking. The market for automotive millimeter wave radar has seen significant growth in recent years, owing to the increasing demand for advanced driver assistance systems (ADAS) and autonomous driving technologies.

The market for automotive mmWave radar is highly competitive, key players in the market include companies such as Continental AG, Bosch, Denso Corporation, and Valeo SA. This report aims to provide a comprehensive analysis of the market, including market size, trends, drivers, challenges, and opportunities, and profiles of key players in the industry.

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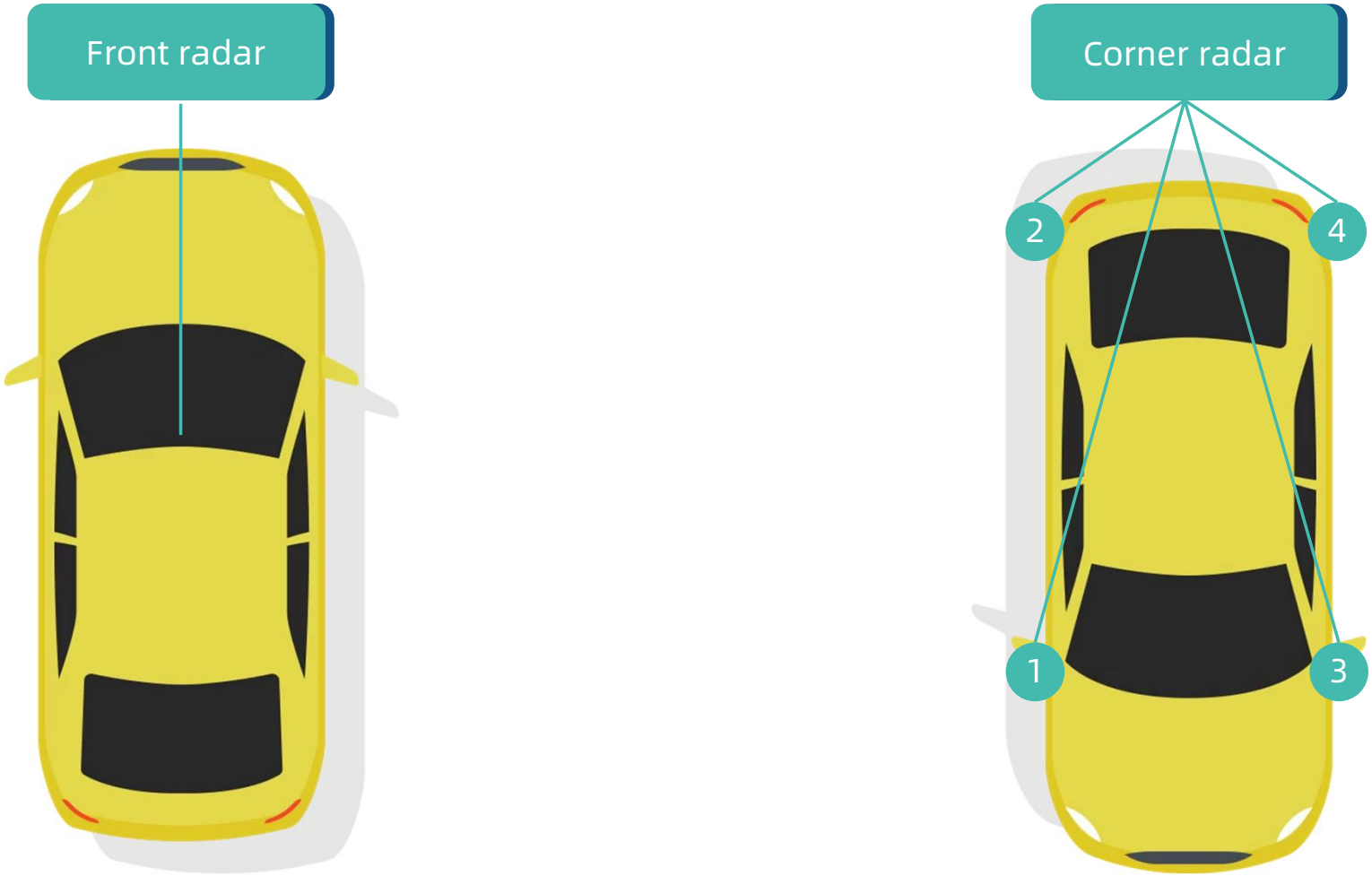


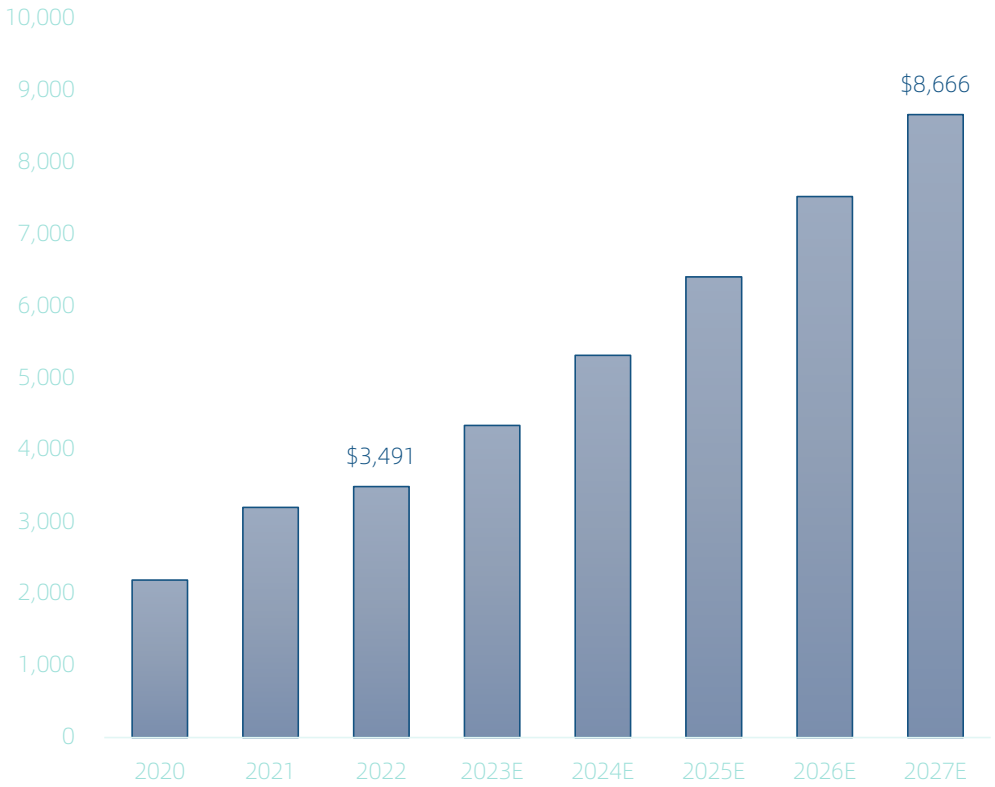
Assumptions: Configuration Table

	Front Radar	Corner Radar
L0	0	0
L1	1	0
L2/L2+	1	2
L3	1	4
L4/L5	2	4

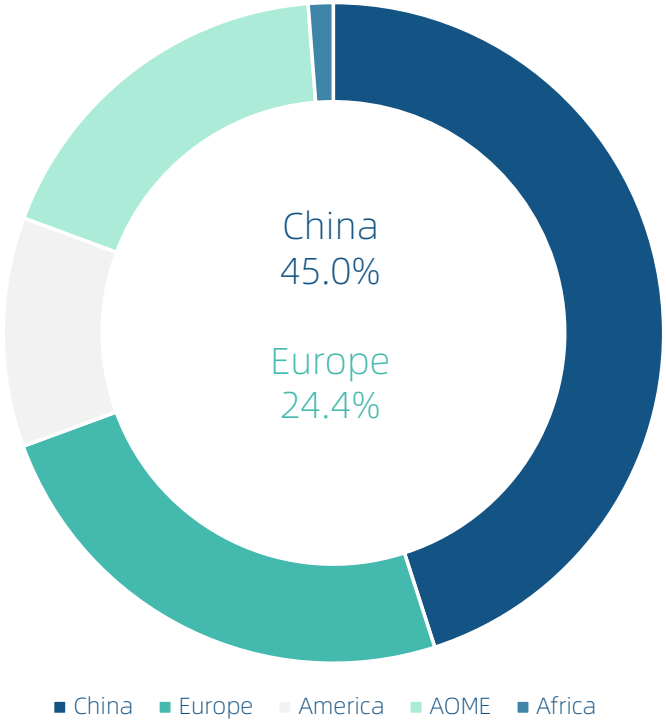
After considering the current vehicle configurations and ADAS technologies, ICV has established more reasonable assumptions for the number of mmWave radars required for different levels of autonomous driving configurations. These assumptions will be used for market analysis and forecasting going forward.

Global Market Overview

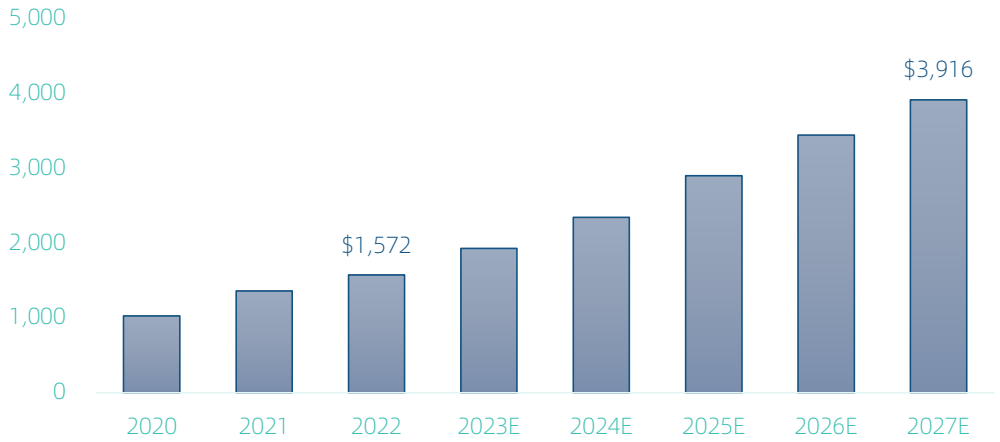
Global Market Size Forecast (in Million USD)



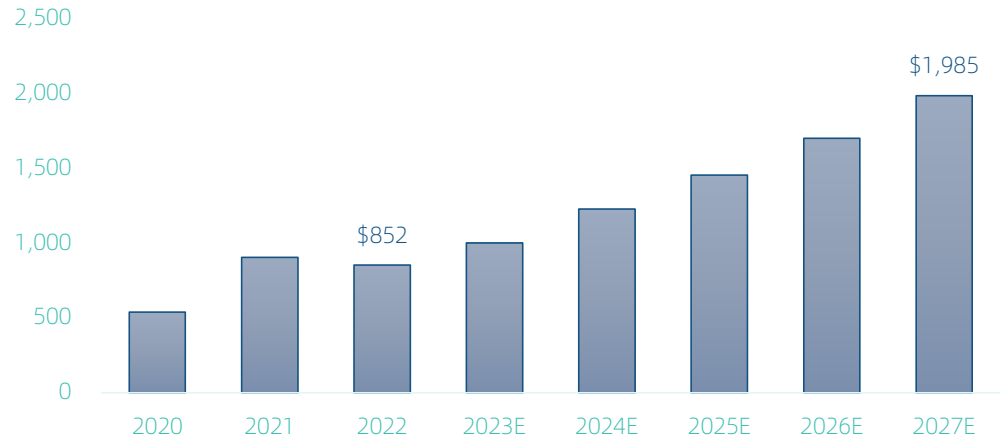
Market Share - by Country/ Region (2022)



Market Size Forecast - China
(in Million USD)



Market Size Forecast - Europe
(in Million USD)



The market of automotive mmWave radar in China was worth $1.57 billion in 2022, it was estimated to grow to $3.92 billion in 2027, resulting at a 6-year CAGR of 15.2%.

The European market was the second largest segment, it was worth $852 million in 2022 and is estimated to increase to $1.99 billion in 2027, with a 6-year CAGR of 14.7%.

Core Components

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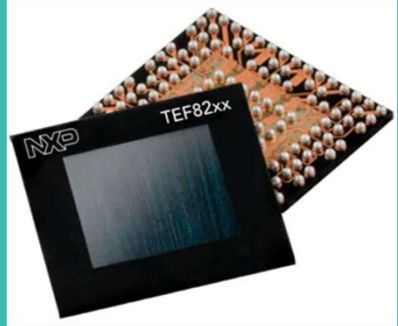
MMIC



Automotive radar transceiver, determines the scanning-performance of radar.

MCU

Processor of automotive radar, enables ADAS radar applications.

MMIC x1
AZ Resolution: 5°
EL Resolution: none

MMIC x2
AZ Resolution: 4°
EL Resolution: 4°

MMIC x4
AZ Resolution: 2°
EL Resolution: 2°

4D Imaging Radar

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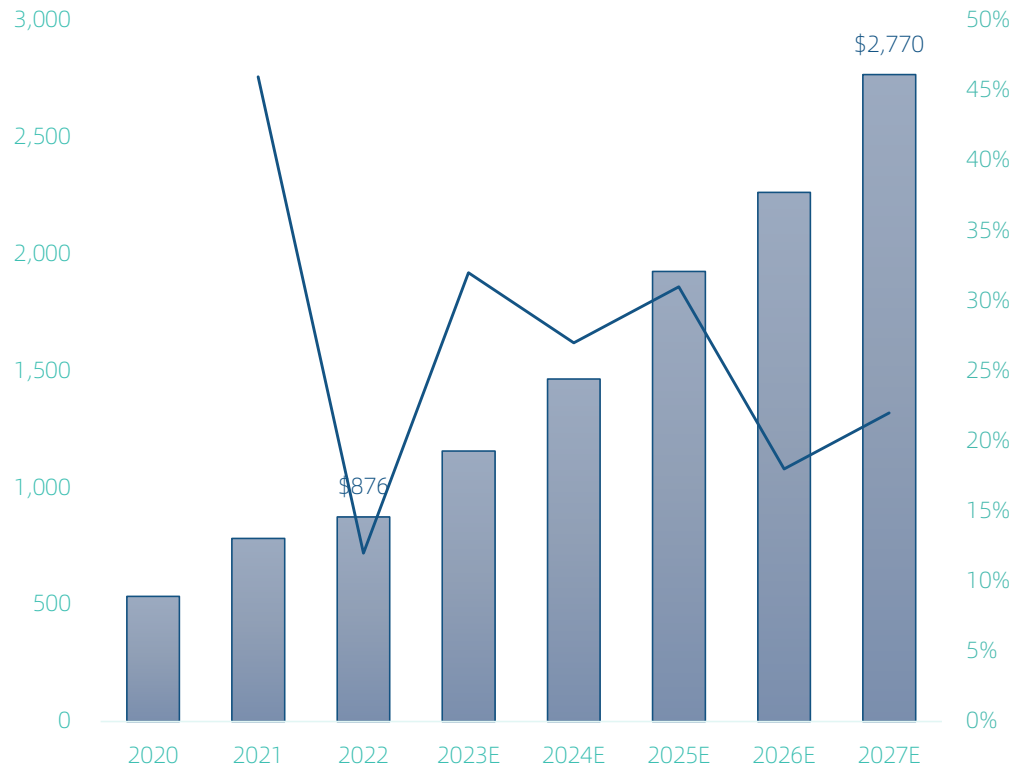
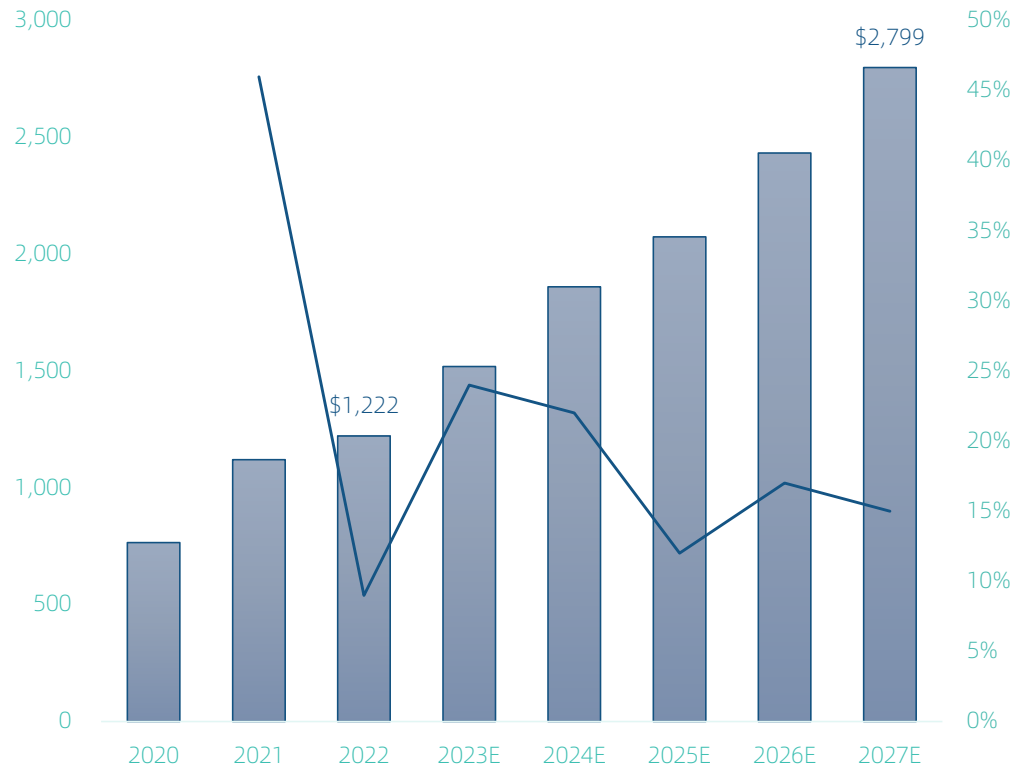
Market Size Forecast - MMIC
(in Million USD)



Market Size Forecast - MCU
(in Million USD)



Competitive Landscape

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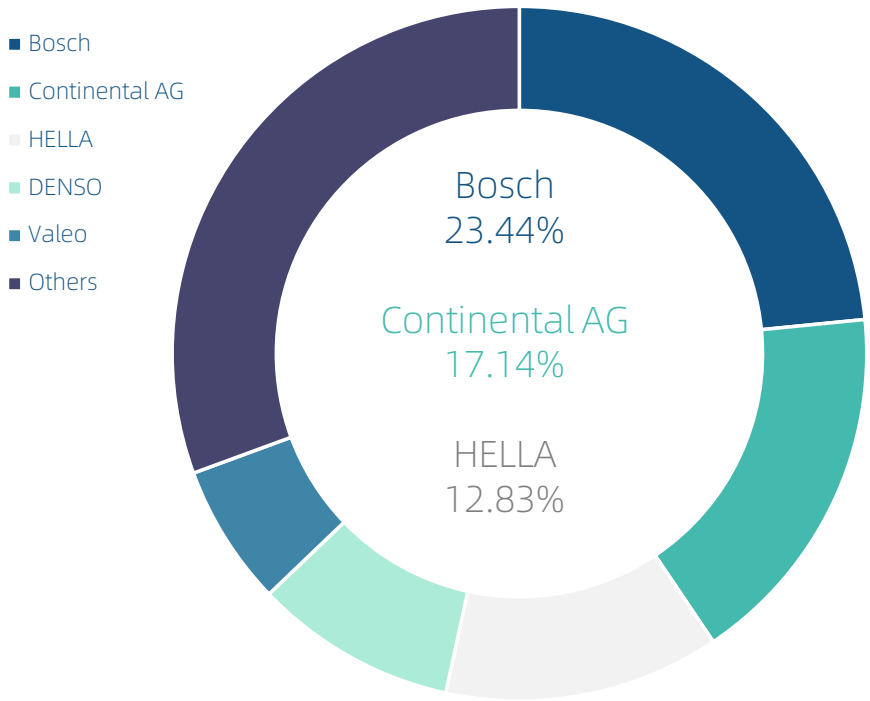
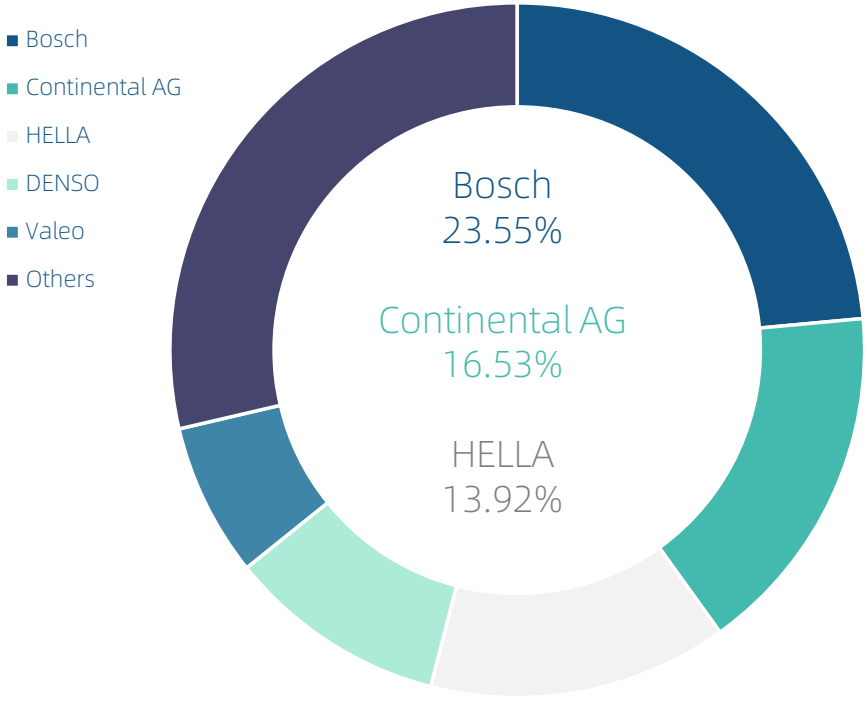
Automotive mmWave Radar Revenue Share by Vendor (2022)



Automotive mmWave Radar Revenue Share by Vendor (2023E)



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List of Exhibits

Ordering Information

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Global Automotive Millimeter-wave Radar Market Research Report (2022)

Electronic (1-5 users)	6,500.00 USD
Electronic (6-10 users)	9,200.00 USD
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We bring together deep intelligence across a wide range of capital-intensive industries and markets. By connecting data across variables, our analysts and industry specialists present our customers with a comprehensive view of their world.

This is the benefit of the new intelligence. We are able to isolate cause and effect, risk and opportunity in new ways that empower our customers to make well-informed decisions with greater confidence.

5250 Fairwind Dr. Mississauga, Ontario, L5R 3H4, Canada
(+1) 929 530 5901
infer@icvtank.com