

5G Chipsets Market by Type (Modems, RFICs), Frequency (Sub - 6 GHz, 24 - 29 GHz, Above 39 GHz), Process Node (Less than 10 nm, 10 to 28 nm, Above 28 nm), End-use (Telecommunication Infrastructure, Mobile Devices) and Region - Global Forecast to 2028

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Abstracts

The 5G Chipsets market is projected to reach USD 81.0 billion by 2028, growing at a CAGR of 17.4% from 2023 to 2028. This report covers key end–uses, namely, Telecommunication Infrastructure, Mobile Devices, Non-mobile Devices, and Automobiles.

“The Modems segment is projected to grow at a sizable CAGR in the market during the forecast period.”

The modem or baseband processor converts the data to a signal that can be used to modulate the carrier frequency for transmission and vice versa. A baseband processor is a chip in a device, such as a smartphone or a tablet, that handles cellular transmission. These are widely used in radio frequency (RF) and wireless communications. Qualcomm Technologies, Inc. (US); MediaTek Inc. (Taiwan); and Huawei Technologies Co., Ltd. (China) are some of the eminent 5G modem providers.

“By end–use, the market for automobile segment is expected to grow at highest CAGR in the market”

5G is expected to be crucial in transforming the automotive industry. It will develop new applications that are difficult to advance with the current generation of cellular technologies. 5G can allow system and application developers to offer a wide range of operations. Modern automobiles utilize vehicle-to-vehicle (V2V), vehicle-to-infrastructure

(V2I), vehicle-to-pedestrian (V2P), and vehicle-to-network (V2N) technologies. It would further help develop other applications, such as automated driving, digital logistics, and intelligent navigation. 5G network provides fast connectivity at low latency. Moreover, the 5G network data transfer rate is higher than that of the previous generation. Hence, 5G will play an integral role in autonomous driving.

“Europe to grow at the highest rate in the 5G Chipsets market.”

In collaboration with chip manufacturers, the European government aims to diversify its fabs and all parts of the semiconductor supply chain, including assembly and testing. They seek to move chipmaking out of the traditional strongholds (Asia Pacific region) into North America and Europe (Italy, Germany, the Netherlands, Spain, the UK, and Norway). Europe has set ambitious targets to grow its chip manufacturing capacity from 9% (FY2020) to 20% (FY2030) over the same period. The region comprises some key countries adopting Industry 4.0 and IoT and connected cars at a higher rate. The adoption of these technologies is mainly dependent on connectivity, and the 5G network is anticipated to play an integral role in developing the European market.

Break-up of the profiles of primary participants:

By Company Type – Tier 1 – 25%, Tier 2 – 30%, and Tier 3 – 45%

By Designation – C-level – 30%, Director-level – 40%, and, Other – 30%

By Region – North America - 30%, Europe – 20%, APAC – 40%, and RoW – 10%

The key players operating in the 5G Chipsets market include Qualcomm Technologies, Inc. (US), MediaTek Inc. (Taiwan), Huawei Technologies Co., Ltd. (China), SAMSUNG (South Korea), and Broadcom (US), Qorvo, Inc (US), Skyworks Solutions, Inc. (US), Analog Devices, Inc. (US), Marvell (US), Anokiwave, Inc (US), NXP Semiconductors (Netherlands), Xilinx (Acquired by AMD) (US), Texas Instruments Incorporated (US), Murata Manufacturing Co., Ltd. (Japan), Renesas Electronics Corporation (Japan), Infineon Technologies AG (Germany), MACOM (US), u-blox (Switzerland), Sivers IMA (Sweden), Unisoc (Shanghai) Technologies Co., Ltd. (China), Arm Limited (UK), Cadence Design Systems, Inc. (US), Fibocom Wireless Inc. (China), Quectel (China), and OMMIC (France). The study includes an in-depth competitive analysis of these key players in the 5G Chipsets market with their company profiles, recent developments,

and key market strategies.

Research Coverage:

This research report categorizes the 5G Chipsets market based on Type, End – Use, Process Node, and Frequency and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the 5G Chipsets market and forecasts the same till 2028. Apart from these, the report also consists of leadership mapping and analysis of all the companies included in the 5G Chipsets ecosystem.

Key Benefits of Buying the Report

The report would help leaders/new entrants in this market in the following ways:

1. This report segments the 5G Chipsets market comprehensively and provides the closest market size projection for all subsegments across different regions.
2. The report helps stakeholders understand the pulse of the market and provides them with information on key drivers, restraints, challenges, and opportunities for market growth.
3. This report would help stakeholders understand their competitors better and gain more insights to improve their position in the business. The competitive landscape section includes competitor ecosystem, product developments and launches, partnerships, and mergers and acquisitions.
4. The analysis of the top 25 companies, based on the market rank as well as the product footprint will help stakeholders visualize the market positioning of these key players.
5. Patent analysis, trade data, and technological trends that will shape the market in the coming years has also been covered in this report.

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*Details on Business overview, Products offered, Recent developments, Product launches, Deals, MnM view, Key strengths/Right to win, Strategic choices made, and Weaknesses/competitive threats might not be captured in case of unlisted companies.

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About

According to the latest market research report "5G Chipset Market by IC Type (RFIC, ASIC, Cellular IC, mmWave IC), Operational Frequency (Sub-6 GHz, Between 26 & 39 GHz, Above 39 GHz), Product (Devices, CPE, Network Infrastructure Equipment), End-User Industry, and Geography - Global Forecast to 2026", the overall 5G chipset market is estimated to be valued at USD 2.03 Billion in 2020 and is expected to be worth USD 22.41 Billion by 2026, at a CAGR of 49.2% from 2020 to 2026. Increasing M2M/IoT connections are fueling the growth of the 5G chipset market. Increasing demand for mobile data services and high demand anticipated from 5G-enabled smartphones are the other key factors driving this market.

Companies that are profiled in this report are :

Intel (US)

Xilinx (US)

Samsung Electronics (South Korea)

Qualcomm Technologies (US)

IBM (US)

Nokia (Finland)

Qorvo (US)

Infineon Technologies (US)

Integrated Device Technology (US)

Anokiwave (US)

ASIC to hold largest market share from 2020 to 2026

ASIC is expected to hold the largest share of the 5G chipset market from 2020 to 2026.

Demand for 5G-enabled smartphones is expected to result in the largest share of ASIC in the 5G chipset market. Many companies are in the process of developing ASIC chipsets to emerge as early providers and showcase commercial readiness for 5G. ASIC chipsets are mainly used in applications such as consumer electronics, autonomous cars, and industrial automation.

5G chipset market for mmWave frequency band to grow at highest CAGR from 2020 to 2026

The 5G chipset market for mmWave frequency band (between 26 and 39 GHz) is expected to grow at the highest CAGR during the forecast period. High bandwidth offered by this spectrum and the improving participation of telecom service providers in this spectrum are fueling the growth of this frequency band. This spectrum is a mixture of licensed and unlicensed spectrum. A world radiocommunication conference (WRC) to be held in 2019 holds the key to realizing the full potential of 5G bands above 24 GHz.

Consumer electronics to account for largest market size between 2020 and 2026

The 5G chipset market is expected to be led by the consumer electronics end-user industry. This can be attributed to the proliferation of 5G-enabled consumer electronic devices in the market. After the commercialization of 5G network connectivity, it is expected that there will be high demand for 5G-enabled smartphones with high-speed internet connectivity. Hence, the consumer electronics industry is estimated to hold the largest share of the 5G chipset market in 2020.

North America to lead 5G chipset market in terms of market size

North America is estimated to account for the largest share of the 5G chipset market in 2020. High demand for advanced technologies such as connected cars, machine-to-machine communication, and artificial intelligence will offer huge opportunities for the growth of the 5G chipset market in North America. Additionally, North America has emerged as a prominent region in terms of the development, testing, adoption, and implementation of 5G network services and applications.

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Product name: 5G Chipsets Market by Type (Modems, RFICs), Frequency (Sub - 6 GHz, 24 - 29 GHz, Above 39 GHz), Process Node (Less than 10 nm, 10 to 28 nm, Above 28 nm), End-use (Telecommunication Infrastructure, Mobile Devices) and Region - Global Forecast to 2028

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