

# Data Center Chip Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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## **Abstracts**

The global data center chip market size reached US\$ 10.3 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 14.9 Billion by 2028, exhibiting a growth rate (CAGR) of 6.1% during 2023-2028.

A data center is a centralized facility that organizations use for retrieving, storing, and processing physical and virtual data. It consists of power distribution units, switches, servers, chips, and firewalls. Graphics processing unit (GPU), application-specific integrated circuit (ASIC), central processing unit (CPU), and field-programmable gate array (FPGA) are some of the commonly used data center chips. The data center chip is an essential component that is usually found in the server area within a data center. It assists in improving energy efficiencies, redundancy, and flexibility, while enhancing operations and productivity. As a result, data center chips are widely used across various industries, such as manufacturing, transportation, information technology (IT) and telecommunication, and banking, financial services, and insurance (BFSI).

# Data Center Chip Market Trends:

The increasing deployment of cloud computing and data storage solutions across organizations is creating a positive outlook for the market. With the continuous transfer of data from private servers and the integration of connected devices, such as autonomous vehicles, virtual reality (VR) systems, and personal computers (PCs), there is an increasing need for data centers to manage the large amounts of data generated. Moreover, rapid technological advancements in memory chips and programmable solutions are significantly improving access to large amounts of data and enhancing performance in connected devices and data centers, which, in turn, is providing an impetus to the market growth. Additionally, the advent of fourth generation (4G) and fifth



generation (5G) networks, along with the large-scale integration of the Internet of Things (IoT) technology is also favoring the market growth. In line with this, the rising demand for smart computing devices, such as utility meters, home security, and navigation systems, is positively impacting the market growth. Other factors, including significant improvements in the telecommunication infrastructure and the implementation of various government initiatives regarding the localization of data centers, are anticipated to drive the market toward growth.

## Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global data center chip market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on chip type, data center size and industry vertical.

Breakup by Chip Type: **GPU** 

**ASIC FPGA** 

CPU

Others

Breakup by Data Center Size:

Small and Medium Size Large Size

Breakup by Industry Vertical:

BFSI

Manufacturing

Government

IT and Telecom

Retail

Transportation

**Energy and Utilities** 

Others

Breakup by Region:



North America

**United States** 

Canada

Asia-Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Achronix Semiconductor Corporation, Advanced Micro Devices Inc., Arm Limited, Broadcom Inc., Fujitsu Limited, GlobalFoundries Inc., Huawei Technologies Co. Ltd., Intel Corporation, Marvell Technology Inc., Nvidia Corporation and Taiwan Semiconductor Manufacturing Company Limited.

# Key Questions Answered in This Report:

How has the global data center chip market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global data center chip market? What are the key regional markets?

What is the breakup of the market based on the chip type?



What is the breakup of the market based on the data center size?
What is the breakup of the market based on the industry vertical?
What are the various stages in the value chain of the industry?
What are the key driving factors and challenges in the industry?
What is the structure of the global data center chip market and who are the key players?
What is the degree of competition in the industry?



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