

Artificial Intelligence Chip Market by Chip Type (GPU, ASIC, FPGA, and CPU), Industry Vertical (Media & Advertising, BFSI, IT & Telecom, Retail, Healthcare, Automotive & Transportation, and Others), Technology (System-on-Chip, System-in-Package, Multi-Chip Module, and Others), and Application (Predictive Maintenance, Image Recognition, Contract Analytics, and Others) - Global Opportunity Analysis and Industry Forecast, 2017-2023

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Abstracts

Artificial intelligence eliminates or minimizes the risk to human life in many applications. Majority of the major players in the IT industry are competing to develop artificial intelligence (AI) chips and applications.

As the amount of data is increasing, the need for more efficient systems to solve mathematical and computational problems becomes crucial. Further, the emergence of quantum computing and increase in implementation of AI chips in robotics drive the market growth to a considerable extent. The emergence of autonomous robotics—robots that develop and control themselves autonomously—presents a promising picture of the AI chip market.

Lack of skilled workforce is one of the major restraints in the AI chip market. Most of the tasks such as testing, bug fixing, cloud implementation, and others are taken over by AI chips; however, the delivery of such tasks lack essential skillsets.

The artificial intelligence chip market is segmented based on chip type, industry vertical, technology, application, and region. Based on technology, the market is categorized into GPU, ASIC, FPGA, and CPU. The industry verticals considered in the study include media & advertising, BFSI, IT & telecom, retail, healthcare, automotive & transportation,

and others. System-on-chip, system-in-package, multi-chip module, and others are the technologies considered. The applications analyzed in the study are predictive maintenance, image recognition, contract analytics, and others. Geographically, the market is sub-segmented into North America, Europe, Asia-Pacific, and LAMEA. Key players profiled in the report include AMD (Advanced Micro Devices), Google Inc., Intel Corporation, NVIDIA, Baidu, Graphcore, Qualcomm, Adapteva, UC-Davis, Mythic, and others.

KEY BENEFITS FOR STAKEHOLDERS

This study includes the analytical depiction of the global artificial intelligence chip market along with current trends and future estimations to determine the imminent investment pockets.

The report presents information regarding key drivers, restraints, and opportunities.

The current market is quantitatively analyzed from 2016 to 2023 to highlight the financial competency of the industry.

Porter's Five Forces analysis illustrates the potency of the buyers and suppliers in the industry.

KEY MARKET SEGMENTS

BY CHIP TYPE

GPU

ASIC

FPGA

CPU

BY INDUSTRY VERTICAL

Media & Advertising

BFSI

IT & Telecom

Retail

Healthcare

Automotive & Transportation

Others

BY TECHNOLOGY

System-on-chip

System-in-package

Multi-chip module

Others

BY APPLICATION

Predictive maintenance

Image recognition

Contract analytics

Others

BY REGION

North America

U.S.

Canada

Mexico

Europe

UK

Germany

France

Russia

Rest of Europe

Asia-Pacific

China

Japan

India

Australia

Rest of Asia-Pacific

LAMEA

Latin America

Middle East

Africa

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