

Global Deep Learning Chip Market Size Study, by Chip Type (GPU, ASIC, FPGA, CPU, Others), by Technology (System-on-chip, System-in-package, Multi-chip module, Others), by Industry Vertical (Media & Advertising, BFSI, IT & Telecom, Retail, Healthcare, Automotive, Others), and Regional Forecasts 2022-2032

<https://marketpublishers.com/r/GDA08B52967DEN.html>

Date: August 2024

Pages: 200

Price: US\$ 4,950.00 (Single User License)

ID: GDA08B52967DEN

Abstracts

Global Deep Learning Chip Market was valued at approximately USD 11.05 billion in 2023 and is expected to grow at a robust CAGR of 35.27% over the forecast period from 2024 to 2032. Deep learning chips are specialized hardware designed to accelerate artificial intelligence (AI) tasks, particularly deep learning algorithms. These chips optimize complex computations involved in neural networks, enhancing performance and efficiency. Key features include parallel processing capabilities, high memory bandwidth, and low power consumption. Major players in this market include NVIDIA, Intel, and Google, each developing advanced chips for various applications like autonomous vehicles, medical imaging, and natural language processing. The increasing demand for AI-driven solutions fuels the rapid growth of the deep learning chip industry.

The Global Deep Learning Chip Market is driven by the advent of quantum computing and the increasing deployment of deep learning chips in robotics. The growing integration of deep learning chips in robotics enhances their ability to process complex data and perform sophisticated tasks, driving market expansion. These chips enable robots to learn from data, adapt to new situations, and improve performance over time, making them crucial in industries such as manufacturing, healthcare, and autonomous systems. This dual influence significantly boosts the market's growth trajectory. Moreover, rising number of autonomous robots, capable of self-development and

autonomous control, presents significant growth opportunities. However, the industry faces challenges such as a shortage of skilled professionals. Tasks such as testing, bug fixing, and cloud implementation, primarily managed by deep learning chips, suffer from a lack of requisite expertise.

The key regions considered for the Global Deep Learning Chip Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. In 2023, Asia-Pacific region is projected to exhibit the highest CAGR during the forecast period, indicating a rapid adoption and integration of deep learning technologies in various applications. This growth is driven by increasing investments in artificial intelligence, expanding technological infrastructure, and rising demand for advanced analytics in industries such as healthcare, automotive, and finance. Key markets such as China, India, Japan, and Australia are leading this trend, leveraging deep learning to enhance innovation and efficiency in their respective sectors.

Major market players include in report are:

Alphabet Inc

Qualcomm Incorporated

Xilinx, Inc.

Bitmain Technologies Ltd.

Advanced Micro Devices, Inc.

Intel Corporation

NVIDIA Corporation

Baidu, Inc.

Amazon.com, Inc.

Samsung Electronics Co. Ltd.

The detailed segments and sub-segments of the market are explained below:

By Chip Type

- GPU
- ASIC
- FPGA
- CPU
- Others

By Technology

- System-on-chip (SoC)
- System-in-package (SIP)
- Multi-chip module
- Others

By Industry Vertical

- Media & Advertising

- BFSI
- IT & Telecom
- Retail
- Healthcare
- Automotive
- Others

By Region:

North America

- U.S.
- Canada

Europe

- UK
- Germany
- France
- Spain
- Italy
- ROE

Asia Pacific

- China
- India
- Japan
- Australia
- South Korea
- RoAPAC

Latin America

- Brazil
- Mexico
- RoLA

Middle East & Africa

- Saudi Arabia
- South Africa
- RoMEA

Years considered for the study are as follows:

- Historical year – 2022
- Base year – 2023
- Forecast period – 2024 to 2032

Key Takeaways:

- Market Estimates & Forecast for 10 years from 2022 to 2032.
- Annualized revenues and regional level analysis for each market segment.

- Detailed analysis of geographical landscape with Country level analysis of major regions.
- Competitive landscape with information on major players in the market.
- Analysis of key business strategies and recommendations on future market approach.
- Analysis of competitive structure of the market.
- Demand side and supply side analysis of the market

Contents

CHAPTER 1. GLOBAL DEEP LEARNING CHIP MARKET EXECUTIVE SUMMARY

- 1.1. Global Deep Learning Chip Market Size & Forecast (2022-2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
 - 1.3.1. By Chip Type
 - 1.3.2. By Technology
 - 1.3.3. By Industry Vertical
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

CHAPTER 2. GLOBAL DEEP LEARNING CHIP MARKET DEFINITION AND RESEARCH ASSUMPTIONS

- 2.1. Research Objective
- 2.2. Market Definition
- 2.3. Research Assumptions
 - 2.3.1. Inclusion & Exclusion
 - 2.3.2. Limitations
 - 2.3.3. Supply Side Analysis
 - 2.3.3.1. Availability
 - 2.3.3.2. Infrastructure
 - 2.3.3.3. Regulatory Environment
 - 2.3.3.4. Market Competition
 - 2.3.3.5. Economic Viability (Consumer's Perspective)
 - 2.3.4. Demand Side Analysis
 - 2.3.4.1. Regulatory frameworks
 - 2.3.4.2. Technological Advancements
 - 2.3.4.3. Environmental Considerations
 - 2.3.4.4. Consumer Awareness & Acceptance
- 2.4. Estimation Methodology
- 2.5. Years Considered for the Study
- 2.6. Currency Conversion Rates

CHAPTER 3. GLOBAL DEEP LEARNING CHIP MARKET DYNAMICS

- 3.1. Market Drivers
 - 3.1.1. Emergence of Quantum Computing
 - 3.1.2. Enhanced Implementation in Robotics
- 3.2. Market Challenges
 - 3.2.1. Dearth of Skilled Workforce
- 3.3. Market Opportunities
 - 3.3.1. Emergence of Autonomous Robots
 - 3.3.2. Growing Adoption in Various Industries

CHAPTER 4. GLOBAL DEEP LEARNING CHIP MARKET INDUSTRY ANALYSIS

- 4.1. Porter's 5 Force Model
 - 4.1.1. Bargaining Power of Suppliers
 - 4.1.2. Bargaining Power of Buyers
 - 4.1.3. Threat of New Entrants
 - 4.1.4. Threat of Substitutes
 - 4.1.5. Competitive Rivalry
 - 4.1.6. Futuristic Approach to Porter's 5 Force Model
 - 4.1.7. Porter's 5 Force Impact Analysis
- 4.2. PESTEL Analysis
 - 4.2.1. Political
 - 4.2.2. Economical
 - 4.2.3. Social
 - 4.2.4. Technological
 - 4.2.5. Environmental
 - 4.2.6. Legal
- 4.3. Top investment opportunity
- 4.4. Top winning strategies
- 4.5. Disruptive Trends
- 4.6. Industry Expert Perspective
- 4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL DEEP LEARNING CHIP MARKET SIZE & FORECASTS BY CHIP TYPE 2022-2032

- 5.1. Segment Dashboard
- 5.2. Global Deep Learning Chip Market: Chip Type Revenue Trend Analysis, 2022 & 2032 (USD Billion)
 - 5.2.1. GPU

- 5.2.2. ASIC
- 5.2.3. FPGA
- 5.2.4. CPU
- 5.2.5. Others

CHAPTER 6. GLOBAL DEEP LEARNING CHIP MARKET SIZE & FORECASTS BY TECHNOLOGY 2022-2032

- 6.1. Segment Dashboard
- 6.2. Global Deep Learning Chip Market: Technology Revenue Trend Analysis, 2022 & 2032 (USD Billion)
 - 6.2.1. System-on-chip (SoC)
 - 6.2.2. System-in-package (SIP)
 - 6.2.3. Multi-chip module
 - 6.2.4. Others

CHAPTER 7. GLOBAL DEEP LEARNING CHIP MARKET SIZE & FORECASTS BY INDUSTRY VERTICAL 2022-2032

- 7.1. Segment Dashboard
- 7.2. Global Deep Learning Chip Market: Industry Vertical Revenue Trend Analysis, 2022 & 2032 (USD Billion)
 - 7.2.1. Media & Advertising
 - 7.2.2. BFSI
 - 7.2.3. IT & Telecom
 - 7.2.4. Retail
 - 7.2.5. Healthcare
 - 7.2.6. Automotive
 - 7.2.7. Others

CHAPTER 8. GLOBAL DEEP LEARNING CHIP MARKET SIZE & FORECASTS BY REGION 2022-2032

- 8.1. North America Deep Learning Chip Market
 - 8.1.1. U.S. Deep Learning Chip Market
 - 8.1.1.1. Chip Type breakdown size & forecasts, 2022-2032
 - 8.1.1.2. Technology breakdown size & forecasts, 2022-2032
 - 8.1.1.3. Industry Vertical breakdown size & forecasts, 2022-2032
 - 8.1.2. Canada Deep Learning Chip Market

- 8.2. Europe Deep Learning Chip Market
 - 8.2.1. U.K. Deep Learning Chip Market
 - 8.2.2. Germany Deep Learning Chip Market
 - 8.2.3. France Deep Learning Chip Market
 - 8.2.4. Spain Deep Learning Chip Market
 - 8.2.5. Italy Deep Learning Chip Market
 - 8.2.6. Rest of Europe Deep Learning Chip Market
- 8.3. Asia-Pacific Deep Learning Chip Market
 - 8.3.1. China Deep Learning Chip Market
 - 8.3.2. India Deep Learning Chip Market
 - 8.3.3. Japan Deep Learning Chip Market
 - 8.3.4. Australia Deep Learning Chip Market
 - 8.3.5. South Korea Deep Learning Chip Market
 - 8.3.6. Rest of Asia Pacific Deep Learning Chip Market
- 8.4. Latin America Deep Learning Chip Market
 - 8.4.1. Brazil Deep Learning Chip Market
 - 8.4.2. Mexico Deep Learning Chip Market
 - 8.4.3. Rest of Latin America Deep Learning Chip Market
- 8.5. Middle East & Africa Deep Learning Chip Market
 - 8.5.1. Saudi Arabia Deep Learning Chip Market
 - 8.5.2. South Africa Deep Learning Chip Market
 - 8.5.3. Rest of Middle East & Africa Deep Learning Chip Market

CHAPTER 9. COMPETITIVE INTELLIGENCE

- 9.1. Key Company SWOT Analysis
 - 9.1.1. Company
 - 9.1.2. Company
 - 9.1.3. Company
- 9.2. Top Market Strategies
- 9.3. Company Profiles
 - 9.3.1. Alphabet Inc
 - 9.3.1.1. Key Information
 - 9.3.1.2. Overview
 - 9.3.1.3. Financial (Subject to Data Availability)
 - 9.3.1.4. Product Summary
 - 9.3.1.5. Market Strategies
 - 9.3.2. Qualcomm Incorporated
 - 9.3.3. Xilinx, Inc.

- 9.3.4. Bitmain Technologies Ltd.
- 9.3.5. Advanced Micro Devices, Inc.
- 9.3.6. Intel Corporation
- 9.3.7. NVIDIA Corporation
- 9.3.8. Baidu, Inc.
- 9.3.9. Amazon.com, Inc.
- 9.3.10. Samsung Electronics Co. Ltd.

CHAPTER 10. RESEARCH PROCESS

- 10.1. Research Process
 - 10.1.1. Data Mining
 - 10.1.2. Analysis
 - 10.1.3. Market Estimation
 - 10.1.4. Validation
 - 10.1.5. Publishing
- 10.2. Research Attributes

List Of Tables

LIST OF TABLES

TABLE 1. Global Deep Learning Chip market, report scope

TABLE 2. Global Deep Learning Chip market estimates & forecasts by Region
2022-2032 (USD Billion)

TABLE 3. Global Deep Learning Chip market estimates & forecasts by Chip Type
2022-2032 (USD Billion)

TABLE 4. Global Deep Learning Chip market estimates & forecasts by Technology
2022-2032 (USD Billion)

TABLE 5. Global Deep Learning Chip market estimates & forecasts by Industry Vertical
2022-2032 (USD Billion)

TABLE 6. Global Deep Learning Chip market by segment, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 7. Global Deep Learning Chip market by region, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 8. Global Deep Learning Chip market by segment, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 9. Global Deep Learning Chip market by region, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 10. Global Deep Learning Chip market by segment, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 11. Global Deep Learning Chip market by region, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 12. Global Deep Learning Chip market by segment, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 13. Global Deep Learning Chip market by region, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 14. Global Deep Learning Chip market by segment, estimates & forecasts,
2022-2032 (USD Billion)

TABLE 15. U.S. Deep Learning Chip market estimates & forecasts, 2022-2032 (USD
Billion)

TABLE 16. U.S. Deep Learning Chip market estimates & forecasts by segment
2022-2032 (USD Billion)

TABLE 17. U.S. Deep Learning Chip market estimates & forecasts by segment
2022-2032 (USD Billion)

TABLE 18. Canada Deep Learning Chip market estimates & forecasts, 2022-2032
(USD Billion)

TABLE 19. Canada Deep Learning Chip market estimates & forecasts by segment
2022-2032 (USD Billion)

TABLE 20. Canada Deep Learning Chip market estimates & forecasts by segment
2022-2032 (USD Billion)

.....

This list is not complete, final report does contain more than 100 tables. The list may be updated in the final deliverable

List Of Figures

LIST OF FIGURES

- FIG 1. Global Deep Learning Chip market, research methodology
- FIG 2. Global Deep Learning Chip market, market estimation techniques
- FIG 3. Global market size estimates & forecast methods.
- FIG 4. Global Deep Learning Chip market, key trends 2023
- FIG 5. Global Deep Learning Chip market, growth prospects 2022-2032
- FIG 6. Global Deep Learning Chip market, porters 5 force model
- FIG 7. Global Deep Learning Chip market, PESTEL analysis
- FIG 8. Global Deep Learning Chip market, value chain analysis
- FIG 9. Global Deep Learning Chip market by segment, 2022 & 2032 (USD Billion)
- FIG 10. Global Deep Learning Chip market by segment, 2022 & 2032 (USD Billion)
- FIG 11. Global Deep Learning Chip market by segment, 2022 & 2032 (USD Billion)
- FIG 12. Global Deep Learning Chip market by segment, 2022 & 2032 (USD Billion)
- FIG 13. Global Deep Learning Chip market by segment, 2022 & 2032 (USD Billion)
- FIG 14. Global Deep Learning Chip market, regional snapshot 2022 & 2032
- FIG 15. North America Deep Learning Chip market 2022 & 2032 (USD Billion)
- FIG 16. Europe Deep Learning Chip market 2022 & 2032 (USD Billion)
- FIG 17. Asia pacific Deep Learning Chip market 2022 & 2032 (USD Billion)
- FIG 18. Latin America Deep Learning Chip market 2022 & 2032 (USD Billion)
- FIG 19. Middle East & Africa Deep Learning Chip market 2022 & 2032 (USD Billion)
- FIG 20. Global Deep Learning Chip market, company market share analysis (2023)

.....

This list is not complete, final report does contain more than 50 figures. The list may be updated in the final deliverable

I would like to order

Product name: Global Deep Learning Chip Market Size Study, by Chip Type (GPU, ASIC, FPGA, CPU, Others), by Technology (System-on-chip, System-in-package, Multi-chip module, Others), by Industry Vertical (Media & Advertising, BFSI, IT & Telecom, Retail, Healthcare, Automotive, Others), and Regional Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/GDA08B52967DEN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GDA08B52967DEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970