

Neuromorphic Chip Market By End user (Consumer Electronics, Automotive, IT and Telecom, Aerospace and Defense, Industrial, Healthcare, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032

Market Report | 2023-10-01 | 242 pages | Allied Market Research

AVAILABLE LICENSES:

- Cloud Access License \$3110.40
- Business User License \$5157.00
- Enterprise License \$8640.00

Report description:

The neuromorphic chip market was valued at \$87.89 million in 2022 and is estimated to reach \$7,112.0 million by 2032, exhibiting a CAGR of 55.8% from 2023 to 2032.

A neuromorphic chip is a microprocessor designed to imitate the architecture and operation of the human brain. Neuromorphic chips are digital and analog integrated circuits that implement neural networking technology. These chips are designed to process and store data together on each individual neuron instead of having separate areas for each, which allows them to avoid the von Neumann bottleneck and experience both high performance and low energy consumption at the same time. The increasing use of biometrics and in-speech recognition drives the demand for neuromorphic chips in many electronics gadgets. These chips are used to process audio data in the cloud and then return it to the phone. In addition, artificial intelligence (AI) requires more data processing power, but low-energy neuromorphic chips have the potential to shift current cloud-based applications towards direct execution on smartphones in the future without significantly depleting the device's battery. Neuromorphic chips are specific brain-inspired ASIC that implements the Spiked Neural Networks (SNNs). It has an object to reach the massively parallel brain processing ability in tens of watts on average.

The adoption of neuromorphic chips in healthcare presents a notable opportunity for advancing precision and real time diagnostics and personalized treatment approaches. These chips excel at rapidly processing extensive and intricate patient data, empowering healthcare practitioners to make more informed decisions, leading to enhanced patient outcomes. Furthermore, their energy-efficient design proves advantageous for portable and implantable medical devices, effectively extending their operational efficiency and lifespan, making them an asset in the pursuit of better healthcare solutions.

The neuromorphic chip market is segmented on the basis of end user and region. By end user, the market is divided into consumer electronics, automotive, IT and telecom, aerospace and defense, industrial, healthcare and others. By region, it is analyzed across North America (the U.S., Canada, and Mexico), Europe (UK, Germany, France, Italy, and the rest of Europe),

Scotts International, EU Vat number: PL 6772247784

Asia-Pacific (China, Japan, India, South Korea, Taiwan, and the rest of Asia-Pacific), and LAMEA (Latin America, the Middle East, and Africa). Competitive analysis and profiles of the major neuromorphic chip market players, such as IBM Corporation, HRL Laboratories, LLC, SynSense, General Vision Inc., GrAI Matter Labs, SK HYNIX INC., QUALCOMM Incorporated, BrainChip, Inc, Samsung Electronics Co. Ltd and Intel Corporation is provided in this report. Product launch, agreement, partnership, and acquisition business strategies were adopted by the major market players in 2022.

Key Benefits For Stakeholders

- -This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the neuromorphic chip market analysis from 2022 to 2032 to identify the prevailing neuromorphic chip market opportunities.
- -The market research is offered along with information related to key drivers, restraints, and opportunities.
- -Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.
- -In-depth analysis of the neuromorphic chip market segmentation assists to determine the prevailing market opportunities.
- -Major countries in each region are mapped according to their revenue contribution to the global market.
- -Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.
- -The report includes the analysis of the regional as well as global neuromorphic chip market trends, key players, market segments, application areas, and market growth strategies.

Additional benefits you will get with this purchase are:

- Quarterly Update and* (only available with a corporate license, on listed price)
- 5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.
- Free Upcoming Version on the Purchase of Five and Enterprise User License.
- 16 analyst hours of support* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)
- 15% Free Customization* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)
- Free data Pack on the Five and Enterprise User License. (Excel version of the report)
- Free Updated report if the report is 6-12 months old or older.
- 24-hour priority response*
- Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

- Analysis of raw material in a product (by %)
- Technology Trend Analysis
- Market share analysis of players by products/segments
- New Product Development/ Product Matrix of Key Players
- Additional company profiles with specific to client's interest
- Additional country or region analysis- market size and forecast
- Expanded list for Company Profiles
- Key player details (including location, contact details, supplier/vendor network etc. in excel format)

Key Market Segments

By End user

- Healthcare
- Others
- Consumer Electronics
- Automotive
- IT and Telecom

Scotts International, EU Vat number: PL 6772247784

- Aerospace and Defense
- Industrial

By Region

- North America
- U.S.
- Canada
- Mexico
- Europe
- UK
- Germany
- France
- Italy
- Rest of Europe
- Asia-Pacific
- China
- Japan
- India
- South Korea
- Taiwan
- Rest of Asia-Pacific
- LAMEA
- Latin America
- Middle East
- Africa
- Key Market Players
- IBM Corporation
- GrAI Matter Labs
- SynSense
- HRL Laboratories, LLC
- BrainChip, Inc
- Samsung Electronics Co. Ltd
- Intel Corporation
- General Vision Inc.
- SK HYNIX INC.
- QUALCOMM Incorporated

Table of Contents:

CHAPTER 1: INTRODUCTION

- 1.1. Report description
- 1.2. Key market segments
- 1.3. Key benefits to the stakeholders
- 1.4. Research methodology
- 1.4.1. Primary research
- 1.4.2. Secondary research
- 1.4.3. Analyst tools and models

CHAPTER 2: EXECUTIVE SUMMARY

2.1. CXO Perspective

Scotts International. EU Vat number: PL 6772247784

CHAPTER 3: MARKET OVERVIEW

- 3.1. Market definition and scope
- 3.2. Key findings
- 3.2.1. Top impacting factors
- 3.2.2. Top investment pockets
- 3.3. Porter's five forces analysis
- 3.3.1. Moderate to high bargaining power of suppliers
- 3.3.2. Moderate to high threat of new entrants
- 3.3.3. Modearte to high threat of substitutes
- 3.3.4. Low to high intensity of rivalry
- 3.3.5. Low to moderate bargaining power of buyers
- 3.4. Market dynamics
- 3.4.1. Drivers
- 3.4.1.1. Increase in number of wearable devices
- 3.4.1.2. Rise in demand for artificial intelligence and machine learning technology
- 3.4.1.3. Surge in demand for neuromorphic chip for big data analysis
- 3.4.2. Restraints
- 3.4.2.1. High manufacturing cost
- 3.4.3. Opportunities
- 3.4.3.1. Surge in adoption of neuromorphic chip in automotive industry

CHAPTER 4: NEUROMORPHIC CHIP MARKET, BY END USER

- 4.1. Overview
- 4.1.1. Market size and forecast
- 4.2. Consumer Electronics
- 4.2.1. Key market trends, growth factors and opportunities
- 4.2.2. Market size and forecast, by region
- 4.2.3. Market share analysis by country
- 4.3. Automotive
- 4.3.1. Key market trends, growth factors and opportunities
- 4.3.2. Market size and forecast, by region
- 4.3.3. Market share analysis by country
- 4.4. IT and Telecom
- 4.4.1. Key market trends, growth factors and opportunities
- 4.4.2. Market size and forecast, by region
- 4.4.3. Market share analysis by country
- 4.5. Aerospace and Defense
- 4.5.1. Key market trends, growth factors and opportunities
- 4.5.2. Market size and forecast, by region
- 4.5.3. Market share analysis by country
- 4.6. Industrial
- 4.6.1. Key market trends, growth factors and opportunities
- 4.6.2. Market size and forecast, by region
- 4.6.3. Market share analysis by country
- 4.7. Healthcare
- 4.7.1. Key market trends, growth factors and opportunities
- 4.7.2. Market size and forecast, by region
- 4.7.3. Market share analysis by country

Scotts International. EU Vat number: PL 6772247784

- 4.8. Others
- 4.8.1. Key market trends, growth factors and opportunities
- 4.8.2. Market size and forecast, by region
- 4.8.3. Market share analysis by country

CHAPTER 5: NEUROMORPHIC CHIP MARKET, BY REGION

- 5.1. Overview
- 5.1.1. Market size and forecast By Region
- 5.2. North America
- 5.2.1. Key market trends, growth factors and opportunities
- 5.2.2. Market size and forecast, by End user
- 5.2.3. Market size and forecast, by country
- 5.2.3.1. U.S.
- 5.2.3.1.1. Market size and forecast, by End user
- 5.2.3.2. Canada
- 5.2.3.2.1. Market size and forecast, by End user
- 5.2.3.3. Mexico
- 5.2.3.3.1. Market size and forecast, by End user
- 5.3. Europe
- 5.3.1. Key market trends, growth factors and opportunities
- 5.3.2. Market size and forecast, by End user
- 5.3.3. Market size and forecast, by country
- 5.3.3.1. UK
- 5.3.3.1.1. Market size and forecast, by End user
- 5.3.3.2. Germany
- 5.3.3.2.1. Market size and forecast, by End user
- 5.3.3.3. France
- 5.3.3.1. Market size and forecast, by End user
- 5.3.3.4. Italy
- 5.3.3.4.1. Market size and forecast, by End user
- 5.3.3.5. Rest of Europe
- 5.3.3.5.1. Market size and forecast, by End user
- 5.4. Asia-Pacific
- 5.4.1. Key market trends, growth factors and opportunities
- 5.4.2. Market size and forecast, by End user
- 5.4.3. Market size and forecast, by country
- 5.4.3.1. China
- 5.4.3.1.1. Market size and forecast, by End user
- 5.4.3.2. Japan
- 5.4.3.2.1. Market size and forecast, by End user
- 5.4.3.3. India
- 5.4.3.3.1. Market size and forecast, by End user
- 5.4.3.4. South Korea
- 5.4.3.4.1. Market size and forecast, by End user
- 5.4.3.5. Taiwan
- 5.4.3.5.1. Market size and forecast, by End user
- 5.4.3.6. Rest of Asia-Pacific
- 5.4.3.6.1. Market size and forecast, by End user

Scotts International. EU Vat number: PL 6772247784

5.5. LAMEA

- 5.5.1. Key market trends, growth factors and opportunities
- 5.5.2. Market size and forecast, by End user
- 5.5.3. Market size and forecast, by country
- 5.5.3.1. Latin America
- 5.5.3.1.1. Market size and forecast, by End user
- 5.5.3.2. Middle East
- 5.5.3.2.1. Market size and forecast, by End user
- 5.5.3.3. Africa
- 5.5.3.3.1. Market size and forecast, by End user

CHAPTER 6: COMPETITIVE LANDSCAPE

- 6.1. Introduction
- 6.2. Top winning strategies
- 6.3. Product mapping of top 10 player
- 6.4. Competitive dashboard
- 6.5. Competitive heatmap
- 6.6. Top player positioning, 2022

CHAPTER 7: COMPANY PROFILES

- 7.1. Intel Corporation
- 7.1.1. Company overview
- 7.1.2. Key executives
- 7.1.3. Company snapshot
- 7.1.4. Operating business segments
- 7.1.5. Product portfolio
- 7.1.6. Business performance
- 7.1.7. Key strategic moves and developments
- 7.2. SK HYNIX INC.
- 7.2.1. Company overview
- 7.2.2. Key executives
- 7.2.3. Company snapshot
- 7.2.4. Operating business segments
- 7.2.5. Product portfolio
- 7.2.6. Business performance
- 7.2.7. Key strategic moves and developments
- 7.3. IBM Corporation
- 7.3.1. Company overview
- 7.3.2. Key executives
- 7.3.3. Company snapshot
- 7.3.4. Operating business segments
- 7.3.5. Product portfolio
- 7.3.6. Business performance
- 7.3.7. Key strategic moves and developments
- 7.4. Samsung Electronics Co. Ltd
- 7.4.1. Company overview
- 7.4.2. Key executives
- 7.4.3. Company snapshot
- 7.4.4. Operating business segments

Scotts International. EU Vat number: PL 6772247784

- 7.4.5. Product portfolio
- 7.4.6. Business performance
- 7.5. SynSense
- 7.5.1. Company overview
- 7.5.2. Key executives
- 7.5.3. Company snapshot
- 7.5.4. Operating business segments
- 7.5.5. Product portfolio
- 7.5.6. Key strategic moves and developments
- 7.6. GrAI Matter Labs
- 7.6.1. Company overview
- 7.6.2. Key executives
- 7.6.3. Company snapshot
- 7.6.4. Operating business segments
- 7.6.5. Product portfolio
- 7.7. BrainChip, Inc
- 7.7.1. Company overview
- 7.7.2. Key executives
- 7.7.3. Company snapshot
- 7.7.4. Operating business segments
- 7.7.5. Product portfolio
- 7.7.6. Business performance
- 7.7.7. Key strategic moves and developments
- 7.8. General Vision Inc.
- 7.8.1. Company overview
- 7.8.2. Key executives
- 7.8.3. Company snapshot
- 7.8.4. Operating business segments
- 7.8.5. Product portfolio
- 7.9. HRL Laboratories, LLC
- 7.9.1. Company overview
- 7.9.2. Key executives
- 7.9.3. Company snapshot
- 7.9.4. Operating business segments
- 7.9.5. Product portfolio
- 7.10. QUALCOMM Incorporated
- 7.10.1. Company overview
- 7.10.2. Key executives
- 7.10.3. Company snapshot
- 7.10.4. Operating business segments
- 7.10.5. Product portfolio
- 7.10.6. Business performance



To place an Order with Scotts International:

 $\hfill \Box$ - Complete the relevant blank fields and sign

☐ - Print this form

Neuromorphic Chip Market By End user (Consumer Electronics, Automotive, IT and Telecom, Aerospace and Defense, Industrial, Healthcare, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032

Market Report | 2023-10-01 | 242 pages | Allied Market Research

Send as a scanned email to support@scotts-international.com					
ORDER FORM:					
Select license	License			Price	
	Cloud Access License			\$3110.40	
	Business User License			\$5157.00	
	Enterprise License			\$8640.00	
			VAT		
			Total		
** VAT will be added at	nt license option. For any questions ple 23% for Polish based companies, indiv	iduals and EU based com			
Email*		Phone*			
First Name*		Last Name*			
Job title*					
Company Name*		EU Vat / Tax ID / NIP number*			
Address*		City*			
Zip Code*		Country*			
		Date	2025-05-09		

Scotts International. EU Vat number: PL 6772247784

Signature	

Scotts International. EU Vat number: PL 6772247784