

Edge AI Hardware Market to Surpass USD 4.27 Billion by 2030 on Account of Increasing Adoption of IoT Devices

Edge AI Hardware Market Size, Share & Segmentation By Component, By Device, By End User, By Function, By Regions And Global Forecast 2023-2030

EDGE AI HARDWARE MARKET SIZE AND SHARE 2023-2030 USD 4.27 Billion MARKET SHARE MARKET SEGMENTS USD 1.07 Billion By Function 45% By End Use By Component By Device CAGR Of 18.9% By End User 💧 2030 2022 copyright ® snsinsider.cor vww.snsinsider.com Edge AI Hardware Market

In the dynamic landscape of artificial intelligence, Edge AI hardware has emerged as a pivotal technology,

pushing the boundaries of decentralized processing and enhancing the capabilities of edge devices. This innovative hardware is designed to execute AI algorithms directly on the edge, bringing intelligence closer to the data source and minimizing latency. The scope of Edge AI Hardware Market extends across various industries, from healthcare and manufacturing to

٢٢

The Global Edge Al Hardware Market Size was valued at USD 1.07 billion in 2022, and is expected to reach USD 4.27 billion, growing at a CAGR of 18.9% over the forecast period 2023-2030."

Research by SNS Insider

autonomous vehicles and smart cities, transforming the way data is processed and interpreted in real-time.

The edge AI hardware market overview reveals a surge in demand for edge AI hardware due to its ability to empower edge devices with advanced computing capabilities. Key features such as energy efficiency, reduced data transmission, and enhanced privacy contribute to the widespread adoption of this technology. The market is witnessing a proliferation of compact and powerful edge AI hardware solutions, catering to the diverse needs of applications requiring on-device AI processing. As the

technology continues to evolve, stakeholders can anticipate an increased integration of edge AI hardware into everyday devices, fostering a new era of intelligent and responsive systems.

- Google
- Intel Corporation
- MediaTek
- NVIDIA Corporation
- Samsung Electronics
- Apple
- Huawei Technologies
- International Business Machines Corporation
- Microsoft Corporation
- Qualcomm Technologies.

The edge AI hardware market experiences a dynamic interplay of growth drivers, restraints, and opportunities that shape its trajectory. One of the primary growth drivers is the escalating demand for real-time processing capabilities, compelling industries to adopt edge AI hardware for faster decision-making and improved efficiency. Conversely, challenges arise from concerns related to data security, interoperability issues, and the complexity of integrating edge AI solutions into existing infrastructures. Opportunities lie in the constant evolution of hardware technologies, presenting avenues for innovation and the development of more efficient and versatile edge AI hardware solutions.

In the competitive landscape, market players are focusing on research and development to address challenges and capitalize on emerging opportunities. The rise of 5G networks further propels the edge AI hardware market, enabling faster and more reliable communication between devices. The integration of edge AI hardware into Internet of Things (IoT) ecosystems is a noteworthy trend, enhancing the overall capabilities of connected devices. As industries continue to embrace digital transformation, the edge AI hardware industry is poised for sustained growth, with advancements in semiconductor technologies and increased collaboration between hardware and software developers.

The regional analysis of the edge AI hardware market reveals a diverse landscape shaped by unique economic, technological, and regulatory factors. In North America, the market thrives on a robust technological infrastructure and widespread adoption of IoT applications. The region's advanced economies, coupled with a focus on innovation, drive significant investments in edge AI hardware solutions across industries. Europe, on the other hand, emphasizes sustainability and data privacy, influencing the development of energy-efficient and secure edge AI hardware. In the Asia-Pacific region, rapid industrialization, coupled with a burgeoning consumer market, propels the demand for edge AI hardware. Countries like China and Japan are at the forefront of technological advancements, contributing to the growth of the market.

- Memory
- Processor
- Sensor
- Other

- Smartphones
- Surveillance cameras
- Smart speakers
- Edge servers
- Robots
- Wearables
- Automotive
- Smart mirrors

- Smart home
- Automotive & transportation
- Industrial
- Healthcare
- Consumer electronics
- Aerospace & defense
- Government
- Construction

- Inference
- Training

- North America
- Europe
- Asia-Pacific
- The Middle East & Africa
- Latin America

000000 0000000 000000 000000 @ <u>https://www.snsinsider.com/reports/edge-ai-hardware-</u> market-2224

In the face of an ongoing recession, the edge AI hardware market displays a nuanced response, marked by both challenges and opportunities. The economic downturn may initially pose constraints on capital expenditure, impacting the adoption of advanced technologies. However, the recession can also act as a catalyst for organizations to streamline operations, leading to increased focus on cost-effective and efficient solutions, with edge AI hardware emerging as a strategic enabler. Furthermore, the demand for automation and efficiency gains, particularly in industries such as manufacturing and logistics, may drive the uptake of edge AI hardware solutions as businesses seek to optimize processes and remain competitive in challenging economic environments.

The Russia-Ukraine war has triggered geopolitical uncertainties with potential ramifications for the global technology landscape, including the edge AI hardware market. The conflict may disrupt supply chains, leading to challenges in the production and distribution of critical components for edge AI hardware. Market participants may face increased costs and delays in sourcing materials, impacting the overall market dynamics. Furthermore, geopolitical tensions could influence international trade policies, potentially resulting in changes to regulations that affect the movement of technology-related goods and services, adding complexity to the market's global ecosystem. On the flip side, the crisis may spur accelerated investments in domestic manufacturing and research and development efforts, as countries seek to reduce dependence on foreign suppliers.

0000000000

In its latest comprehensive report on the Edge AI hardware market, SNS Insider delves into the

dynamic landscape of cutting-edge technologies that are shaping the future of artificial intelligence at the network's edge. The report meticulously covers the latest advancements, emerging trends, and key players in the rapidly evolving market of edge AI hardware. From innovative processors and accelerators designed for low-latency inferencing to the integration of machine learning algorithms into edge devices, the report provides a detailed analysis of the market dynamics. SNS Insider explores the increasing demand for efficient and high-performance edge AI hardware solutions across various industries, shedding light on the strategic moves and collaborations driving this transformative sector.

- 0. 0000000 0000000000
- 0. 000000 00000000
- 3.1 Drivers
- 3.2 Restraints
- 3.3 Opportunities
- 3.4 Challenges
- 0. 000000 00000000
- 4.1 Impact of the Russia-Ukraine War
- 4.2 Impact of Ongoing Recession
- 4.2.1 Introduction
- 4.2.2 Impact on major economies
- 4.2.2.1 US
- 4.2.2.2 Canada
- 4.2.2.3 Germany
- 4.2.2.4 France
- 4.2.2.5 United Kingdom
- 4.2.2.6 China
- 4.2.2.7 Japan
- 4.2.2.8 South Korea
- 4.2.2.9 Rest of the World
- 4.3 Supply Demand Gap Analysis
- 0. 00000 00000 00000000
- 0. 000000'0 0 000000 00000
- 0. 0000 00000000

00.000000 0000000

- 13.1 Microsoft Corporation
- 13.1.1 Financial
- 13.1.2 Products/ Services Offered
- 13.1.3 SWOT Analysis
- 13.1.4 The SNS view
- 13.2 Google
- 13.3 Intel Corporation
- 13.4 MediaTek
- 13.5 NVIDIA Corporation
- **13.6 Samsung Electronics**
- 13.7 Apple
- 13.8 Huawei Technologies
- 13.9 International Business Machines Corporation
- 13.10 Qualcomm Technologies
- 14.1 Competitive Benchmark
- 14.2 Market Share analysis
- 14.3 Recent Developments

000000000....

000 00000 0000 000 @ https://www.snsinsider.com/checkout/2224

DDDDDDDDD: Akash Anand – Head of Business Development & Strategy info@snsinsider.com Phone: +1-415-230-0044 (US) | +91-7798602273 (IND)

0000000:

SNS Insider has been a leader in data and analytics globally with its authentic consumer and market insights. The trust of our clients and business partners has always been at the center of who we are as a company. We are a business that leads the industry in innovation, and to support the success of our clients, our highly skilled engineers, consultants, and data scientists have consistently pushed the limits of the industry with innovative methodology and measuring technologies.

Al Sensor Market

Al-Powered Storage Market

Akash Anand
SNS Insider Pvt. Ltd
+1 415-230-0044
info@snsinsider.com
Visit us on social media:
Facebook
Twitter
LinkedIn
Instagram
YouTube

This press release can be viewed online at: https://www.einpresswire.com/article/680815220

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire[™], tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.