

Neuromorphic Computing Market With Covid-19 Impact by Offering, Deployment, Application (Image Recognition, Signal Recognition, Data Mining), Vertical (Aerospace, Military, & Defense, Automotive, Medical) and Geography - Global Forecast to 2026

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Abstracts

The neuromorphic computing market is expected to be valued at USD 22,743 thousand in 2021 and is expected to reach USD 550,593 thousand by 2026, at a CAGR of 89.1% between 2021 and 2026. The need for better performing ICs, increase in demand for artificial intelligence and machine learning, and increasing number of cross-industry partnerships and collaborations are key factors driving the growth of the market. Artificial intelligence (AI) is being adopted in industries such as medical, media, entertainment, telecom, utility, aerospace, military, consumer devices, food & beverages, and piping. A combination of AI systems and machine learning is set to revolutionize the business environment with smart decisions. However, lack of knowledge about neuromorphic computing and complex algorithms increasing complexity of designing hardware of neuromorphic chips can act as a major challenge in the market during the forecast period.

Edge Computing will have highest growth in coming years

The edge computing segment is expected to account for a 95% share of the overall neuromorphic computing market by 2026. The high growth of edge computing segment is attributed its increasing use in applications such as responsive voice control for vehicles, full-body gesture recognition for touchless interfaces, and on-board intelligence for assistive robotics. Neuromorphic computing at edge is also apt for low-power and low-latency applications, and on-device adaptation.

Aerospace, military, & defense vertical is expected to hold the largest share in 2026

Neuromorphic computing can process information faster than any other processor; this helps the military & defense industry in processing sensitive data such as battlefield data, including weapons and resources management. Increasing requirement for testing and transmitting signals to securely code and transmit data from one end to another to reduce the threat of security issues is another factor driving the growth of the neuromorphic computing market for the aerospace, military, & defense industry.

APAC is attributed to grow at the highest CAGR in the neuromorphic computing market during the forecast period (2021-2026)

APAC is expected to hold the second-largest share of ~37% of the global neuromorphic computing market in 2021. Countries such as China, Japan, and South Korea are expected to be the major contributors to the neuromorphic computing market in APAC. China is the largest market for AI, followed by Japan, in APAC; this makes the country an attractive market for neuromorphic computing for machine learning and NLP applications.

The break-up of primary participants for the report has been shown below:

By Company Type: Tier 1 - 50%, Tier 2 - 30%, and Tier 3 - 20%

By Designation: C-level Executives - 30%, Director Level - 30%, and Others - 40%

By Region: North America - 30%, Europe - 25%, APAC - 40%, and RoW - 5%

The neuromorphic computing market was dominated by Intel Corp. (US), IBM Corporation (US), BrainChip Holdings Ltd. (US), Qualcomm (US) and HP Enterprise (US).

Research Coverage:

This research report categorizes the neuromorphic computing market by offering, deployment, application, vertical and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the neuromorphic computing

market and forecasts the same till 2026.

Key Benefits of Buying the Report

The report would help leaders/new entrants in this market in the following ways:

1. This report segments the neuromorphic computing market comprehensively and provides the closest market size projection for all subsegments across different regions.
2. The report helps stakeholders understand the pulse of the market and provides them with information on key drivers, restraints, challenges, and opportunities for market growth.
3. This report would help stakeholders understand their competitors better and gain more insights to improve their position in the business. The competitive landscape section includes product launches and developments, collaborations and acquisitions.
4. This report would help understand the pre and post-COVID-19 scenarios as to how would the penetration of neuromorphic computing will look like for the forecast period. The region segment includes the country wise impact analysis of COVID-19 and initiatives taken to overcome these impacts.

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