

## Global Next Generation Non Volatile Memory Market Size study, by Product (FeRAM, PCM, MRAM, ReRAM) by Application (Mobile Phones, Cache Memory & Enterprise Storage, Industrial & Automotive, Mass Storage, Embedded MCU & Smart Cards) and Regional Forecasts 2022-2032

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### **Abstracts**

Global Next Generation Non Volatile Memory Market is valued approximately USD 4.34 billion in 2023 and is anticipated to grow with a healthy growth rate of more than 18.21% over the forecast period 2024-2032. Next Generation Non-Volatile Memory (NVM) retain stored data even when the power is turned off. Unlike volatile memory such as RAM, which loses its contents when power is removed, NVM maintains data integrity without requiring constant power supply. Examples of NVM technologies include NAND flash memory, 3D XPoint, and MRAM (Magnetic RAM). These technologies offer advantages such as faster access times, higher density, and lower power consumption compared to traditional storage solutions such as hard disk drives. Next Generation NVM plays a crucial role in enabling faster, more efficient, and reliable data storage solutions for various applications. The rising demand for storage in data centers is a key trend that is supporting to the growth of the Global Next Generation Non Volatile Memory Market. Low-latency NVM systems due to the exponential rise of data created by businesses and consumers in order to serve applications such as cloud computing, big data analytics, and artificial intelligence, data centers need to have high-capacity.

The Global Next Generation Non-Volatile Memory (NVM) Market is driven by technological advancements in 3D NAND, MRAM, ReRAM, and PCM, along with the rising demand for data storage due to digital activities. Different interface technologies for NVM include DDR, SATA, SAS, PCIe, and I2C. The DDR interface is predominantly



used in high-speed, memory-intensive applications such as industrial, networking, and telecommunication equipment. It is also utilized in servers, workstations, and graphics cards. DDR's ability to fetch data on both the rising and falling edges of a clock cycle effectively doubles the data rate for a given clock frequency. The SATA interface is primarily used in computer systems and laptops, providing a reliable and widely adopted solution for storage needs. The PCIe interface, suitable for a wide range of computer applications including enterprise servers, consumer personal computers (PCs), communication systems, and industrial applications, excels in caching and buffering tasks. Also, the growing need for highly scalable, quick, and affordable memory solutions is acting as a catalyzing factor for market growth. With the rise in data volume, there is a growing requirement to manage and store the information for use in future references. Furthermore, the growing focus on energy efficiency, advancements in autonomous vehicles, and significant investments in semiconductor R&D propel the market's growth over the projected period. However, the high development costs, lack of standardization, and integration complexities with existing memory controllers and computer architectures is expected to stifle market growth during the forecast period 2024-2032.

The key regions considered for the global Next Generation Non Volatile Memory Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. In 2023, Asia Pacific was the largest regional market in terms of revenue driven by the presence of major industry players in countries such as China, South Korea, Japan, and India. Additionally, the expanding computer and mobile phone industries are anticipated to contribute to regional growth. Also, the market in Asia Pacific is expected to develop at the fastest rate over the forecast period. The growing demand for smartphones, tablets, laptops, and other consumer electronics in the Asia Pacific region increases the need for advanced memory solutions, boosting the adoption of NVM technologies at a substantial rate.

Major market player included in this report are:
IBM Corporation
Adesto Technologies
Everspin Technologies
Crossbar Inc
Fujitsu Ltd
Intel Corporation
Micron Technology
Samsung Electronics Co. Ltd.
Toshiba Corporation



Nantero, Inc.

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

By Product

FeRAM

**PCM** 

MRAM

ReRAM

By Application

Mobile Phones

Cache Memory & Enterprise Storage

Industrial & Automotive

Mass Storage

Embedded MCU & Smart Cards

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

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



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