

Hybrid Memory Cube and High-Bandwidth Memory Market by Density (2GB, 4GB and 8GB), Application (Enterprise Storage, Consumer Electronics (PCS, Gaming Consoles and Laptops) and Networking and Telecommunication), & Geography - Global Forecast to 2022

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Abstracts

“Hybrid Memory Cube and High-Bandwidth Memory market to grow at a CAGR of 56.96%”

According to the new market research report on Hybrid Memory Cube and High-Bandwidth Memory, this market is expected to be worth USD 953.8 million by 2022, growing at a CAGR of 53.96% between 2016 and 2022. The growth of the Hybrid Memory Cube and High-Bandwidth Memory market can be attributed to its growing applications in the networking and enterprise storage sector. The exponentially increasing demand for an enriched end-user experience and increased performance in next-generation mainstream computing applications is driving the market for high-density Hybrid Memory Cube and High-Bandwidth Memory devices. The DRAM memory manufacturing industry is expected to face significant challenges over the next six to eight years as it would witness the evolution of these memory technologies.

“Hybrid Memory Cube and High-Bandwidth Memory market in APAC expected to grow at the highest rate”

This report covers regions including North America, Europe, Asia-Pacific, and Rest of the World (RoW). The market in APAC is expected to grow at a high CAGR between 2016 and 2022. The major drivers for the growth of the Hybrid Memory Cube and High-

Bandwidth Memory market in APAC are the rising demand for data centers in enterprise storage applications and increasing manufacturing activities in the automotive and industrial sectors, backed by strong economic growth.

Breakdown of profile of primary participants:

By Company Type: Tier 1 - 25%, Tier 2 - 50%, and Tier 3 - 25%

By Designation: C level - 35%, Director level - 25%, and others - 40%

By Region: North America - 45%, APAC - 20%, Europe - 30%, and RoW - 5%

The companies that are profiled in the report are Samsung Electronics Co., Ltd. (South Korea), SK Hynix, Inc. (South Korea), Micron Technology, Inc. (U.S.), Intel Corporation (U.S.), Fujitsu Ltd. (Japan), IBM (U.S.), Xilinx Inc. (U.S.), Advanced Micro Devices, Inc. (U.S.), Nvidia Corporation (U.S.), Open-Silicon, Inc. (U.S.) and Arira (U.S.)

Reasons to buy the report:

This report includes the market statistics pertaining to type, application and geography along with their respective revenue.

The Porter's Five Forces framework has been provided along with the value chain analysis to provide an in-depth insight into the Hybrid Memory Cube and High-Bandwidth Memory market.

The major drivers, restraints, challenges, and opportunities for the Hybrid Memory Cube and High-Bandwidth Memory market have been detailed in this report.

Illustrative segmentation, analysis, and forecast for markets based on type, application, and geography have been conducted to give an overall view of the Hybrid Memory Cube and High-Bandwidth Memory market.

A detailed competitive landscape has been provided including key players, in-depth analysis, and revenue of key players.

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About

According to the new research report "Hybrid Memory Cube (HMC) and High-bandwidth Memory (HBM) Market by Memory Type (HMC and HBM), Product type (GPU, CPU, APU, FPGA, ASIC), Application (Graphics, High-performance Computing, Networking, Data Centers), and Geography - Global Forecast to 2023", the HMC and HBM market is expected to grow from USD 922.7 in 2018 to USD 3,842.5 Million by 2023, at a CAGR of 33.02% between 2018 and 2023. The growth of this market is mainly driven by the growing need for high-bandwidth, low power consuming, and highly scalable memories; increasing adoption of artificial intelligence; and rising trend of miniaturization of electronic devices.

Some of the Major players operating in the market include:

Samsung (South Korea),

Micron (US),

SK Hynix (South Korea),

Intel (US), and

AMD (US)

The report also covers various major contributors involved in the HMC and HBM market. Fujitsu (Japan), Xilinx (US), NVIDIA (US), IBM (US), and Open-Silicon (US) are the other important key companies in the HMC and HBM market. In addition, Arira (US), Cadence (US), Marvell (US), Cray (US), ARM (UK), and Rambus (China) are a few other companies involved in the market.

The market for HMC accounted for the largest share in 2017

HMC offers higher bandwidth than HBM. Moreover, the primary application that HMC serves is high-performance computing, which is gaining traction owing to the developments in artificial intelligence and machine learning. HMC also acts as a far memory and supports capability expansion through the chaining process which is attached to the CPU for a maximum of eight cubes. This ensures scalability which is

demand in high-performance computing. All these factors are supporting the adoption of the HMC technology.

The market for APU is expected to grow at the highest CAGR during the forecast period

The market for APU is expected to grow at the highest rate during the forecast period. An HBM-based APU is a recent innovation by AMD (US) developed to meet the requirements of high-performance computing. APUs integrate both GPU and CPU capabilities on a single SoC. This further improves the overall energy efficiency of APUs by eliminating connections between chips. APUs can also be used for graphics applications. Moreover, AMD (US), the leading manufacturer of APUs, demonstrated an APU with integrated HBM and stacked non-volatile memory cells. This will also serve to drive the adoption of APUs in computing applications.

High-performance computing held the largest market size in 2017

High-performance computing has gained traction in the last few years owing to the various developments in artificial intelligence and machine learning. The increasing computational power in the cloud and advancements in sophisticated algorithms are driving the adoption of artificial intelligence by several companies. Along with improvements in AI algorithms, an increasing number of hardware solutions also need advanced devices, which will drive the demand for high-performing memory and processors. Intel (US) has already integrated deep-learning instructions in its Xeon and Xeon Phi processors which use the HMC technology.

The APAC market is expected to grow at the highest CAGR during the forecast period

The major drivers for the rapid growth of the HMC and HBM market in the APAC are the growing number of data centers and servers, increasing shipments of network equipment, and the rising number of manufacturing activities in the enterprise storage and consumer electronics sectors. The strong economic growth and growing demand for high-density memories is expected to drive the HMC and HBM market in the APAC region.

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