



**Global and China Memory Industry Report,
2019-2025**

May 2019

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

In 2018, global memory market was worth USD153.4 billion, surging by 23.7% from a year earlier thanks to rising prices as a result of robust demand from mobile phones and cloud services and a higher supplier concentration. Global memory demand will continue to increase as emerging technologies such as AI, AR/VR and internet of things (IoT) rise and downstream sectors like consumer and automotive electronics need much more. It is predicted that global memory market size will hit USD270.6 billion in 2025, at a CAGR of 8.4% between 2018 and 2025.

Global Memory Market Size and Growth Rate, 2017-2025E



Source: Global & China Memory Industry Report, 2019-2025

May 2019

Memories are led by DRAM and Flash. Dynamic random access memory (DRAM) is used the most widely in systems for its excellent performance and lower cost than its peers in spite of volatility when powered down. In 2018, global DRAM market was valued at USD94.8 billion or so, a 30.2% jump on the previous year; Flash memory chip, the most common non-volatile memory, finds the broadest application in mass storage field because it is non-volatile even if power is turned off. In 2018, NAND Flash sales leaped by 14.4% to USD56.3 billion on an annualized basis; NOR Flash sales were approximately USD1.9 billion; market size of other memories (including static random-access memory (SRAM)) reached a combined roughly USD400 million.

Memory market segments vary in competitive pattern. In global DRAM market, Samsung Electronics remains the bellwether sweeping 46% market shares, and its four DRAM plants all with 12-inch production lines can produce 395,000 units a month; another Korean vendor SK Hynix branching out from Hyundai Technology, takes a 28% share, making itself the world's second largest DRAM vendor, with an 8-inch wafer production line and two 12-inch lines in Korea, an 8-inch line in Oregon, the US and a 12-inch line in Wuxi, China; America's Micron Technology is in the third place commanding 21% of the market and boasting a DRAM capacity of about 340,000 units per month after acquiring ELPIDA and Rexchip and integrating Inotera Memories' capacity.

As for NAND Flash, the global market has been monopolized by five vendors, i.e., Samsung, Toshiba, Micron, SK Hynix and Western Digital, with the CR5 reaching a staggering 98%. Samsung Electronics whose NAND Flash capacity stands at 560,000 units per month has decided to expand Phase II of its plant in Xi'an city, China for a larger NAND Flash capacity. Toshiba and Western Digital will keep their partnership, with a collective capacity of 510,000 units per month; Toshiba's Fab 6 still under construction will start 96-layer 3D NAND capacity expansion plan; also, its Fab 7 has been kicked off, and will become operational in the second half of 2019 for producing 96-layer-above 3D NAND and go into mass production in 2020. Micron has a monthly capacity of 350,000 units and proposes construction of Phase III of its fab. SK Hynix will build another new plant, M15, on the site of its existing plant in Cheongju, Korea, to produce 96-layer-above 3D NAND, and put it into use in 2019, with a monthly capacity of 50,000 units. Chinese player Yangtze Memory Technologies Co., Ltd. under Tsinghua Unigroup will see the capacity of its manufacturing base in Wuhan City reach 150,000 units at the end of 2019.

Global & China Memory Industry Report, 2019-2025 highlights the following:

Memory overview (definition and classification, industry chain and technology roadmap);

Memory applications (mobile phone, tablet PC, notebook computer and server);

Memory industry (market size and segments (DRAM, NAND Flash, NOR Flash, etc.));

14 memory vendors (Samsung Electronics, SK Hynix, Micron, etc.) (operation, main products, production layout, output and sales, development strategy, etc.).

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