

Semiconductors

Chinese chip champion's 'snowballing' growth threatens Korean dominance

CXMT develops AI products and rapidly erodes market share of Samsung and SK Hynix



CXMT has been able to mass produce the latest DDR5 memory chips since last year, challenging industry leader Samsung © SeongJoon Cho/Bloomberg

Christian Davies and **Song Jung-a** in Seoul and **Zijing Wu** in Hong Kong 10 HOURS AGO

CXMT, China's leading producer of memory chips, is rapidly gaining global market share at the expense of South Korean competitors, joining OpenAI rival DeepSeek in strengthening Beijing's drive to reduce its dependence on foreign technology in advanced fields such as artificial intelligence.

Based in Hefei in the eastern province of Anhui, CXMT — ChangXin Memory Technologies — increased its share of the \$90bn global Dram memory market from close to zero in 2020 to [5. per cent last year](#), according to Shenzhen-based consultancy Qianzhan, with analysts predicting growth could quickly “snowball”.

The company is also spearheading China's efforts to break into the growing market for so-called high-bandwidth memory (HBM), a crucial component in running AI systems such as Open AI's ChatGPT, which is [facing new competition](#) from its cheaper Chinese rival DeepSeek.

[CXMT's rise](#) is threatening the traditional dominance of the sector by South Korean chipmakers Samsung and SK Hynix and their US rival Micron, which between them accounted for 96 per cent of Dram revenues in 2023.

“With the rise of CXMT, Korean chipmakers are facing a new reality where the lower

end of the market is flooded with Chinese products,” said CW Chung, joint head of Asia-Pacific equity research at Nomura.

“It is not a matter of technological superiority but of volume, meaning that Samsung in particular has been hit hard by oversupply and lower chip prices,” Chung added.

As recently as 2016, the year CXMT was established, China possessed almost no indigenous capability to produce Dram chips, which are used in servers, computers and mobile devices.

But by 2019, with investments from Alibaba and [Beijing's state-backed “Big Fund”](#), the company had started mass production of DDR4 chips, then the most advanced category of Dram memory product.

According to consultancy SemiAnalysis, CXMT last year began mass production of DDR5 memory, first commercialised by SK Hynix in 2020 and currently the most advanced category of Dram.

The Chinese company is also aggressively boosting its DDR4 production, according to a report by investment bank Nomura, increasing capacity from 70,000 wafers per month in 2022 to a projected 200,000 a month by the end of 2024, which would be enough to secure 15 per cent of the global Dram market.

That has been driving down the price of older Dram chips, eating into profit margins at Samsung and SK Hynix and forcing the South Korean companies to retreat from the lower end of the market.

Last month, Samsung said it was [reducing its exposure](#) to conventional memory semiconductors, amid limited growth for Dram and Nand products.

The group's operating profit dropped by 29 per cent between the third and fourth quarter of last year, while [SK Hynix acknowledged](#) last month that Chinese Dram expansion had contributed to its operating profit slightly undershooting analyst expectations in the fourth quarter.

G Dan Hutcheson, vice chair of consultancy TechInsights, said that while CXMT's global market share was still relatively small and heavily concentrated in China, its rapid progress in the highly commoditised Dram sector was generating a “snowball effect”.

“The more market share you gain, the larger your volume, the higher your yields go, the lower your costs and the more market share you gain again,” said Hutcheson.

“The more market share you gain, the larger your volume, the higher your yields go, the lower your costs and the more market share you gain again,” said Hutcheson.

“That’s exactly how the Koreans pushed the Japanese out of the memory sector in the 1980s and 1990s, and now something similar is starting to happen to them.”

Analysts note CXMT has also exploited a loophole in US export controls since 2023 that allowed it to access advanced US chipmaking equipment to help produce its most cutting-edge chips. It was also omitted last year from an updated commerce department blacklist that would have prohibited any US companies from doing business with it.

“Even now, it’s not entirely clear if CXMT is subject to any restriction,” said Jimmy Goodrich, senior adviser for technology analysis to the RAND Corporation research institute.

A person familiar with CXMT’s thinking said it was now building a 280,000 sq metre fabrication plant east of Shanghai that will include capacity to produce “HBM2” products — two generations behind the HBM4 chips Nvidia supplier SK Hynix is planning to begin producing this year.

CXMT did not respond to a request for comment.

CXMT’s expansion of HBM2 production is expected to intensify pressure on Samsung, which is still struggling to pass Nvidia’s stringent tests to qualify as an HBM supplier.

“Samsung is finding itself in a nutcracker, with SK Hynix and Micron squeezing them at the high end and CXMT squeezing them at the low end,” said Hutcheson.

[Copyright](#) The Financial Times Limited 2025. All rights reserved.

Follow the topics in this article

Technology sector

Semiconductors

Asia-Pacific companies

South Korean business & finance

Artificial intelligence

