# China’s ban on NVIDIA chips accelerates shift to homegrown AI technology



China's recent ban on NVIDIA chips marks a significant escalation in the ongoing trade conflict between the United States and China. This decision effectively eliminates access for Chinese consumers and companies to some of the most advanced technologies in graphics processing units, fundamentally reshaping the landscape for AI and gaming within the country. The move signals a strategic pivot towards greater self-sufficiency in technology, with President Xi Jinping's administration prioritising a vision of "de-Americanization" that seeks to end reliance on US technology.

NVIDIA has long been a cornerstone of China's tech ecosystem. The company provided powerful GPUs essential for a myriad of applications, from data centres to popular gaming platforms. In 2022, China constituted approximately 13% of NVIDIA’s global revenue, underscoring the importance of this market for its financial health. However, this relationship has faced increasing pressure since the US began imposing export restrictions on advanced AI chips, citing concerns over their potential military applications. NVIDIA attempted to counter these restrictions through the development of a new chip tailored for compliance with US regulations, but the company’s efforts have not succeeded in preventing this latest fallout.

As China embarks on its initiative to cultivate a national technology ecosystem, the government is directing significant resources towards the development of homegrown alternatives to American products. Leading this charge are companies like Huawei, which has launched its Ascend series of AI chips, and Biren Technology, creating chips designed to handle workloads similar to NVIDIA’s offerings. Other emerging players include Moore Threads, which has introduced China’s first fully domestic gaming GPU, and Innosilicon, producing GPUs for both gaming and industrial use. These innovations represent not merely attempts to substitute imported technology but rather a full-fledged strategy to establish a self-sufficient computing environment that would withstand external pressures.

The ramifications of this ban are not confined to NVIDIA alone; the global technology landscape stands to be significantly impacted. The company is expected to see a marked drop in demand, which could ripple through the tech sector. China had been NVIDIA’s third-largest market, and losing access could result in declining profitability and reduced investment in research and development. With its home market in jeopardy, NVIDIA may struggle to keep pace with its competitors, particularly as China's domestic tech firms ramp up their production capabilities.

Recent developments underscore this growing tension. As the US intensifies its efforts to regulate the export of AI technology, legislators are proposing measures to prevent American chips from being smuggled into China, highlighting the national security risks associated with such technology. Additionally, recent reports suggest that Chinese firms are navigating regulatory hurdles not only from the US but also from domestic directives that restrict their purchases of certain advanced chips, thus forcing them to pivot more aggressively towards local options.

China's burgeoning capabilities in AI and gaming reflect a strategic foresight that may reshape the global marketplace for chip manufacturers and technology companies. With the rise of new players in the sector, there is potential for increased competition, which could either drive innovation or lead to price volatility, depending on how the market adjusts to these changes.

As the situation unfolds, both the US and Chinese tech industries must adapt to a new reality defined by self-reliance and heightened strategic competition in the domain of technology.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://eladelantado.com/news/china-bans-nvidia-chips/), [[3]](https://www.ft.com/content/1d2ba248-4919-4b29-a059-5a88182e2b80)
* Paragraph 2 – [[1]](https://eladelantado.com/news/china-bans-nvidia-chips/), [[2]](https://apnews.com/article/2ae671996444c9cd64d635d1b832a340), [[5]](https://apnews.com/article/77c031067a61996ef4baa2ae3eb10a81)
* Paragraph 3 – [[1]](https://eladelantado.com/news/china-bans-nvidia-chips/), [[4]](https://www.tomshardware.com/pc-components/gpus/nvidia-rtx-pro-6000d-b40-blackwell-gpus-reportedly-set-to-supersede-banned-h20-accelerators-in-china), [[6]](https://www.reuters.com/world/us/us-lawmaker-targets-nvidia-chip-smuggling-china-with-new-bill-2025-05-05/)
* Paragraph 4 – [[1]](https://eladelantado.com/news/china-bans-nvidia-chips/), [[7]](https://www.ft.com/content/6a2c54fe-e2b7-4c58-907d-68076456d907)
* Paragraph 5 – [[3]](https://www.ft.com/content/1d2ba248-4919-4b29-a059-5a88182e2b80), [[2]](https://apnews.com/article/2ae671996444c9cd64d635d1b832a340)

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## Bibliography

1. <https://eladelantado.com/news/china-bans-nvidia-chips/> - Please view link - unable to able to access data
2. <https://apnews.com/article/2ae671996444c9cd64d635d1b832a340> - On June 2, 2025, China strongly criticised recent actions by the United States, accusing them of breaching a recent trade truce agreement. The U.S. had introduced AI chip export restrictions, halted the sale of chip design software to China, and announced plans to revoke Chinese student visas. These actions, according to China's Commerce Ministry, violated the consensus reached between the two nations to reduce tariffs and improve trade relations. The Ministry accused the U.S. of unilaterally triggering new trade conflicts and warned of firm retaliatory steps to protect its interests. President Trump, contradicting earlier cooperation, accused China of violating the agreement, stoking further uncertainty. Meanwhile, U.S. officials suggested the measures taken were a response to China's slow compliance. The dispute unfolds amid strategic competition over technologies like AI and U.S. concerns over China’s influence in the Asia-Pacific, particularly regarding Taiwan.
3. <https://www.ft.com/content/1d2ba248-4919-4b29-a059-5a88182e2b80> - In the latest episode of the Financial Times podcast 'Unhedged,' Katie Martin, alongside Aiden Reiter and John Foley, explores Nvidia's recent market turmoil caused by new U.S. export restrictions on AI chips to China. Nvidia revealed a $5.5 billion hit due to the inability to sell its custom H20 chips, designed to comply with previous rules, sparking a 7% stock drop and $200 billion market cap loss. The move has shaken investor confidence, contributing to a broader tech sector decline. The hosts also discuss the implications of China’s AI advancements, particularly the emergence of DeepSeek, a high-performing AI model built with export-compliant chips, which has prompted U.S. lawmakers to investigate potential loopholes in chip controls. The conversation widens to include concerns about AI overinvestment and comparisons to historical bubbles like the telecom infrastructure boom. While Nvidia and peers have seen massive growth, there's unease about sustainability. Geopolitical uncertainties, especially regarding data sovereignty and the dominance of U.S. tech, fuel discussions about the need for regional tech champions. The episode concludes with lighthearted commentary and market predictions in the podcast’s 'Long/Short' segment, touching on Fed volatility, ASML, and a bizarre startup called 'Sperm Racing.'
4. <https://www.tomshardware.com/pc-components/gpus/nvidia-rtx-pro-6000d-b40-blackwell-gpus-reportedly-set-to-supersede-banned-h20-accelerators-in-china> - Following the recent U.S. export ban on Nvidia's Hopper H20 accelerators in China, Nvidia is reportedly preparing to launch a new line of Blackwell-based GPUs, specifically the RTX Pro 6000D—also referred to as the B40. Mass production is anticipated by June 2025, with general availability expected by Q3 or Q4. These new GPUs are designed to comply with export restrictions by avoiding sensitive technologies like HBM memory and TSMC's CoWoS packaging. The RTX Pro 6000D is expected to be a server-class GPU utilizing GDDR7 memory instead of HBM and is likely derived from the consumer-grade GB2XX Blackwell silicon, similar to the GB202 chip found in the RTX 5090. This would exclude it from features like NVLink, posing limitations for multi-GPU configurations. Instead, Nvidia may use ConnectX-8 SuperNICs and the Spectrum-X networking platform for GPU-to-GPU communication. The B40 is projected to be priced between $6,500 and $8,000, more affordable than the previous H20 accelerator. This move allows Nvidia to maintain a strategic presence in China's AI market despite ongoing regulatory challenges.
5. <https://apnews.com/article/77c031067a61996ef4baa2ae3eb10a81> - Nvidia reported strong financial results for its fiscal first quarter, defying concerns around U.S. tariff policies and restrictions on chip exports. Despite facing turbulence from former President Donald Trump's trade war and a $4.5 billion charge due to U.S. export restrictions on sales to China, Nvidia posted a 26% year-over-year increase in earnings to $18.8 billion and a 69% jump in revenue to $44.1 billion. Excluding that charge, earnings would have hit 96 cents per share, surpassing analysts' expectations of 73 cents. The company forecasted $45 billion in revenue for the current quarter, even accounting for an estimated $8 billion loss in Chinese sales. CEO Jensen Huang criticized the U.S. policies blocking AI chip sales to China, warning it could bolster China's domestic chip-building efforts. Nevertheless, investors were encouraged by Nvidia’s results, with share prices increasing over 4% in after-hours trading. Nvidia also announced plans to bolster U.S. manufacturing and expand into Middle Eastern markets. As Big Tech continues aggressive AI investments—forecasted to reach $325 billion—Nvidia remains a critical player, providing the essential chips driving this technological boom. Analyst Dan Ives emphasized Nvidia's centrality in the AI revolution, helping the company grow its annual revenue from $27 billion to $130 billion in just two years.
6. <https://www.reuters.com/world/us/us-lawmaker-targets-nvidia-chip-smuggling-china-with-new-bill-2025-05-05/> - U.S. Representative Bill Foster is planning to introduce legislation to curb the smuggling of Nvidia's AI chips into China, a violation of export control laws. The proposed bill aims to implement on-chip location verification and prevent unauthorized chips from functioning. This move follows reports that advanced Nvidia chips, crucial for AI development and potentially dual-use for weapons, continue to reach China despite export bans levied by Presidents Trump and Biden. Foster, a former particle physicist and chip designer, asserts that technology for location tracking already exists, as seen in Google’s operations. The legislation would direct the U.S. Commerce Department to enact regulations within six months. Foster emphasizes the urgency by citing unpublicized large-scale smuggling and national security concerns involving AI and weapon development. The initiative has bipartisan support, with lawmakers from both parties recognizing the need for stricter controls. The bill also responds to revelations of China’s DeepSeek AI system using restricted Nvidia chips and recent fraud charges in Singapore over similar activities. Though technically demanding, particularly for disabling unlicensed chips, the bill marks a significant legislative step toward controlling advanced chip distribution.
7. <https://www.ft.com/content/6a2c54fe-e2b7-4c58-907d-68076456d907> - Nvidia's sales in China face a challenge due to Beijing introducing strict energy efficiency rules for the use of advanced chips, potentially limiting Chinese companies' purchase of Nvidia's best-selling processors. The National Development and Reform Commission (NDRC) advises using chips that meet stringent requirements in new and expanded data centres. Nvidia's H20 chip, compliant with US export controls but not meeting these new rules, has seen tech giants like Alibaba, ByteDance, and Tencent quietly discouraged from purchasing them. Although the rules haven't been strictly enforced yet, tighter enforcement could impact Nvidia's $17bn-a-year Chinese business. As China builds more data centres, domestic rivals like Huawei, better aligned with Beijing's green agenda, pose a threat. Nvidia plans to adjust the H20 chip to meet requirements, though this might reduce its efficiency and competitiveness. The NDRC's stance signals tension amid growing US-China trade conflicts. China is Nvidia's fourth-largest market, contributing significantly to its revenue. Additionally, Intel's HL328 and HL388 chips also fail to comply with the NDRC's requirements, though with less potential impact due to limited sales.