

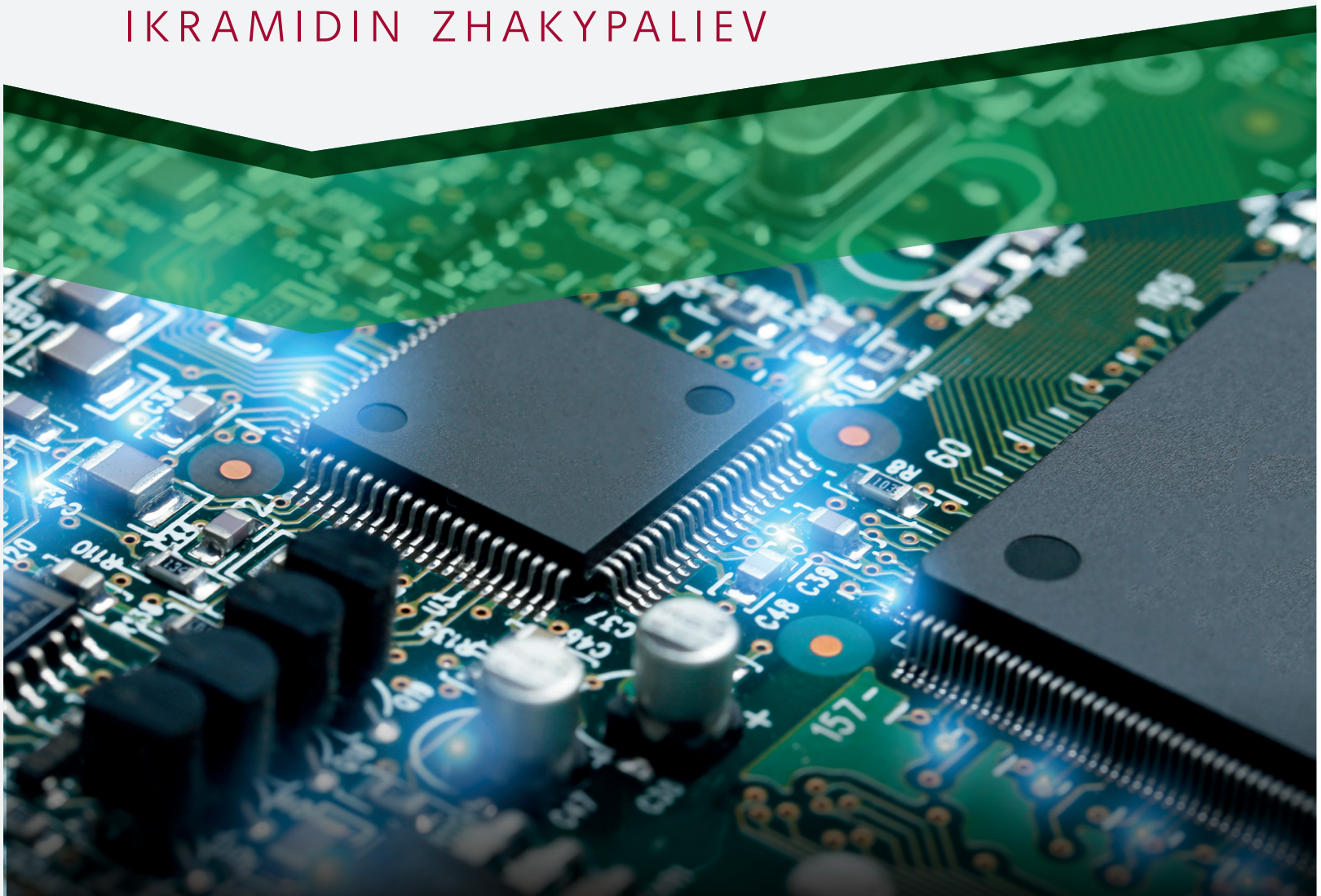


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BRIDGING THE STRAIT:
**THE GEOPOLITICS OF
MICROCHIP PRODUCTION
IN TAIWAN AMID
US-CHINA RELATIONS**

IKRAMIDIN ZHAKYPALIEV



HAYDAR ALİYEV
AVRASYA ÇALIŞMALARI UYGULAMA VE
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HACE REPORT 02

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Production in Taiwan Amid US-China Relations**

İkramidin Zhakypaliev

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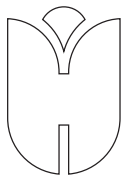
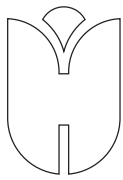


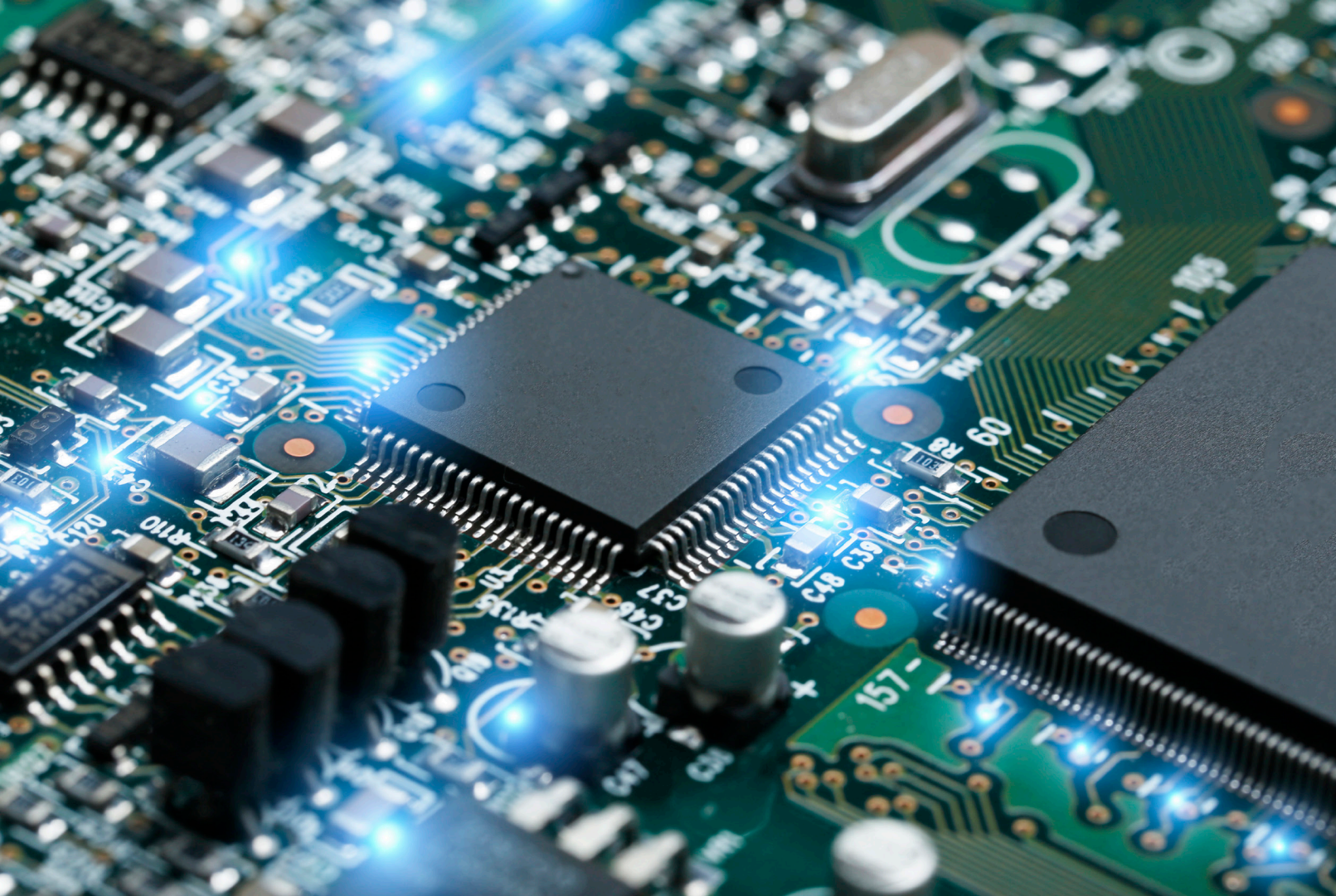
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SUMMARY

This article examines the complex geopolitical dynamics of microchip production in Taiwan, particularly in the context of US-China relations. It delves into the historical backdrop of Cross-Strait relations since 1949, exploring how political shifts during the Cold War and subsequent periods have influenced the current state of affairs.

The focus is on Taiwan's significant role in global semiconductor manufacturing and how this positions Taiwan strategically in US-China geopolitical tensions. The analysis highlights the economic interdependencies and political implications of Taiwan's microchip industry, considering the potential consequences for regional stability and international trade.

Keywords: Cross-Strait Relations, Taiwan Semiconductor Manufacturing, US-China Relations, Regional Stability, Microchip Production, Cold War Legacy.

Introduction:

The birth of two Chinas¹ Dates back to the end of the Second World War when troops of the Empire of Japan withdrew from China after its defeat.

The relations between China and Taiwan have been complicated, with de jure war still ongoing (as no peace treaty was signed after the civil war), with slight improvements in the 1990s and early 2000s.

This was followed by a civil war over who would control China; This war resulted in the victory of the Communist Party and the establishment of the People's Republic of China, forcing the nationalist Chinese government to abandon mainland China and retreat to Taiwan in 1949.

From 1949 to 1990, it focused on the conditions of the international system during the Cold War period, the opening up of mainland China to the world, and the role of the United States. Then, it discusses microchip production in Taiwan and its influence on contemporary China-Taiwan relations.

Since then, the relations between China and Taiwan have been complicated, with de

jure war still ongoing (as no peace treaty was signed after the civil war), with slight improvements in the 1990s and early 2000s. This article first analyzes Cross-Strait relations.² From 1949 to 1990, it focused on the conditions of the international system during the Cold War period, the opening up of mainland China to the world, and the role of the United States. Then, it discusses microchip production in Taiwan and its influence on contemporary China-Taiwan relations.

How Complicated Cross-Strait Relations Are?

The Chinese Civil War lasted for 22 years, with a temporary break during World War II, and de facto ended in 1949 with the victory of the Mao-led Communist Party and the foundation of the People's Republic of China. Chiang Kai-Shek-led nationalist party (KMT) retreated to Taiwan after its defeat, establishing the Republic of China there. It is important to note that the parties have not signed any peace treaty to end the war; they remain de jure at war to this day. Since 1949, this uneasy relationship between the People's Republic of China and the Republic of China has not changed. Bush argues that Mao was planning to take Taiwan by force. However, North Korea's invasion of South Korea in 1950 delayed Mao's plans to invade Taiwan and never materialized. The main reason for this was the United States' containment of communism in the Asia-Pacific region. After the Korean War, the United States increased its presence in the region, adding Taiwan to its line of containment policy in East Asia.³ This move led to a deterioration of the relations between Washington and Beijing. Moreover, Mao's PRC and

Chiang Kai-shek's ROC remained rivals on ideological and legal fronts (they disputed ownership of China's legal government). However, both sides agreed that only one state, China, and Taiwan is part of it.⁴

The structure of the Cold War international system forced two sides to join blocs that shaped their political, economic structure, and foreign policy preferences. Communist China joined the Eastern Bloc, becoming an ally of the Soviet Union. It adopted a one-party rule political system modeled on the Soviet one, introduced a centrally planned economy, and took a confrontational foreign policy with the West, even though it was excluded from the U.N. based international system. On the other hand, Taiwan went in the opposite direction, joining the Western bloc, adopting some elements of a market economy, and allying itself with the United States. As the Republic of China, Taiwan presented itself as the legitimate representative of China in the United Nations. Charney & Prescott point out that Taiwan traces its lineage as the legitimate government of China to the 1910s, far earlier than when the Communist Party was established, signing international agreements and treaties on behalf of China. It participated in U.N. negotiations in 1945 and was a permanent member of the Security Council. Therefore, the Republic of China signed the 1952 Treaty of Peace between China and Japan, where Japan renounced all its rights to the island of Taiwan and several other chains of islands in the South China Sea.⁵ It is important to note that Bush argues that KMT's rule on the island was exploitative and abusive against the native people.⁶

The PRC had careful cross-strait relations focusing more on economic cooperation, thus hoping to create interdependence between Taiwan and China under the umbrella of One China.

However, things have changed when the Sino-Soviet split erupted over border disputes since 1960s. The United States changed its attitude towards communist China, hoping to counterbalance the Soviet Union by allying with China (PRC) at Taiwan's expense. This gradual restoration of relations resulted in the establishment of diplomatic relations between Washington and Beijing in 1979. Furthermore, the United Nations, like most other international organizations, replaced the Republic of China with the People's Republic of China as the holder of China's seat. Finally, in 1979, the United States discontinued diplomatic relations with the Republic of China (Taiwan) and terminated the mutual defense treaty of 1955.⁷ The insecurity felt after these dramatic changes pushed Taiwan to radically restructure its economy and domestic politics and keep the derecognized island in international politics. According to Wu, President Chiang Ching-kuo started the democratization process to attract the attention of the United States and restructured the island's economy into an export-oriented one heavily dependent on imports and foreign aid.⁸ Wu suggests that democratization was necessary to create a political space for its nativization and cross-strait engagement policies. The main goal of this triad was to create a different identity (with the help of native

people) from mainland China and engage with it (be it economic or cultural relations) without losing its sovereignty to communist China.⁹ On the other hand, the PRC had careful cross-strait relations focusing more on economic cooperation, thus hoping to create interdependence between Taiwan and China under the umbrella of One China.¹⁰

The politics of the Cold War had set different development paths between two rival parties in terms of the political system and economy. However, switching sides and opening up mainland China to the world have changed the course of cross-strait relations, especially bringing economic interdependence across the strait.

Overall, the politics of the Cold War had set different development paths between two rival parties in terms of the political system and economy. However, switching sides and opening up mainland China to the world have changed the course of cross-strait relations, especially bringing economic interdependence across the strait. Noticeably, Taiwan's restructuring efforts to transform its economy into export-oriented policies paid off in the immediate future. This laid the foundation to produce the most advanced microchips industry in the world today. Semiconductor microchips are the backbone of the modern economies that drive innovation and economic growth around the world.



Advanced Microchips as Guarantor of Taiwan's Sovereignty?

It is not an overstatement to say that semiconductors power the modern world. They are a key component of nearly every electronic device and power the factories that make the electronic devices. Semiconductors power our laptops, cell phones, cars, washing machines, refrigerators, etc. We are not even getting into how advanced microchips are essential to the military, the power grid, and Artificial Intelligence.

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and scale has resulted in a highly specialized global supply chain in which regions play diverse roles based on their comparative advantages.¹¹ The Semiconductor Industry Association indicates that the United States dominates the R&D-intensive activities, electronic design automation (EDA), and core Intellectual Property (I.P.), while East Asia, especially Taiwan, South Korea, and China, are leading the production of microchips.¹² Figure 1 shows that Taiwan Semiconductor Manufacturing Company (TSMC) controls half of the global semiconductor production market. According to the Semiconductor Industry Association, the world's most sophisticated semiconductor production capacity—in nodes smaller than 10 nanometers—is currently concentrated in South Korea (8%) and Taiwan (92%). Therefore, it puts Taiwan in a favorable position in cross-strait relations and the China-Taiwan-U.S. triangular relations. As a function of globalization, there are two periods in China-Taiwan relations, the first culminating with deep economic integration and cooperation and the second disrupting established cross-strait relations in the last decade.

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Over the past three decades, the economic integration of the two economies across the strait has become so inextricable that severing ties would be mutually destructive to both sides. Some scholars argue that the business community across the strait is more interested in economic benefits than political differences. Leng (2002, 238-239) indicates that Taiwanese high-tech firms entered mainland China’s market in the early 2000s to set up businesses. Moreover, they brought high-skilled workers from Taiwan. These trends have been made feasible by

cross-strait engagement programs that have paid greater wages and offered critical amenities for employee families, such as quality elementary and secondary school education comparable to Taiwanese or even worldwide standards etc.¹³

Over the last decade, economic integration has been halted due to the rising geopolitical tensions in the region. In 2016, Taiwan held historic presidential elections where the candidate from the Democratic Progressive Party (DPP), Tsai Ing-wen, won the elections that changed the course of Taiwan’s development and brought significant consequences to the cross-strait relations emphasizing “Taiwanization,” the

Company	Market share	Country
TSMC	54%	Taiwan 🇹🇼
Samsung	17%	South Korea 🇰🇷
UMC	7%	Taiwan 🇹🇼
GlobalFoundries	7%	U.S. 🇺🇸
SMIC	5%	China 🇨🇳
HH Grace	1%	China 🇨🇳
PSMC	1%	Taiwan 🇹🇼
VIS	1%	Taiwan 🇹🇼
DB HiTek	1%	China 🇨🇳
Tower Semiconductor	1%	Israel 🇮🇱
Other firms	5%	N/A

Figure 1. Top 10 Global Microchips Production Companies by Market Share.

term refers to the island's identity politics that was preceded by President Chiang Ching-kuo's nativization policies.

However, over the last decade, economic integration has been halted due to the rising geopolitical tensions in the region. In 2016, Taiwan held historic presidential elections where the candidate from the Democratic Progressive Party (DPP), Tsai Ing-wen, won the elections that changed the course of Taiwan's development and brought significant consequences to the cross-strait relations emphasizing "Taiwanization," the term refers to the island's identity politics that was preceded by President Chiang Ching-kuo's nativization policies.¹⁴ Following that, despite China's concerns that China-Taiwan relations were deteriorating, United States Speaker of House Representatives, Nancy Pelosi, visited the island in 2022.¹⁵ China has taken action against Taiwan, imposing trade bans on certain goods, including suspensions of imports of Taiwanese citrus, frozen fish, sweets, and biscuits and exports of natural sands to the island, about 0.04% of their two-way trade, making them more political than economic.¹⁶ Noticeably, the volume of imports in Beijing's targeted areas was relatively small. It hasn't imposed restrictions on microchips, electronics, and machinery that China heavily relies on Taiwan. Despite this, PRC political maneuvers and, to some extent, trade restrictions had not impacted China-Taiwan relations. Some analysts say that TSMC is Taiwan's "silicon shield," while many Taiwanese refer to the company as a "sacred mountain" that protects the

nation. Indeed, it is easier to discuss semiconductor supply networks in today's global economy if addressing Taiwan.¹⁷ Kelter argues that referring to the Academia Sinica political scientist Jieh-min Wu, the export limits imposed on the Chinese semiconductor industry due to recent legislation mean that TSMC is no longer a protective mountain. On the contrary, if China becomes increasingly desperate to ensure its technological progress in the semiconductor industry in the face of U.S. containment, it will look across the Taiwan Strait with increased longing.¹⁸

TSMC is Taiwan's "silicon shield," while many Taiwanese refer to the company as a "sacred mountain" that protects the nation.

Conclusion

Overall, advanced microchips have become a core commodity of the modern economy and are used in nearly every electronic device, consumer electronics, fighter jets, cars, etc. As mentioned above, the global production of microchips is based in East Asia, which is approximately 90% of the market share, especially in Taiwan and South Korea.

Advanced microchips have become a core commodity of the modern economy and are used in nearly every electronic

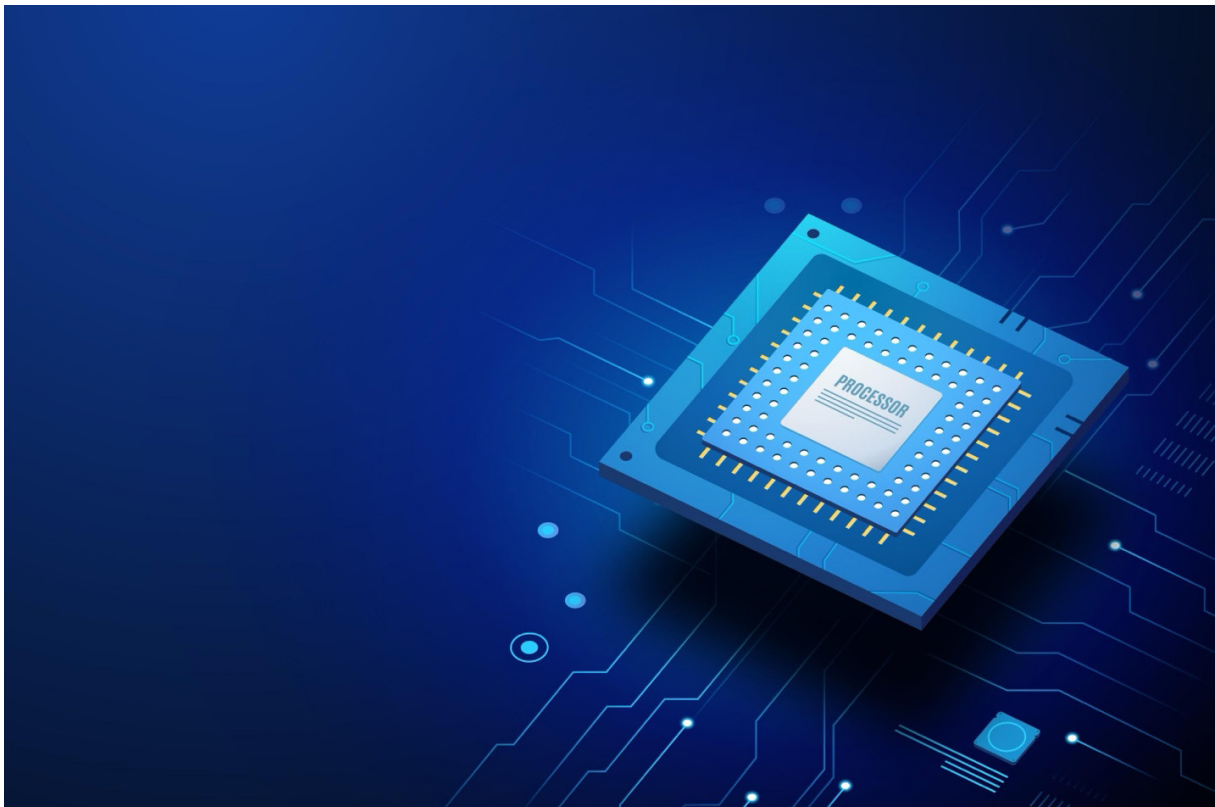
device, consumer electronics, fighter jets, cars, etc.

Regarding the production of the most advanced chips, the world heavily relies only on TSMC, which is in Taiwan. The ability of Taiwanese companies to produce such sophisticated technology has put them in a more favorable position in rising geopolitical tensions in the region. The disruption of chip production on the island could put the United States national security in danger in the face of PRCs flexing its muscles across the strait of Taiwan, some analysts predict.¹⁹

Thus, microchip production might be critical in protecting the island's sovereignty for the next decade and maintaining the current state of relations between China and Taiwan. Moreover, cross-strait relations are complicated due to economic globalization, which has created a complex

interdependence between mainland China and Taiwan. Even though there are political and ideological differences between the two parties, the status quo in their relations would be stable unless and until China and the United States are able to increase their production capacity of advanced microchips domestically.

Thus, microchip production might be critical in protecting the island's sovereignty for the next decade and maintaining the current state of relations between China and Taiwan.



Endnotes

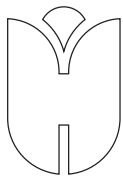
- 1 This term refers to the Republic of China (KMT National Party) and the People's Republic of China (Communist Party).
- 2 **Cross-Strait relations** (sometimes called **Mainland China–Taiwan relations** or **Taiwan–China relations**) are the relations between China (officially the People's Republic of China) and Taiwan (officially the Republic of China).
- 3 Richard C. Bush, *Uncharted Strait: The Future of China-Taiwan Relations* (Rowman & Littlefield, 2013), 20. <https://books.google.com/books?hl=en&lr=&id=0c-48FOeBU6UC&oi=fnd&pg=PP1&dq=Uncharted+Strait:+The+Future+of+China-Taiwan+Relations&ots=KJk7JFImfQ&sig=r4ITdWdXEpKz0l-8Hq-5JP881tU8>.
- 4 Bush, *Uncharted Strait*. 21.
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- 7 Bush, *Uncharted Strait*. 21
- 8 Yu-Shan Wu, "Taiwan's Domestic Politics and Cross-Strait Relations," *The China Journal*, no. 53 (2005): 35–37, <https://doi.org/10.2307/20065991>.
- 9 Wu, "Taiwan's Domestic Politics and Cross-Strait Relations." 36.
- 10 The term «One China» is used differently by various entities. The People's Republic of China (PRC) refers to it as the «One China principle. « In contrast, the United States of America and the Republic of China (ROC) refer to it as the «One China policy.»
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