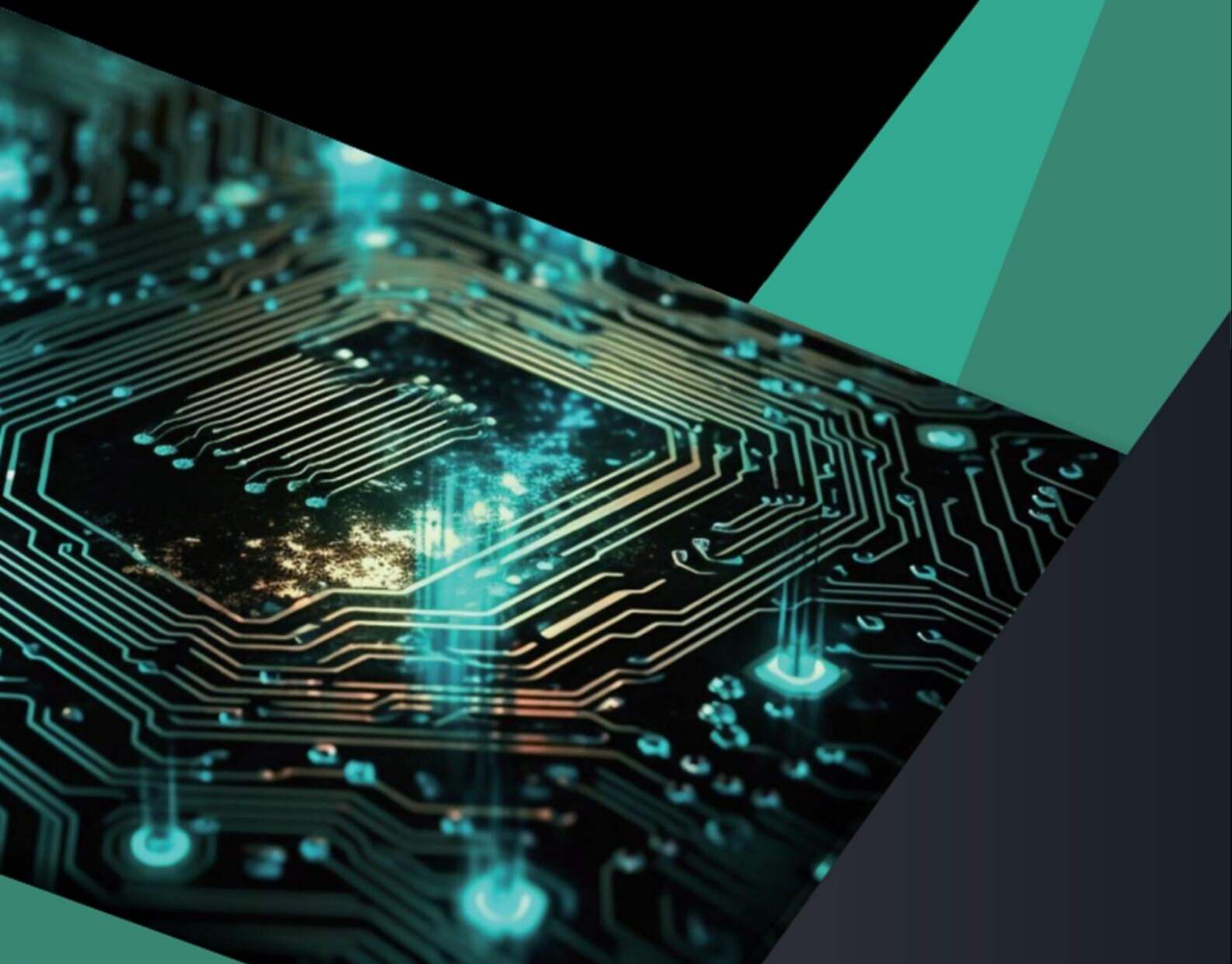


May 2025

Monthly Market Updates

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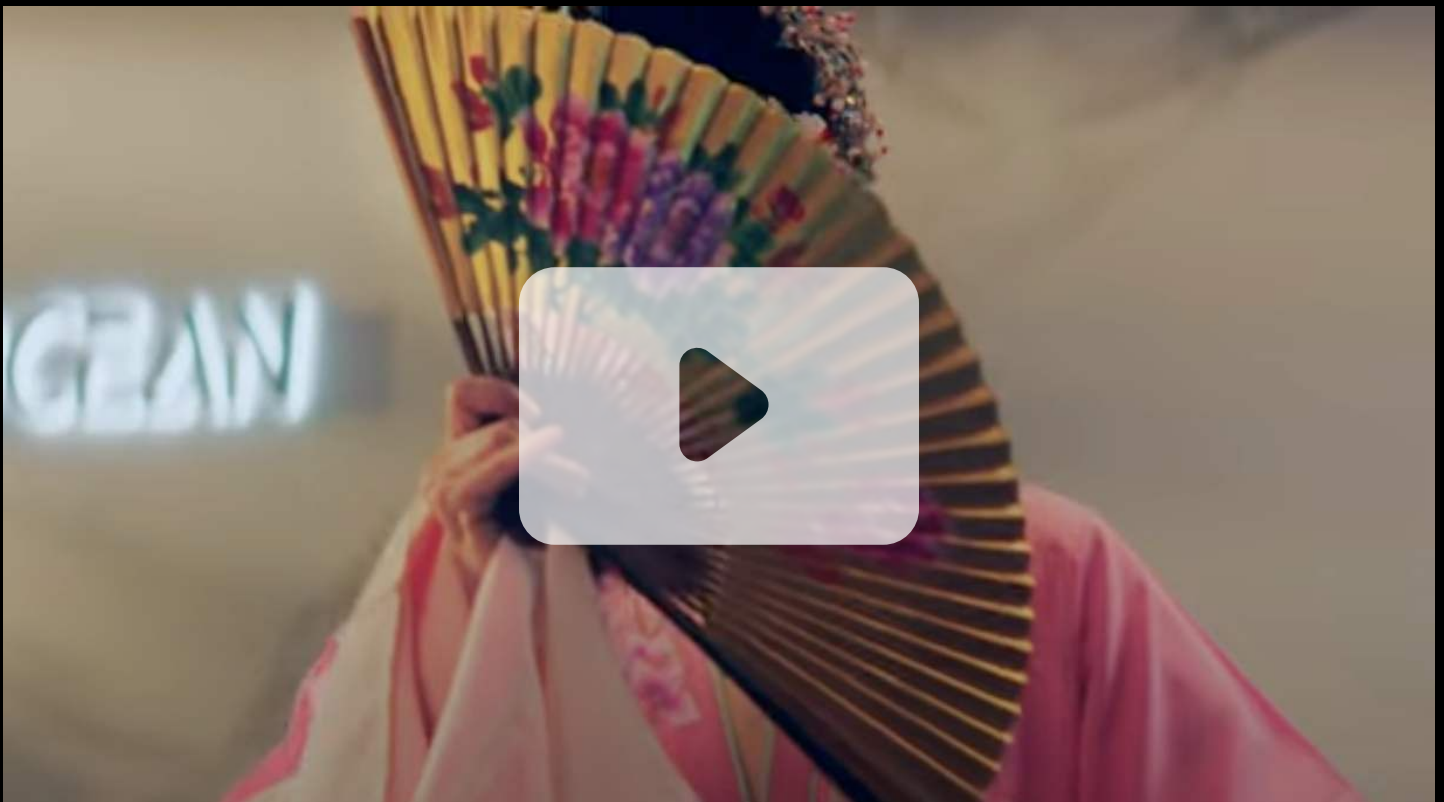


About Brioccean

Brioccean was established in 2008 as ISO9001:2005, and ANSI/ESD S20.20-2021 certified leading independent electronic component distributor, with our headquarters in Singapore. Our company specialises in sourcing and supply chain management services for the electronic manufacturing clients across a broad range of industries.

Our global network of over 10,000 vetted suppliers allows us to respond to the unique needs of our clients, from reducing component shortages to achieving significant cost savings. Our robust supplier management system and two state-of-the-art quality assurance centres in Shenzhen and Hong Kong ensure that we deliver reliable, traceable procurement services.

At Brioccean, quality is our cornerstone. Our commitment is to ensure that every component we source is of the highest quality.



Summary

Category	Trend
Macroeconomics	<ul style="list-style-type: none"> - U.S.-China Geneva Trade Talks Joint Statement: Tariff War Temporarily Suspended; - EU Launches Revised "Chip Act," Intensifying the Global Semiconductor Industry Policy Race; - NDRC Reduces Market Access Negative List to 106 Items, Lowering Barriers to Entry and Stimulating Innovation; - China Semiconductor Industry Association Issues Urgent Notice on the "Place of Origin" determination rules of Semiconductor Products; - South Korea Approves 200 Billion KRW AI Fund and 500 Billion KRW Semiconductor Special Fund.
Industry	<ul style="list-style-type: none"> - Nvidia Accelerates Domestic AI Computing Deployment, Expanding U.S. Production of Blackwell Chips; - Memory prices rebound as DDR4 is gradually phased out and the transition to HBM/LPDDR5X accelerates; - Silan Microelectronics Reports 8.3% Year-on-Year Revenue Growth in Q1, Reaching 790 Million CNY; - Intel Outsources 2nm Production to TSMC, Reflecting Strategic Adjustments to Its IDM Model; - STMicroelectronics Launches Next-Generation Automotive-Grade MCUs to Strengthen Its Automotive Market Presence; - Nexperia Releases 1200V SiC MOSFET to Expand into Automotive and Industrial Applications; - GigaDevice and Navitas Form Strategic Partnership to Develop High-Efficiency Digital Power Solutions; - Qualcomm Increases Investment in In-House AI Chips, Expands Presence in Edge Computing and Intelligent Devices Market; - Samsung Accelerates Development of HBM4 to Secure Leadership in AI High-Bandwidth Memory Market; - Silan Micro Expands Mature Process IDM Capacity above 28nm in China.
End-market	<ul style="list-style-type: none"> - Artificial Intelligence: NVIDIA has partnered with Saudi Arabia's HUMAIN to establish an AI manufacturing facility, which will deploy 18,000 GPUs to build a 500-megawatt computing power center. Meanwhile, DeepSeek has launched the Prover-V2 model, featuring 671 billion parameters; - New Energy: CATL has introduced the world's first 9MWh energy storage system. Tesla's Q1 deliveries have dropped to the lowest level in nearly three years; - Consumer Electronics: Huawei's Pura80 series will be equipped with the Kirin 9020 chipset and a custom RYYB sensor. UBTECH Robotics has collaborated with Chuangyao Technology to develop humanoid robot chip solutions targeting robotic automation applications;

Category	Trend
	<ul style="list-style-type: none">- Industrial: Honeywell projects full-year sales between USD 39.6 billion and USD 40.5 billion for 2025.- Automotive: Desay SV's German factory has commenced production, while its Spanish facility is expected to be completed by the end of the year;- Communication: In Q1 2025, ZTE's intelligent computing servers accounted for over 60% of orders;- Medical: Johnson & Johnson is increasing investment in surgical robots and AI healthcare, focusing on high value-added sectors, with revenue growth expected to accelerate in the second half of the year.
Product	<ul style="list-style-type: none">- Storage Chips: The five leading NAND manufacturers have implemented synchronized production cuts, resulting in price increases for certain products;- GPU: NVIDIA's GPU market share has declined, while AMD and Intel have experienced growth in their respective market shares;- MCU: The automotive-grade MCU market is substantial, with accelerated localization and substitution by domestic suppliers.

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01

Macro Environment Overview

1. Macro Environment Overview

1.1 Industry Policy

1.1.1 U.S.-China Geneva Trade Talks Joint Statement: Tariff War Temporarily Suspended

On May 12, 2025, senior trade officials from the United States and China convened in Geneva, Switzerland, for high-level economic and trade negotiations. The two sides issued a Joint Statement on U.S.-China Geneva Economic and Trade Talks, agreeing to a 90-day suspension of selected reciprocal tariffs and reaching multiple consensus points to stabilise bilateral economic relations. The statement underscores the strategic importance of U.S.-China economic ties to the global economy and reaffirms the shared goal of building a sustainable and mutually beneficial trade relationship.

1. Negotiation Background

On April 2, U.S. President Donald Trump signed an executive order on "reciprocal tariffs" at the White House, announcing a 10% "minimum benchmark tariff" to be imposed on trade partners. Some trade partners will face higher tariffs, such as China at 34%, Vietnam at 46%, Thailand at 36%, Indonesia at 32%, India at 26%, Japan at 24%, and South Korea at 25%. The 10% tariff went into effect at 12:01 AM on April 5, and the higher tariffs will take effect on April 9.

In response, China swiftly retaliated. The State Council Tariff Commission of China issued an announcement, approved by the State Council, stating that starting from 12:01 AM on April 10, it would impose a 34% tariff on imports originating from the United States. On April 10, the U.S. raised the "reciprocal tariff" rate on Chinese goods to 125%. Subsequently, on April 12, China's State Council Tariff Commission announced that the U.S. tariff rate would be increased from 84% to 125%.

2. Negotiation Results

According to the Joint Statement, both China and the United States have committed to implementing the following measures by May 14:

(1) The U.S. will suspend the 24% tariff on Chinese goods (including Hong Kong and Macau) imposed under Executive Order 14257 for an initial 90-day period. A 10% tariff will remain in place, while tariffs under Executive Orders 14259 and 14266 will be rescinded.

(2) China will suspend the 24% tariff on U.S. goods imposed under Announcement No. 4 of the 2025 Tariff Commission for an initial 90-day period, retaining a 10% tariff. Tariffs under Announcements No. 5 and No. 6 will be cancelled.

3. Future Outlook

With the release of the Joint Statement from the Geneva Economic and Trade Talks, the China-U.S. tariff dispute has reached a significant turning point. The major economies have achieved a phased consensus on reducing non-tariff barriers, thereby laying the institutional foundation for the reconstruction of the multilateral trade framework.

The Ministry of Commerce of China has expressed strong endorsement of the results of the talks, stating: "This move meets the expectations of both producers and consumers, aligning with the interests of both countries and the global common interest."

Vice Premier He Lifeng further noted at a press conference on the evening of May 11: "The talks were highly productive, exceeding our previous expectations. This marks an important step in resolving differences through equal dialogue and consultation, laying the foundation and creating the conditions for further bridging differences and deepening cooperation."

1.1.2 EU Launches Amendment to the "Chip Act," Intensifying the Global Semiconductor Industry Policy Race

On May 2, the European Union initiated an amendment to the "Chip Act," with an expected addition of €15 billion aimed at advancing 2nm and below semiconductor processes, third-generation semiconductor materials, and AI chip architectures. The EU had originally launched the "Chip Act" at the end of 2022, intending to increase its global semiconductor market share from 10% to 20% by 2030 and establish local production of advanced 2nm and below processes. To achieve this, the legislation aims to mobilize €43 billion in public and private investments.

Compared to the previous version of the Act, this amendment will place greater emphasis on leveraging the EU's existing strategic advantages rather than blindly pursuing market share expansion.

1.1.3 NDRC Reduces Market Access Negative List to 106 Items, Lowering Barriers to Entry and Stimulating Innovation

According to the National Development and Reform Commission (NDRC) website, on April 24, it was announced that, with approval from the Central Committee of the Communist Party and the State Council, the NDRC, in collaboration with the Ministry of Commerce and the State Administration for Market Regulation, released the "Market Access Negative List (2025 Edition)" (hereinafter referred to as the "List (2025 Edition)"). The number of items on the list has been reduced from 117 in the 2022 edition to 106, further easing market access restrictions, optimizing the market access management system, and marking a significant achievement in the development of market access regulations.

1.1.4 China Semiconductor Industry Association Issues Urgent Notice on the Rules for Determining the "Origin" of Semiconductor Products

On April 11, the China Semiconductor Industry Association issued an urgent notice regarding the rules for determining the "origin" of semiconductor products. In accordance with relevant regulations from the General Administration of Customs, the origin of "integrated circuits" will be determined based on the four-digit tariff classification code principle, with the location of wafer fabrication being recognized as the place of origin. For integrated circuits, whether packaged or unpackaged, the origin for import customs declaration will be based on the location of the "wafer fabrication plant."

This policy is expected to significantly reduce the opportunity for "pseudo-domestic" chips, which are produced abroad and then reintroduced to the domestic market, thus fostering the promotion of domestic substitution.

1.1.5 South Korea Approves 200 Billion KRW AI Fund and 500 Billion KRW Semiconductor Special Fund

According to a report by Yonhap News on April 2, the Seoul Metropolitan Government announced on the same day that it will invest 200 billion KRW to establish "AI City Seoul," a project aimed at enhancing the convenience of citizens' daily lives and improving the work efficiency of public sector employees. Concurrently, the South Korean government disclosed plans to increase its semiconductor industry support fund from 26 trillion KRW to 33 trillion KRW. This includes an additional 2.5 trillion KRW in direct financial contributions, raising the total to 4.2 trillion KRW. Moreover, a special fund of 500 billion KRW has been allocated to support small and medium-sized enterprises (SMEs) in the semiconductor sector, specifically in the areas of advanced materials, components, and equipment. Each eligible company may receive up to 20 billion KRW in funding.

1.2. Economic Indicators

1.2.1 Slowdown Driven by Trade Concerns and Weakening Export Orders in April 2025

In April 2025, the global manufacturing sector experienced a marginal contraction, with the global PMI falling to 49.8, a decrease of 0.5 points from the previous month and the first dip below the neutral 50 threshold in four months. This overall slowdown, however, masks a divergence in performance across key regions. India stood out with a robust expansion, registering a PMI of 58.2, indicating continued strong growth fueled by a significant upturn in new export orders. In contrast, China's manufacturing activity contracted with a PMI of 49.0, a notable decrease from March. Similarly, Japan (48.7) and South Korea (47.5) continued to experience contraction, highlighting ongoing challenges in their respective manufacturing sectors. The Eurozone also saw a contraction with a PMI of 49.0. The United States, while remaining above the 50 threshold, showed only marginal expansion with a PMI of 50.2.

The observed global slowdown appears to be influenced by growing concerns surrounding tariffs and protectionism, which are reportedly impacting order books, supply chains, and overall business optimism, pushing it to a two-and-a-half-year low. Notably, global new export orders experienced their steepest decline since August 2023. Despite this cooling of momentum, inflationary pressures persist, with reports indicating rising input costs and output prices, potentially linked to trade uncertainties and supply shortages. The data for April 2025 underscores a complex global manufacturing landscape characterized by regional disparities and emerging headwinds that warrant close monitoring for future market research and strategic planning.

Global Manufacturing by Region PMI

Date	Global	China	Japan	Korea	India	US.	Euro Area
2024-04	50.30	50.40	49.60	49.40	58.80	49.20	45.70
2024-05	50.90	49.50	50.40	51.60	57.50	48.70	47.30
2024-06	49.50	49.50	50.00	52.00	58.30	51.70	45.60
2024-07	49.80	49.40	49.10	51.40	58.10	46.80	45.80
2024-08	48.90	49.10	49.80	51.90	57.50	47.20	45.60
2024-09	48.80	49.80	49.70	48.30	56.50	47.20	45.00
2024-10	48.80	50.10	49.80	48.30	57.50	46.50	46.00
2024-11	50.00	50.30	49.00	50.60	56.50	48.40	45.20
2024-12	49.60	50.10	49.60	49.00	56.40	49.20	45.10
2025-1	50.10	49.10	48.70	50.30	57.70	50.90	46.60
2025-2	50.60	50.20	49.00	49.90	56.30	50.30	47.60
2025-3	50.30	50.50	48.40	49.10	58.10	49.00	48.60
2025-4	49.80	49.00	48.70	47.50	58.20	49.70	49.00

Data Source: Wind

1.2.2 Q1 2025 Global Semiconductor Sales Surge 18.8% Annually; March Sales Indicate Continued Upward Trend with 1.8% MoM Growth

The Semiconductor Industry Association (SIA) has reported that global semiconductor sales reached USD 167.7 billion in the first quarter of 2025. This represents a robust year-over-year (YoY) growth of 18.8% compared to Q1 2024, underscoring sustained strong demand across key sectors. However, this figure reflects a 2.8% contraction compared to the preceding fourth quarter of 2024.

For the month of March 2025, worldwide semiconductor sales amounted to USD 55.9 billion, indicating a positive month-over-month (MoM) increase of 1.8% from February 2025 total of \$54.9 billion.

Overall, the global semiconductor market continues to demonstrate significant momentum, with Q1 2025 sales substantially exceeding the performance of the same period last year. Notably, YoY sales have now registered growth exceeding 17% for the eleventh consecutive month. This sustained upward trajectory is significantly propelled by exceptional growth in the Americas, which recorded an approximate 45% YoY increase.

Examining regional performance in March 2025 on a year-over-year basis, the Americas exhibited the most substantial growth at 45.3%. Following this, the Asia Pacific/All Other region experienced a 15.4% increase, China recorded a 7.6% rise, and Japan saw growth of 5.8%. In contrast, Europe reported a marginal decline of 2.0% in YoY sales.

On a month-over-month basis for March 2025, Europe demonstrated the strongest growth at 5.7%, followed by Asia Pacific/All Other at 3.6%, and China at 2.4%. Conversely, both the Americas and Japan experienced slight MoM contractions of 0.4% each.

Global Semiconductor Sales (Billion USD)



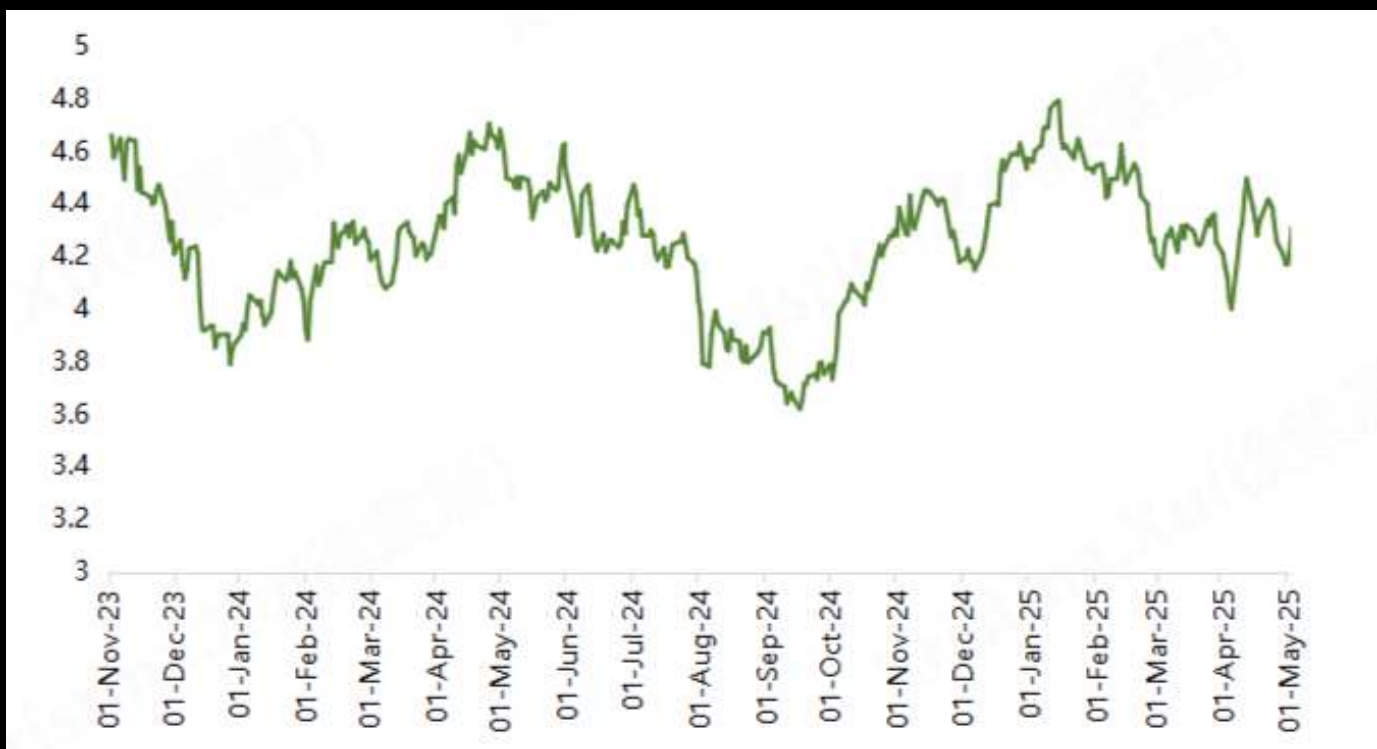
Data Source: SIA

1.2.3 US 10-Year Treasury Yield Rises in May Amidst Inflation Concerns and Tariff Uncertainty

The U.S. 10-Year Treasury Bond yield in May 2025 has trended upwards, currently hovering around 4.481%, following an April average of 4.28%. This increase occurred even after the release of April's Consumer Price Index (CPI), which showed a slightly cooler-than-expected 2.3% year-over-year rise, a tick below the anticipated 2.4%. However, the muted downward reaction in yields indicates that the market remains cautious, particularly regarding the potential inflationary impact of President Trump's tariffs and the stickiness of core inflation, which met expectations at 2.8%. This scenario, as highlighted by former Fed Vice Chair Roger Ferguson, reinforces a "wait-and-see posture" regarding potential Federal Reserve rate cuts.

Adding complexity is the recently announced U.S.-China trade agreement in May 2025, which will temporarily suspend the majority of tariffs for 90 days, reducing "reciprocal" tariffs from 125% to 10%. While this development might offer short-term relief from immediate tariff pressures and potentially moderate inflation concerns related to bilateral trade, market analysts like Pepperstone's Michael Brown point to the "volatile and chaotic nature" of policy decisions, which could erode institutional credibility and asset values. OCBC's Vasu Menon further cautions about the potential for President Trump's broader 10% universal tariffs and policy shifts to negatively impact the U.S. economy and the corporate sector, despite no immediate recession being anticipated. The looming threat of broader universal tariffs and the inherent uncertainty in trade policy, as emphasized by market strategists, continue to pose significant risks, such as supply chain disruptions and increased costs, to the semiconductor industry's profitability and long-term investment outlook. Investors in this sector must navigate this environment of fluctuating interest rates and evolving trade dynamics, recognizing the potential for both positive and negative impacts on company performance and market sentiment.

U.S. 10-Year Treasury Yield (%)

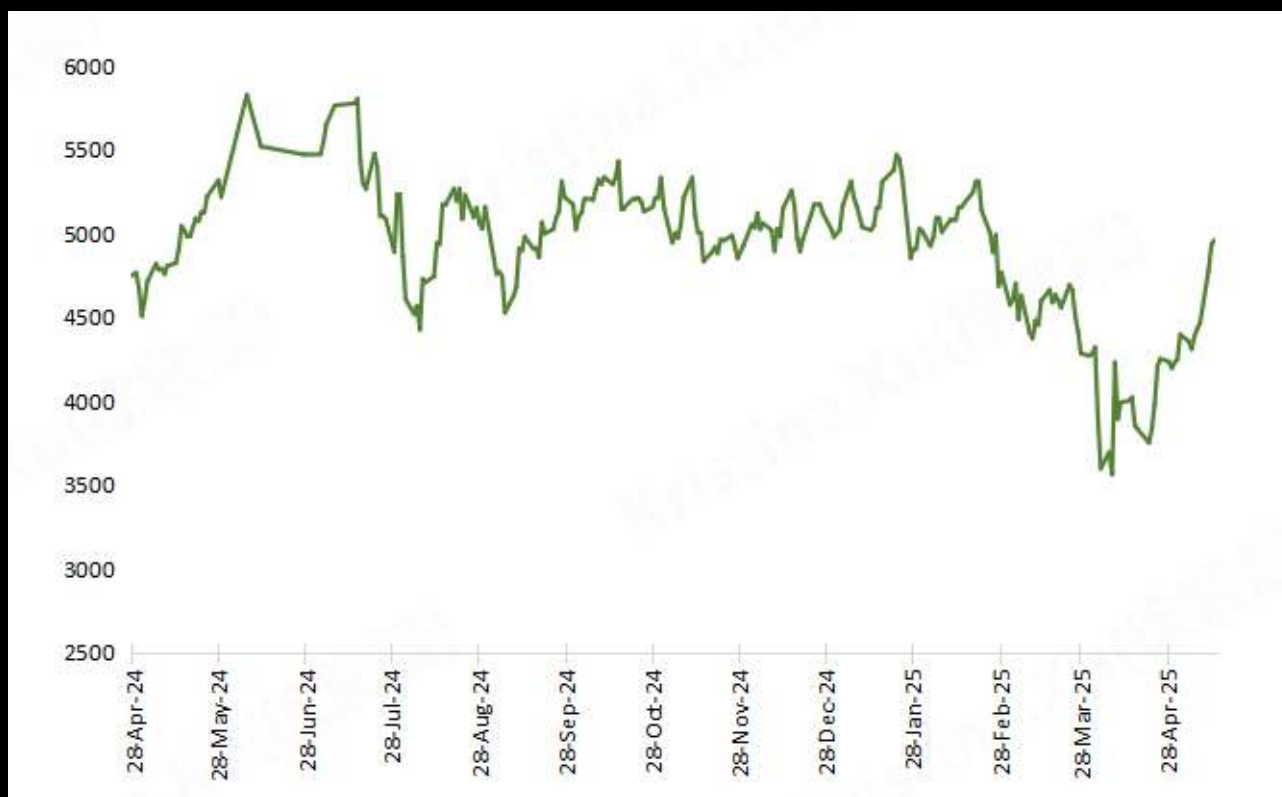


Data Source: Investing

1.2.4 Philadelphia Fed Survey: Modest Rebound in Business Sentiment Amidst Continued Contraction in May

The Philadelphia Federal Reserve's Business Outlook Survey for May revealed a modest rebound in regional business sentiment, with the general business conditions index improving to -4.0, following a significant contraction to -26.4 in April. Despite this upward movement, the current reading still indicates a net decline in business activity within the Third Federal Reserve District. Notably, the Action Economics Forecast Survey had anticipated a less pronounced increase, underscoring the unexpected nature of this partial recovery. The proportion of firms reporting decreased general activity moderated from 39% in April to 23% in May, while the percentage citing increased activity rose from 13% to 19%. The majority of firms (58%) continued to report no change in activity levels.

Philadelphia Semiconductor Index (SOX)



Data Source: MacroMicro

02

Semiconductor Industry Updates

Semiconductor Industry Overview

Impact	Manufacturer	Updates	Analysis
Short-term	NVIDIA	Nvidia Accelerates Domestic AI Computing Deployment, Expanding U.S. Production of Blackwell Chips	Nvidia is accelerating the domestic production of its Blackwell chips in the United States to enhance supply chain resilience. However, the high manufacturing costs may put pressure on its profit margins.
Short-term	Micron SK Hynix Samsung	Memory Prices Rebound, DDR4 Phases Out as Transition to HBM/LPDDR5X Accelerates	The storage market is experiencing a resurgence, driven by the increasing demand from AI servers and AIPC. Leading manufacturers are solidifying their monopolistic positions through technological iterations.
Short-term	SG Micro	Reports 8.3% Year-on-Year Revenue Growth in Q1, Reaching 790 Million CNY	Demand for analog chips continues to grow steadily, resulting in robust performance. This growth has led to enhanced market recognition and confidence in the company.
Mid-term	Intel	Intel Outsources 2nm Production to TSMC, Reflecting Strategic Adjustments to Its IDM Model	Intel's progress in advanced process technologies has been slower than expected, forcing the company to rely on TSMC's technology. This highlights the insufficient advanced manufacturing capabilities in the U.S.
Mid-term	STMicroelectronics	Launches Next-Generation Automotive-Grade MCUs to Strengthen Its Automotive Market Presence	In response to the trends of electrification and intelligentization, the company aims to increase its market share in the automotive electronics sector.

Impact	Manufacturer	Updates	Analysis
Mid-term	Nexperia	Releases 1200V SiC MOSFET to Expand into Automotive and Industrial Applications	The new product meets the high-voltage application requirements, enhancing competitiveness and driving upgrades in electric vehicles and industrial equipment.
Mid-term	GigaDevice	GigaDevice and Navitas Form Strategic Partnership to Develop High-Efficiency Digital Power Solutions	Combining MCU and GaN technologies, the collaboration focuses on AI data centers and the new energy market, driving innovation in power management solutions.
Long-term	Qualcomm	Increases Investment in In-House AI Chips, Expands Presence in Edge Computing and Intelligent Devices Market	The company's strategy of developing in-house AI chips strengthens its product competitiveness and drives growth in the edge computing and smart device markets.
Long-term	Samsung	Samsung Accelerates Development of HBM4 to Secure Leadership in AI High-Bandwidth Memory Market	HBM4 technology is poised to be a critical factor in improving AI chip performance, with Samsung actively positioning itself to maintain a technological leadership in this field.
Long-term	Silan Microelectronics	Silan Micro Expands Mature Process IDM Capacity above 28nm in China	Silicon Motion is accelerating the expansion of its mature process production capacity, strengthening its IDM model and enhancing its capabilities for domestic substitution.

2. Semiconductor Industry Updates

2.1 Short-term Implications

2.1.1 Nvidia Accelerates Domestic AI Computing Deployment, Expanding U.S. Production of Blackwell Chips

Nvidia's new generation of AI server plans, powered by its Blackwell chips, marks the company's shift from a high reliance on Asian manufacturing to a more diversified strategy. While collaboration with TSMC's U.S. factory helps mitigate geopolitical risks, the high costs of domestic manufacturing and slow yield ramp-up remain significant challenges that could pressure Nvidia's overall gross margins. Strategically, this adjustment reflects a growing priority for AI chip leaders to ensure supply chain security and long-term supply reliability.

2.1.2 Memory Prices Rebound, DDR4 Phases Out as Transition to HBM/LPDDR5X Accelerates

Since the second quarter of 2025, DRAM and NAND Flash prices have seen a significant rebound, with a quarter-on-quarter increase of 8%-20%. The three major memory manufacturers have begun to reduce DDR4 production capacity and ramp up their focus on high-bandwidth memory (HBM) and next-generation low-power LPDDR5X. This shift signals a rapid market transition toward AI servers, smart devices, and AI PCs, among other cutting-edge fields. As advanced packaging technologies become more widespread, memory chips will increasingly integrate with SoCs, creating new technological barriers and intensifying the market dominance of leading firms.

2.1.3 Silan Microelectronics Reports 8.3% Year-on-Year Revenue Growth in Q1, Reaching 790 Million CNY

Silan Microelectronics announced its first-quarter 2025 financial report, with a year-on-year revenue increase of 8.3%, totaling 790 million CNY. The growth is primarily driven by stable demand for analog chips in industrial control, new energy, and automotive electronics sectors. The company has continuously optimized its product portfolio and increased investment in R&D, further solidifying its leadership position in the high-end analog chip market.

2.2 Mid-term Implications

2.2.1 Intel Outsources 2nm Production to TSMC, Reflecting Strategic Adjustments to Its IDM Model

Despite continued promotion of its IDM 2.0 strategy, Intel's progress in advanced process nodes at 2nm and below remains below expectations. The company's recent order to TSMC for the production of compute tiles for its Nova Lake platform underscores Intel's increasing reliance on external foundries to ensure timely product delivery in high-performance segments. This shift highlights structural weaknesses in the U.S. semiconductor manufacturing ecosystem—particularly in EUV lithography tools, advanced materials, and process integration—and reaffirms TSMC's technological leadership in sub-nanometer process technologies.

2.2.2 STMicroelectronics Launches Next-Generation Automotive-Grade MCUs to Strengthen Its Automotive Market Presence

STMicroelectronics has introduced a new generation of automotive-grade microcontrollers (MCUs) designed to meet the evolving demands of electrification and smart vehicle technologies. The new MCUs deliver significant improvements in performance, safety, and energy efficiency, supporting more complex driver assistance systems and in-vehicle infotainment solutions. By expanding its automotive semiconductor product portfolio, ST aims to increase its market share and reinforce its leadership in the automotive-grade semiconductor sector.

2.2.3 Nexperia Releases 1200V SiC MOSFET to Expand into Automotive and Industrial Applications

Nexperia recently launched a 1200V Silicon Carbide (SiC) MOSFET utilizing advanced surface-mount packaging technology to address the growing need for high-voltage and high-efficiency power devices in electric vehicles (EVs) and industrial equipment. This product introduction marks a significant step in Nexperia's progress in wide bandgap semiconductor technologies, enhancing its competitive position and enabling broader application across high-growth sectors.

2.2.4 GigaDevice and Navitas Form Strategic Partnership to Develop High-Efficiency Digital Power Solutions

GigaDevice has entered into a strategic collaboration with Navitas Semiconductor, integrating GigaDevice's high-performance MCU portfolio with Navitas's high-frequency, high-speed, and highly integrated GaN (Gallium Nitride) technologies. The partnership aims to co-develop intelligent, efficient, and high-power-density digital power solutions. Key target markets include AI data centers, photovoltaic inverters, energy storage systems, EV charging infrastructure, and electric vehicles. This initiative is expected to accelerate commercialization and drive innovation in power management systems.

2.3 Long-term Implications

2.3.1 Qualcomm Increases Investment in In-House AI Chips, Expands Presence in Edge Computing and Intelligent Devices Market

Qualcomm has announced a significant escalation of its investment in self-developed AI chips, aiming to strengthen its competitive position in the edge computing and smart device sectors. The forthcoming generation of AI chips will integrate more powerful Neural Processing Units (NPUs) to enable highly efficient on-device AI inference, thereby reducing reliance on cloud computing. This strategic move not only enhances Qualcomm's product differentiation but also fosters the growth of edge AI applications, meeting the increasing demand for local AI processing capabilities across smartphones, wearable devices, and IoT endpoints.

2.3.2 Samsung Accelerates Development of HBM4 to Secure Leadership in AI High-Bandwidth Memory Market

Samsung Electronics is accelerating the development of the next-generation High Bandwidth Memory (HBM4) to address the surging demand for higher memory bandwidth and capacity driven by AI chip advancements. HBM4 is expected to deliver substantial improvements in bandwidth, energy efficiency, and capacity, serving as a critical enabler for enhanced AI chip performance. Samsung's proactive investment positions it to maintain technological leadership in the emerging AI high-bandwidth memory segment, further consolidating its dominant status in the global memory market.

2.3.3 Silan Micro Expands Mature Process IDM Capacity above 28nm in China

Silan Microelectronics, a leading Chinese IDM in power semiconductors, has been steadily increasing investment and expanding capacity in mature process nodes above 28nm. Its 8-inch silicon carbide (SiC) power device production line under construction in Xiamen reached structural completion in early 2025 and is scheduled to commence production in Q1 2026, ultimately targeting an annual output capacity of 420,000 wafers. Additionally, Silan Micro's 12-inch specialty process wafer fab in Hangzhou is progressing steadily, with a planned monthly production capacity of 80,000 wafers. These capacity expansions are expected to significantly enhance Silan Micro's competitiveness in power semiconductors, supporting rapidly growing markets such as new energy vehicles, industrial control, and telecommunications.

03

Application
Updates

3. Application Updates Overview

Category	Section	Manufacturer	Updates
Artificial Intelligence	AI Chip	NVIDIA	NVIDIA: NVIDIA partners with Saudi Arabia's HUMAIN to build an AI factory, deploying 18,000 GPUs to establish a 500 MW computing power center.
Artificial Intelligence	Cloud Computing & Big Data	DeepSeek	Released the Prover-V2 model with 671 billion parameters.
New Energy	Photovoltaics and Energy Storage	CATL	CATL released the world's first 9MWh energy storage system.
New Energy	NEVs	TESLA	Q1 delivery volume drops to the lowest level in three years.
Consumer Electronics	Smartphones	HUAWEI	Huawei's Pura80 series will feature the Huawei's Kirin 9020 chipset and a custom RYYB sensor.
Consumer Electronics	Drones	UBTECH	UBTECH Robotics has partnered with Chuangyao Technology to develop humanoid robot chip solutions, targeting automation applications in service robots.
Industrial	Industrial Automation and Control	Honeywell	Sales are expected to reach between \$39.6 billion and \$40.5 billion this year.
Automotive	In-car intelligent operating systems	DesaySV	The German factory has started production, while the Spanish facility is expected to be completed by the end of the year.

Category	Section	Manufacturer	Updates
Telecommunication	Communication networks and optical fiber	ZTE	The order share for intelligent computing servers in Q1 2025 exceeded 60%.
Medical	Medical imaging equipment	J&J	Increased focus on high-value sectors such as surgical robots and AI-driven healthcare; revenue growth is expected to be higher in the second half of the year.

3.1 Artificial Intelligence

3.1.1 NVIDIA Partners with Saudi HUMAIN to Establish AI Factory

On May 13, NVIDIA CEO Jensen Huang announced a collaboration with Saudi Arabia's newly established AI company HUMAIN. The partnership will deploy 18,000 NVIDIA chips to build a 500-megawatt computing center. The five-year collaboration was revealed at the US-Saudi Investment Forum held in Riyadh, Saudi Arabia. HUMAIN, funded by the Saudi sovereign wealth fund, is focused on building large-scale Arabic language models and AI infrastructure, including data center development.

3.1.2 DeepSeek Launches Prover-V2 Model

On April 30, DeepSeek released the Prover-V2 model on the HuggingFace platform. With 67.1 billion parameters, this model is nearly 100 times larger than its predecessor, setting a new benchmark for open-source mathematical reasoning models. It is specifically designed for formal mathematical proof tasks and is applicable to scenarios such as automatic theorem verification, broadening the possibilities for artificial intelligence applications.

3.2 New Energy

3.2.1 CATL Unveils the World's First 9MWh Energy Storage System

Contemporary Amperex Technology Co. Limited (CATL) has achieved a significant breakthrough in the energy storage sector by launching the world's first 9MWh energy storage system. This system offers higher energy density and efficiency, effectively enhancing storage performance and providing an optimized solution for large-scale energy storage applications. It plays a crucial role in advancing the storage and utilization of renewable energy.

3.2.2 Tesla's Q1 2025 Deliveries Drop to Lowest Level in Three Years

Tesla reported a 13% decline in vehicle deliveries for Q1 2025, marking the lowest quarterly sales since Q2 2022. The drop is mainly attributed to model redesigns and a backlash against CEO Elon Musk's international actions. As of the end of April, Tesla's stock price had fallen by 44%, reflecting the negative impact of these factors.

3.3 Consumer Electronics

3.3.1 Huawei Pura80 Series to Feature Kirin 9020 Chip and Custom RYYB Sensor

Huawei's upcoming Pura80 series smartphones will be equipped with the Kirin 9020 chip and a custom RYYB sensor, alongside innovative dual-layer OLED display technology across all models. This combination is expected to significantly enhance the phone's computational processing power and power efficiency. The Huawei Pura80 series is anticipated to be officially launched in June this year.

3.3.2 UBTECH Partners with Chuango Technology to Develop Humanoid Robot Chip Solutions

UBTECH, a global leader in humanoid robotics, has entered into a strategic partnership with Chuango Technology, a communications chip company, to jointly develop chip solutions for humanoid robots. This collaboration aims to improve automation in robotics applications, driving the development and expansion of service robot technology.

3.4 Industrial

3.4.1 Honeywell Projects 2025 Sales Between \$39.6 Billion and \$40.5 Billion

On April 29, Honeywell released its Q1 2025 financial report and updated its full-year guidance, projecting annual sales to range from \$39.6 billion to \$40.5 billion. The company plans to complete the spin-off of its advanced materials business and the separation of its automation and aerospace businesses by the second half of 2026, resulting in three leading industry companies that will each be publicly listed.

3.5 Automotive

3.5.1 Desay SV's German Plant Now Operational, Spanish Plant Expected to Complete by Year-End

Desay SV Automotive's German plant has officially commenced production, and the company's Spanish facility is under construction, with completion expected by the end of the year. This marks a significant step in the expansion of Chinese automotive electronics companies into the European market, enhancing global supply capacity and competitiveness in the automotive electronics sector.

3.6 Communication

3.6.1 ZTE's Q1 2025 Smart Server Orders Account for Over 60%

At ZTE's China Ecosystem Partners Conference, Executive Vice President and COO Xie Junshi announced that in Q1 2025, smart server orders accounted for over 60% of the company's total orders. ZTE has positioned the internet market as a strategic focus and is looking to expand its collaborations with top-tier companies such as ByteDance, Alibaba, and Tencent, aiming to capture a larger share of the smart computing orders from internet enterprises.

3.7 Medical

3.7.1 Johnson & Johnson to Increase Investment in Surgical Robotics and AI Healthcare

According to Johnson & Johnson's Q4 2024 and full-year financial report, its medical division achieved sales of \$31.857 billion, representing a 4.8% year-over-year growth. The company plans to increase its investments in surgical robotics and AI healthcare in 2025, viewing these areas as critical for future growth.

04

Product Updates

4. Product Updates

4.1 Storage Chips

4.1.1 Five Major NAND Manufacturers Simultaneously Cut Production, Resulting in Price Increases for Some Products

1. Market Competition:

According to the Q1 2025 DRAM market share report released by industry research firm Counterpoint, SK hynix surpassed Samsung Electronics for the first time, securing the largest market share for the quarter. SK hynix, Samsung Electronics, and Micron Technology held 36%, 34%, and 25% of the market share, respectively, with other manufacturers collectively accounting for the remaining 5%.

2. Supply and Demand Dynamics:

Demand Growth: Global IT equipment manufacturers are urgently increasing chip inventories to mitigate risks associated with U.S. tariffs, which has boosted procurement demand. Additionally, according to the latest survey by TrendForce, strong demand for AI applications is expected to drive a 30% annual growth in enterprise-grade SSD demand. This will also lead to a significant increase in storage configurations for end-user devices.

Supply Reduction: Recently, the five major NAND manufacturers have collectively reduced production, resulting in a contraction on the supply side. Samsung, Micron, and other NAND manufacturers have cut production by 15%-25%. SK hynix and others are also undergoing structural adjustments in capacity, reducing the production of traditional process products such as DDR3 and DDR4. This is expected to lead to tight supply for certain storage chips.

3. Pricing:

The average selling price (ASP) of DRAM, which had been sluggish for five months, began to rise in April. According to data from market research firm DRAMeXchange, the fixed contract price for standard PC DRAM (DDR4 8Gb 1Gx8) increased by 22.2% month-over-month, reaching \$1.65.

Storage Chip Lead Times by Manufacturer

Manufacturer	Product Series	Lead Time (Weeks)	Lead Time Trend
SK Hynix	NAND FLASH	6-10	Reduction
	eMMC	8-12	Stable
INFINEON	SRAM	12-52	Stable
	NOR FLASH	12-26	Stable
GigaDevice	NOR FLASH	8-12	Stable
	NAND FLASH	6-10	Stable
Samsung	PC DRAM	32-54	Stable
	SSD	30-54	Stable

Data Source: Fuchang Electronics and Public Online Data

4.2 GPU

4.2.1 NVIDIA GPU Market Share Declines, AMD and Intel Gain Ground

1. Market Overview:

As of April 5, 2025, according to the latest GPU rankings released by the global hardware benchmarking tool CPU-Z, NVIDIA's RTX 3060 maintains its position as the most widely used GPU on Steam with a 3.7% usage rate, holding the top spot for five consecutive years. However, NVIDIA's overall GPU market share has decreased from 74.3% to 67.9%, marking a historic low. Conversely, AMD's market share rose significantly from 16.6% to 31.1%, driven by the premium pricing and strong performance of its RX 7900 series high-end graphics cards. Intel's GPU market share also increased to 0.7%, boosted by a 27% year-over-year growth in its Arc series.

2. Supply and Demand Dynamics:

On the demand side, the large-scale deployment of AI models such as DeepSeek's Prover-V2 and GPT-5 class models across multiple sectors has accelerated GPU demand. Additionally, the rising requirements for edge computing in smart vehicles and industrial internet applications have fueled explosive growth in global AI compute demand, further boosting GPU market demand.

On the supply side, NVIDIA faces constraints with certain high-end GPUs, including the discontinuation of the RTX 5090D and the inclusion of the H20 model on export control lists. Qualcomm has recently announced its reentry into the data center market, aiming to deepen integration with NVIDIA's AI chip ecosystem.

3. Pricing Trends:

According to Taiwan's Economic Daily News report dated May 12, NVIDIA has adjusted the official pricing of nearly all its products in response to rising tariffs and manufacturing costs. Gaming GPU prices have increased by an average of 5% to 10%, while AI-dedicated GPUs have seen price hikes as high as 15%. Notably, the RTX 5090 has been rated as the highest-tier PC graphics card, with its price rising over 25% compared to the beginning of the year.

GPU Market Trends by Vendor

Manufacturer	Order Trends	Price Trends
NVIDIA	Increasing	Increasing
AMD	Increasing	Stable
Intel	Stable	Stable
Qualcomm	Stable	Stable

Data Source: Publicly available online information

4.3 MCU

4.3.1 Significant Market Potential in Automotive-grade MCU; Acceleration of Domestic Substitution

1. Market Landscape:

In April 2025, Yole Group released a global market outlook report on automotive-grade RISC-V MCUs, forecasting that the global MCU market will reach USD 32 billion by 2028, with over 60% of growth driven by the automotive and industrial sectors.

2. Supply and Demand:

Demand: The report indicates that the intelligent upgrade of new energy vehicles in 2025 will drive over 15% growth in the high-end automotive MCU market, with MCU usage per intelligent vehicle estimated to be four times that of traditional internal combustion engine vehicles.

Supply: In Q1 2025, NXP, STMicroelectronics, and Texas Instruments reported below-expectation results, potentially impacting their supply strategies. Domestic manufacturers are actively promoting localization, with orders for Zhongwei Semiconductor’s automotive MCUs continuously increasing; Q1 2025 revenue reached CNY 206 million, a year-on-year increase of 0.52%. As domestic technology advances, the market share of local high-end MCU chips is expected to rise steadily over the coming years.

3. Pricing:

As of April 2025, automotive MCU prices remained generally stable. However, due to growing demand and supply adjustments, prices of certain models have increased. For example, NXP automotive MCUs saw demand rise nearly 40% month-over-month in April, though overall demand remains somewhat subdued. Demand for automotive-grade materials is notably increasing, while general-purpose materials maintain relatively stable demand.

MCU Lead Time Status by Vendor

Manufacturer	Product Series	Lead Time (Weeks)	Lead Time Trend
ST	8-bit MCUs	10-24	Stable
	32-bit MCUs	13-16	Reduction
	Automotive MUCs	40-52	Stable
INFINEON	8-bit MCUs	10-26	Stable
	32-bit MCUs	10-26	Stable
	Automotive MUC	32-54	Stable
NXP	8-bit MCUs	13-39	Stable
	32-bit MCUs	13-39	Basically Stable
	Automotive MUC	18-52	Stable
MICROCHIP	8-bit MCUs	4-12	Stable
	32-bit MCUs	4-18	Stable

Data Source: Fuchang Electronics and publicly available online data

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