BRIOCEAN

August 2026

Monthly Market Research

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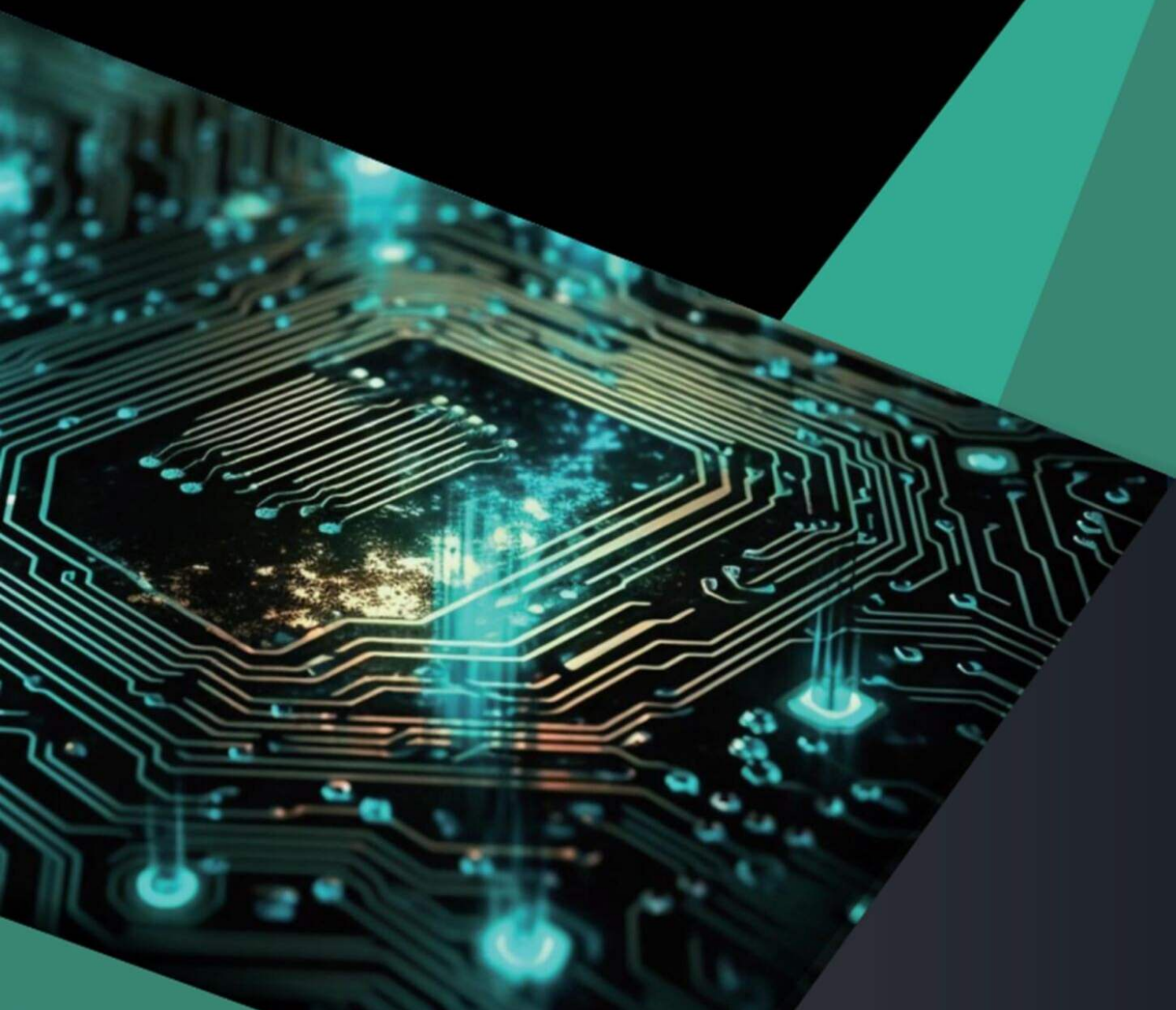


About Briocean

Established in 2008 and headquartered in Singapore, Briocean is an independent distributor of electronic components, offering strategic sourcing and integrated supply chain solutions to manufacturers across a wide range of industries. Our two quality assurance centres in Shenzhen and Hong Kong – featuring a combined 2,100 m^2 QC laboratory – enforce end-to-end traceability and rigorous component testing, ensuring every part meets the highest standards of authenticity, reliability, and performance.

We hold a comprehensive set of internationally recognised certifications, including AS6081, AS9120B, ISO14001, ANSI/ESD S20.20-2021, and ISO9001 – with AS6081 and AS9120B underscoring our commitment to counterfeit avoidance and aerospace-grade quality management. Our industry leadership is consistently validated by independent rankings: 8th on Supply Chain Connect's Top APAC Distributor List in 2023, and in 2024, simultaneous recognition on both the Top 50 Global Distributor and the Top 25 Global Independent Distributors.

Summary

Category	Trend
Macroeconomics	- World Semiconductor Trade Statistics (WSTS): Global Semiconductor Market Up 102% in 1H26 - Global/Asia Manufacturing: AI Drives Asia Factory Activity and Electronics Exports - China Manufacturing: August PMI 49.8; High-Tech Manufacturing PMI 52.9; Electronics Equipment Demand/Production Index >53 - Korea Semiconductor Exports: August Semiconductor Exports Hit Record High, Validating Real AI/Memory Demand - U.S. Trade Policy: Semiconductor Supply Chain Localization and Tariff Risks Continue to Intensify
Industry	- STMicroelectronics: Third Price Hike in Five Months, MCU Spot Prices Up 29% - NXP: Automotive MCUs Remain Tight, RFID Up Twice in Two Months -Microchip: Price Adjustments on Select Product Lines Effective August 14 - Texas Instruments: Five Rounds of Price Hikes in 12 Months, AI Tight Models Up 85% - Analog Devices: Second Price Hike on Sep 13, Tied to Capacity Expansion - Samsung Electro-Mechanics: MLCC Unified +30%, Long-Term Agreements Lock Supply Through 2027 - TSMC: CoWoS Capacity Tight, Orders Spill to Intel, JV with Sony for Fab - SMIC: Q2 Revenue Breaches USD 3B for First Time, AI Demand Drives Volume and Price Gains - NVIDIA: Q2 Revenue Doubles to USD 96.2B, Q3 Guidance Tops USD 100B for First Time - Renesas: Kumamoto Earthquake Aftermath Persists, Optocoupler and Automotive MCU Production Constraine - SK Hynix: U.S. Fab to Mass-Produce HBM4E in Q3 2029, CEO Predicts Shortage Through End-2030

Category	Trend
End-market (Artificial Intelligence)	- Four Tech Giants' AI Infrastructure Investment Approaches US$2.4 Trillion - Nine CSPs' Capital Expenditure to Surge 90% in 2026, with AI Server Shipments Growing 31% - CoreWeave Raises Capital Spending and Plans 360MW Indonesia Data Centres
End-market (Automotive)	- Megapack 3 Enters Mass Production; Texas Megafactory Reaches 50GWh Annual Capacity
End-market (Robotics)	- XPENG IRON to Enter Mass Production by Year-End, Launching for Retail and Services in 2027 - UBTECH Partners with BASiC Semiconductor on SiC to Develop Power and Motion Control
End-market (Industrial)	- Siemens Invests US$200 Million in Two New US Factories to Expand AI Power Equipment Production
Memory Market Trends	- DRAM: TrendForce expects conventional DRAM contract prices to rise 13%–18% QoQ in Q3, while Morgan Stanley, UBS and other banks forecast a 20%–32% increase - DDR3: Supply remains tight and prices continue rising, though spot price gains have slowed - DDR4: Contract prices strengthen (up around 50% in Q3), while some spot prices have eased - DDR5: Prices remain high, driven by costs and cloud procurement - HDD: AI storage demand continues to drive prices higher, with the supply gap expected to last until 2028

Table Of Contents

01

Macro Environment Updates

1. Macro Environment

1.1 Industry Policy

1.1.1 World Semiconductor Trade Statistics (WSTS): Global Semiconductor Market Up 102% in 1H26

According to WSTS 2Q26 data, the global semiconductor market reached USD 702.0 billion in 1H26, surging 102% YoY, driven primarily by AI infrastructure, HPC, and advanced memory. Memory products grew 305%, logic 45%. Based on 2Q actuals, the full-year forecast has been raised to USD 1.655 trillion, up ~108% YoY, 18 ppts above the spring forecast; 2027e at ~USD 2.1 trillion, +29%. Memory is expected to grow 302% for the full year, with all major regions expanding, led by the Americas and Asia-Pacific. Amid rapid growth, the latest top-20 global chip supplier ranking shows memory companies leading QoQ gains: Kioxia +76%, SK Hynix and SanDisk +51%; NVIDIA +18% QoQ, Broadcom forecast +33%. Kioxia (No. 8) and SanDisk (No. 9) moved up, with revenues more than quadrupling YoY. The other top-20 suppliers grew only 9% QoQ, signaling clear divergence.

Top Semiconductor Companies' Revenue

Change versus prior quarter in local currency

	Company	US$B 2Q26	Reported 2Q26	Guidance 3Q26	Comments on 3Q26
1	Nvidia	96.2	18%	12%	AI demand remains strong
2	Samsung SC	83.2	62%	n/a	strong AI memory demand
3	SK Hynix	51.8	51%	n/a	strong AI memory demand
4	Micron	41.5	74%	21%	supply constraints
5	Broadcom	29.4	33%	n/a	3Q26 is 2Q26 guidance
6	Intel	16.1	19%	1.1%	supply constraints
7	AMD	11.5	13%	13%	data center strong
8	Kioxia	11.0	76%	35%	strong AI memory demand
9	Sandisk	9.0	51%	18%	supply constraints
10	Qualcomm IC	8.5	-6.3%	2.3%	mobile phones weak
11	TI	5.5	13%	8.0%	all markets strong
12	Infineon	4.8	9.4%	13%	AI & auto strong
13	MediaTek	4.8	2.0%	2.5%	mobile phones weak
14	ADI	4.0	11%	6.9%	AI data center strong
15	NXP	3.5	10%	7.3%	auto strong
16	STMicro	3.5	13%	6.1%	AI data center strong
17	Sony Imaging	3.2	-2.2%	n/a	mobile image sensors down
18	Marvell	2.7	12%	n/a	3Q26 is 2Q26 guidance
19	Renesas	2.6	10%	2.8%	auto flat, IoT up
20	Onsemi	1.6	6.0%	6.0%	AI data center strong
	Total of above	394	33%		
	AI companies	322	40%		Nvidia, Broadcom & memory
	Others	72	9%	6%	

Source: Semiconductor Intelligence

1.1.2 Global/Asia Manufacturing: AI Drives Asia Factory Activity and Electronics Exports

A Reuters survey published September 1 shows that robust global demand for AI hardware kept Asian factories in expansionary territory in August 2026. China's August manufacturing PMI rose to 51.5 (S&P Global survey), up from 50.9 in July and above market consensus of 51; Japan's PMI climbed to 54.9, the highest since April and the eighth consecutive month of expansion; Korea's PMI edged down to 52.3 but remained in expansion for the ninth straight month. Korea's expansion was mainly export-driven, with exports up 68.7% YoY in August, marking 15 consecutive months of growth. Separately, Taiwan, Malaysia, and the Philippines also saw factory activity expand, with the Philippines' PMI jumping to 54.9. An S&P Global Market Intelligence economist noted that strong export demand is "an encouraging signal that businesses continue to benefit from the current AI and semiconductor super-cycle."

1.1.3 China Manufacturing: August PMI 49.8; High-Tech Manufacturing PMI 52.9; Electronics Equipment Demand/Production Index >53

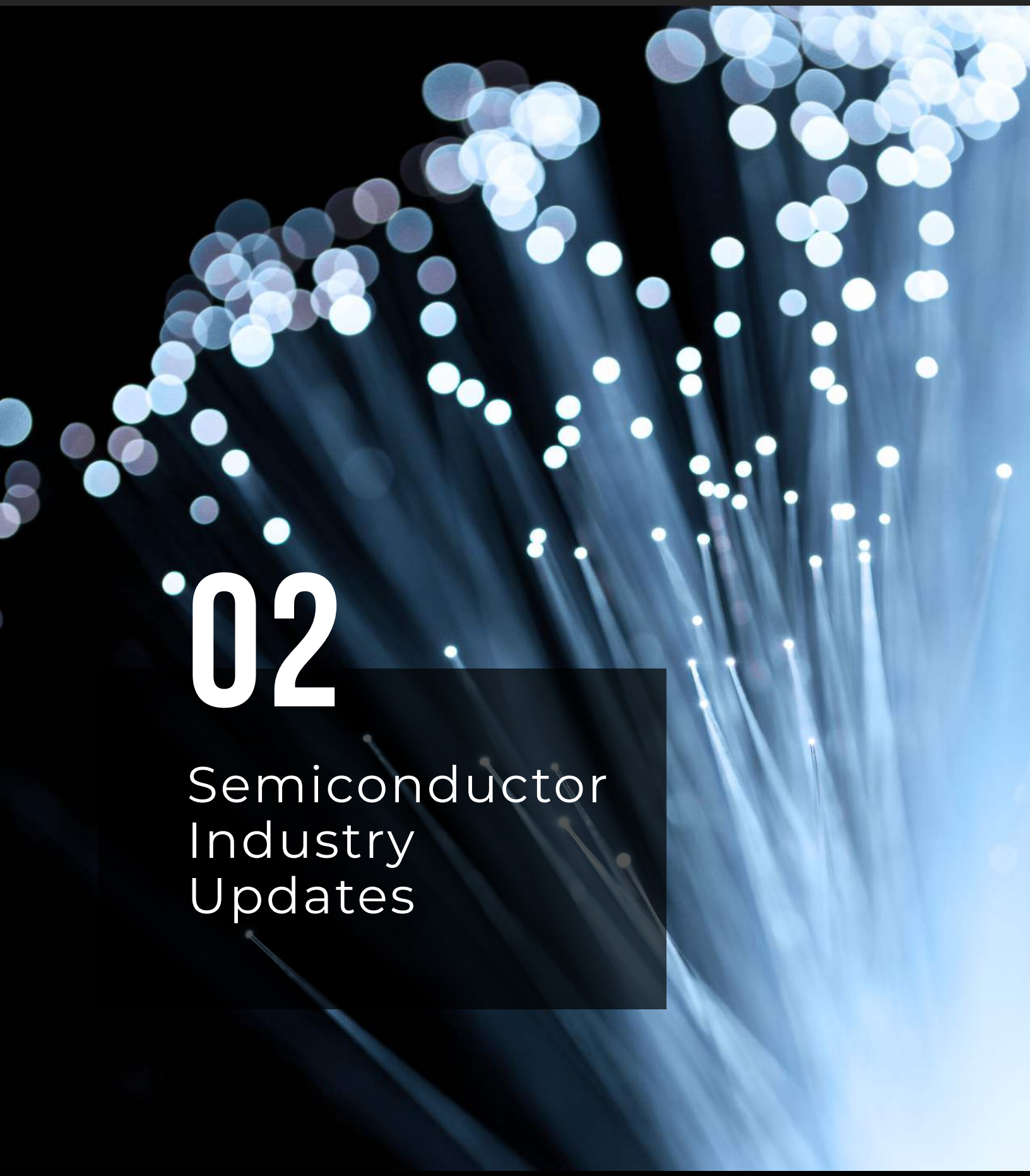
On August 31, 2026, the National Bureau of Statistics released PMI data, interpreted by Chief Statistician Huo Lihui. August manufacturing PMI stood at 49.8, up 0.6 ppts MoM, with 16 of 21 industries improving—a clear rebound. Both production and demand expanded: production index 50.4 (+0.5), new orders 50.6 (+2.1), procurement 50.5 (+1.1). In particular, electrical machinery & equipment, and computer, communication & electronic equipment saw both production and new orders indices above 53.0, indicating rapid release; while chemical raw materials and ferrous metals remained below the threshold. Equipment manufacturing (51.4) and high-tech manufacturing (52.9) continued to expand; consumer goods (49.0) and high-energy-consuming industries (47.9) improved. Price indices rose across the board: input prices 56.6 (+3.4), output prices 50.4 (+2.6) returning to expansion. Large-enterprise PMI rose to 50.6 (expansion), medium 49.4 (down), small 47.9 (up). Non-manufacturing business activity index was unchanged at 49.0; services at 49.3 (postal, telecom, internet growing fast; wholesale/retail weak); construction at 46.9 (slightly down, affected by heavy rain and typhoons). Composite PMI output index was 49.5, up 0.2, signaling a modest improvement in overall economic output.

1.1.4 Korea Semiconductor Exports: August Semiconductor Exports Hit Record High, Validating Real AI/Memory Demand

Data released by Korea's Ministry of Trade, Industry and Energy on September 1 show that August 2026 semiconductor exports reached USD 46.65 billion, surging 209% YoY to a record high—the third consecutive month above USD 40 billion. Driven by this, Korea's total August exports reached USD 98.25 billion, +68.7% YoY, the third-highest monthly figure ever. Semiconductors accounted for 47.5% of total exports and contributed nearly 80% of the month's export growth. The surge is widely seen as strong validation of real demand for AI and high-value-added memory chips. Analysts point to continued expansion in global AI infrastructure investment and surging demand from tech giants like Google and Amazon for high-bandwidth memory (HBM) and other high-performance chips as the core driver. Separately, driven by rising NAND prices —a key component of enterprise SSDs—Korea's August computer exports also jumped 419.5% YoY to USD 6.24 billion, another monthly record.

1.1.5 U.S. Trade Policy: Semiconductor Supply Chain Localization and Tariff Risks Continue to Intensify

In August, the U.S. further reinforced its "localization + tariffs" dual track for the semiconductor supply chain, extending policy tools from early-stage export controls to upstream raw materials and manufacturing. On August 6, President Trump signed a proclamation under Section 232 of the Trade Expansion Act of 1962, titled Adjusting Imports of Polysilicon and its Derivatives into the United States, imposing minimum import prices and additional tariffs on imported polysilicon and its derivative products to support U.S. domestic polysilicon, semiconductor, and solar supply chains. The proclamation sets minimum import prices at: polysilicon USD 21/kg; polysilicon ingots and wafers USD 100/kg; solar cells USD 0.22/W; solar modules USD 0.38/W. In addition, the U.S. will impose a 15% ad valorem tariff on polysilicon ingots and related derivative products listed in the annex to the proclamation. The measures take effect at 12:01 a.m. EST on December 4, 2026. Separately, the U.S. Department of Commerce is authorized to establish a "Reshore America" incentive program, granting tariff relief to companies that commit to investing in polysilicon, wafer, cell, or module production facilities in the U.S.



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Semiconductor Industry Updates

Semiconductor Industry Overview

Manufacturer	Category	Key Metrics	Trend
STMicroelectronics (ST)	MCU Power	32-bit MCU spot price +29%; automotive MCU +15%–20%; power device lead times 30–52 weeks	Third price hike, supply tightening
NXP Semiconductors (NXP)	MCU Automotive Processors RFID	S32/S32K series lead times extended; RFID chip cumulative price increases +8%–12%	Price hikes and capacity expansion, extended lead times
Microchip Technology	MCU Analog PMIC	ATmega/AVR/PIC18 lead times 20–30 weeks; industrial and automotive hot part numbers lead times 18–27 weeks	Price adjustments effective, tight supply
Texas Instruments (TI)	Analog PMIC Signal Chain	5 price adjustments in 12 months; AI server tight models up to +85%; some older part numbers +100%+	Five rounds of price hikes, AI tightness
Analog Devices (ADI)	Analog Signal Chain	Q3 revenue USD 4.022 billion, up 40% YoY	Second round of price hikes, capacity expansion commitments
Samsung Electro-Mechanics	Passive Components	MLCC +30% across all series effective August 1	MLCC price hikes, long-term agreements lock supply through 2027
TSMC	Foundry Advanced Packaging	CoWoS monthly capacity ~140k wafers by end-2026; orders booked through 2027; 2027 foundry price base increase 5%–10%	CoWoS tight, capacity expansion accelerated
SMIC	Foundry	Q2 revenue USD 3.006 billion, +20% QoQ, first time above USD 3B; gross margin 25.3%; utilization 93.7%; ASP +5.7% QoQ	Approaching full capacity, volume and price both up

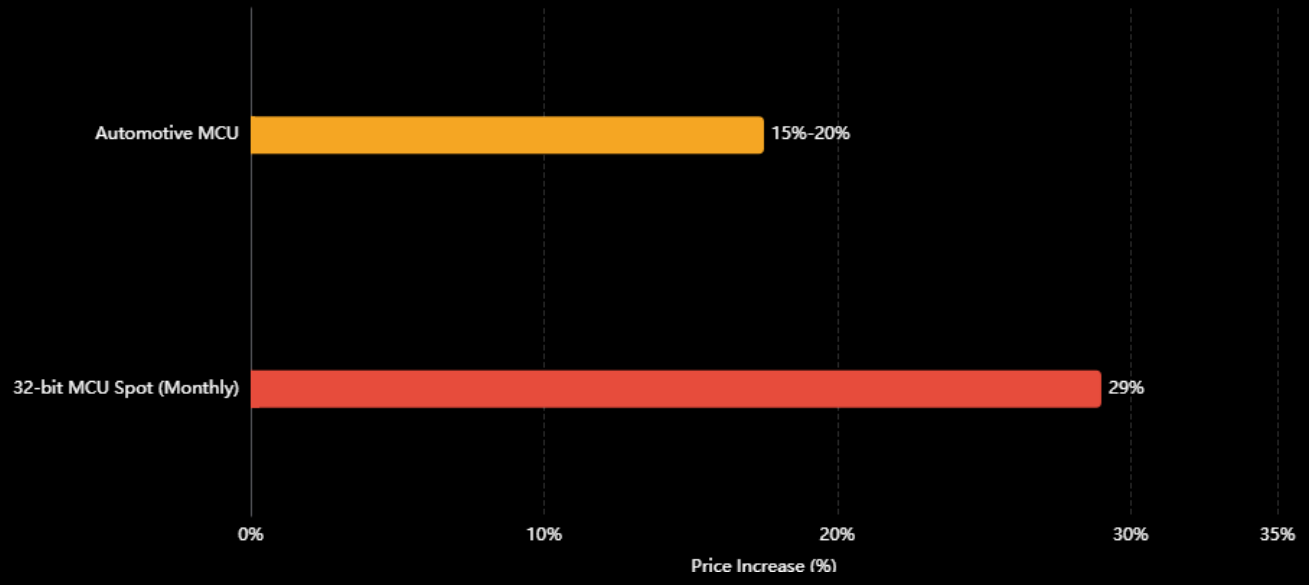
Semiconductor Industry Overview

Manufacturer	Category	Key Metrics	Trend
NVIDIA	GPU AI Accelerators	Q2 revenue USD 96.2 billion, +106% YoY; data center USD 89.0 billion, +117% YoY; gross margin 75%; Q3 guidance USD 108.0 billion	AI demand surge, revenue doubled
Renesas Electronics	Power Automotive MCU	Aftermath of Kumamoto earthquake: optocoupler production lines halted or slowly recovering; automotive MCU (RL78/RH850) orders significantly delayed	Earthquake disruption, supply under pressure
SK Hynix	Memory	Total investment over USD 4 billion in next-gen HBM advanced packaging fab; HBM4E mass production in 2H29	Supply shortage continues through end-2030

2.1 Manufacturer Dynamics In-Depth Analysis

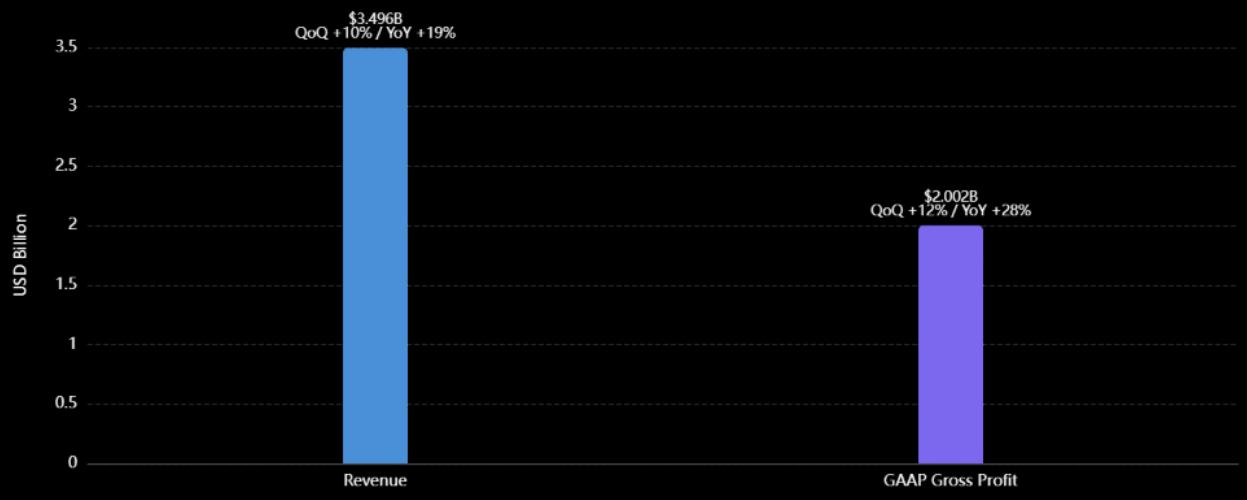
2.1.1 STMicroelectronics: Third Price Hike in Five Months, MCU Spot Prices Up 29%

On August 23, ST initiated its third price increase in nearly five months. 32-bit MCU spot prices rose 29% in August, automotive MCUs up 15%–20%, and power device lead times generally exceed 30 weeks, with some reaching 52 weeks, highlighting tight supply. Regarding the reasons, ST's Sales & Marketing President noted in the notice that costs across the entire chain—transportation, energy, raw materials, and manufacturing services—continue to rise. A deeper factor is that the company is in a critical production transition window: silicon carbide shifting from 6-inch to 8-inch, and analog process from 8-inch to 12-inch. New capacity requires validation, qualification, and gradual ramp-up, constraining near-term effective supply. Meanwhile, industrial customers, after MCU design-in, cannot quickly switch suppliers due to re-qualification and even hardware modifications required for part-number changes, further amplifying the supply-demand gap.



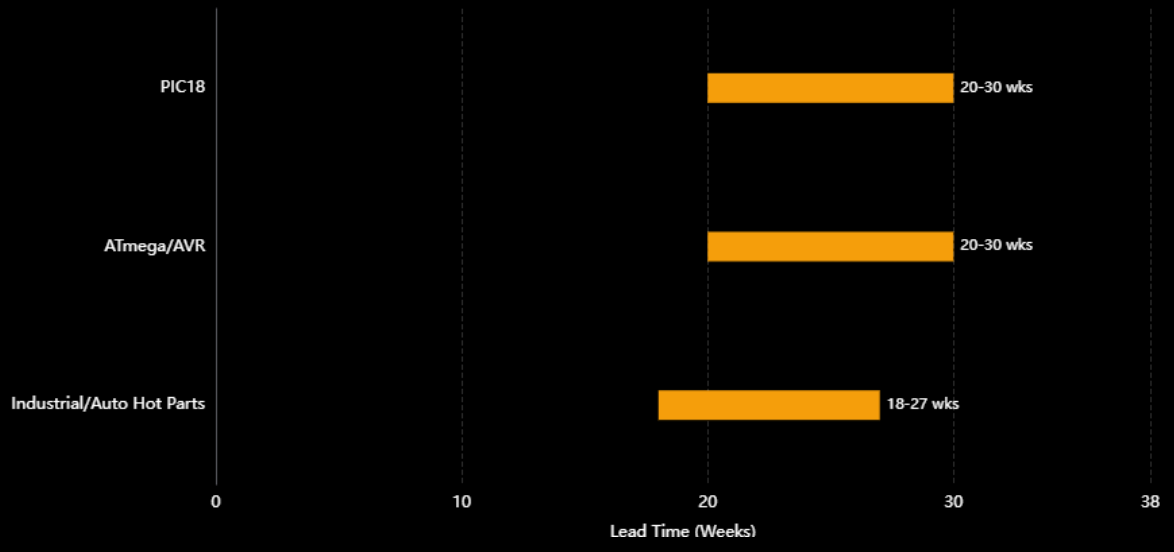
2.1.2 NXP: Automotive MCUs Remain Tight, RFID Up Twice in Two Months

NXP reported Q2 2026 revenue of USD 3.496 billion (+19% YoY, +10% QoQ), GAAP gross profit of USD 2.002 billion (+28% YoY, +12% QoQ). Automotive and industrial IoT businesses grew QoQ, channel inventory at 11 weeks, and S32/K-series MCUs (especially S32K3/K144/K146) still have extended lead times. RFID chip prices have risen 8%–12% cumulatively over the past two months, mainly due to high-end chip capacity crowding out mid-to-low-end supply, with ST also following the uptrend, reflecting industry-wide tightness. In mid-August, it launched the first MCX A5 series that integrates 10BASE-T1S PHY and supports post-quantum cryptography; on August 12, its new packaging and test plant in Malaysia broke ground, with mass production expected in Q1 2028 and capacity doubling after full ramp-up.



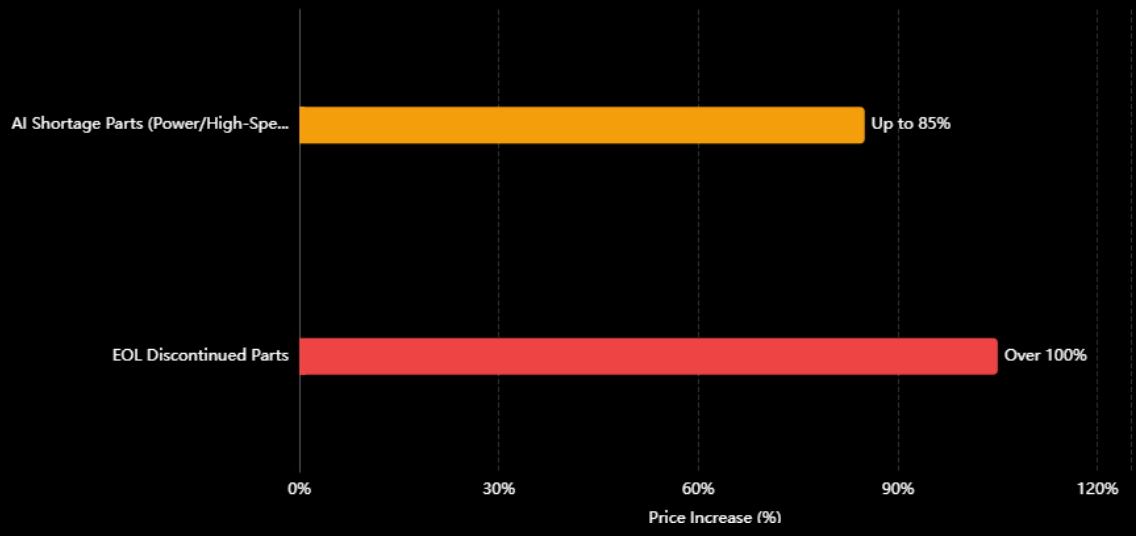
2.1.3 Microchip: Price Adjustments on Select Product Lines Effective August 14

Microchip's price adjustments on certain product portfolios took effect on August 14, covering core lines including MCUs, memory, analog, and power management ICs, driven by rising overall costs in wafer, packaging, raw materials, and labor. Lead times for popular industrial and automotive grade part numbers range 18–27 weeks, and some ATmega/AVR, PIC18 models have lead times of 20–30 weeks, keeping supply tight. On August 25, Haoen Automotive Electronics and Microchip reached a technical partnership to promote standardized high-speed cockpit and ADAS connectivity solutions based on the ASA-ML ecosystem for deployment in China and global markets.



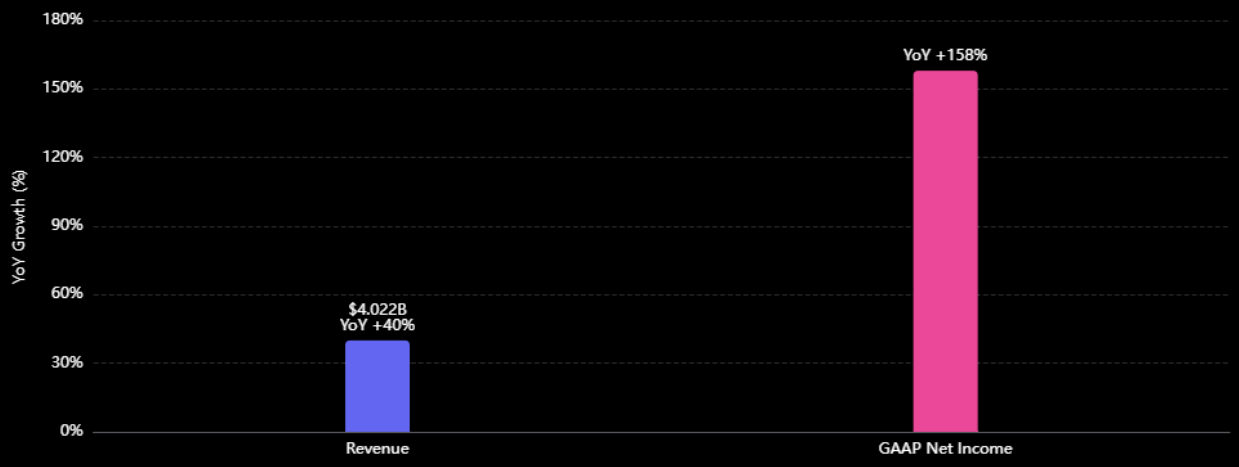
2.1.4 Texas Instruments: Five Rounds of Price Hikes in 12 Months, AI Tight Models Up 85%

TI has implemented five cumulative price adjustments over the past 12 months, with a further notice in August 2026 effective October 1, allowing extremely limited exceptions. AI server PMIC and high-speed signal-chain products see increases of 15%–85%, while some end-of-life part numbers rise over 100%. The hikes are driven by sustained cost increases in raw materials, wafer foundry, packaging, and logistics, compounded by surging demand from AI, EVs, and energy storage, which outstrips current capacity. TI's 8-inch wafer capacity remains tight, with allocation prioritized for AI server, automotive, and industrial top-tier customers, squeezing supply to mid- and small-sized clients. TPS, UCC, OPA, ISO series remain in tight supply, with spot prices highly volatile.



2.1.5 Analog Devices: Second Price Hike on Sep 13, Tied to Capacity Expansion

ADI issued a formal price adjustment notice to global distributors in August, with new pricing effective September 13, 2026—its second broad-scale increase this year (first took effect Feb 1, covering commercial, industrial, and mil-spec lines). Unlike the earlier inflationary hedge, ADI explicitly ties the increase to capacity expansion: all incremental revenue will be reinvested into internal wafer fabs and test/assembly lines to alleviate lead-time pressure that has persisted for six months. On August 19, ADI reported Q3 FY2026 revenue of USD 4.022 billion, +40% YoY—its first quarterly revenue above USD 4.0 billion—with GAAP net income up 158% YoY.



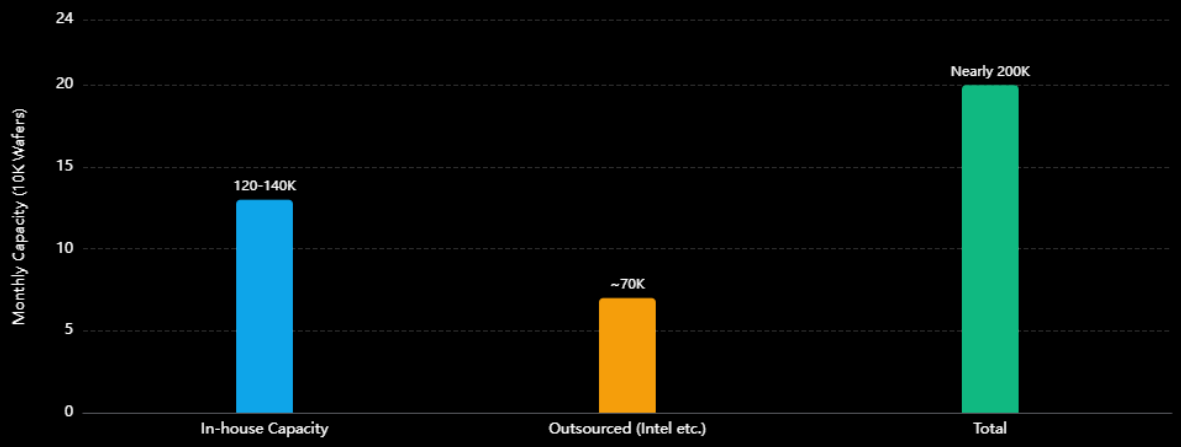
2.1.6 Samsung Electro-Mechanics: MLCC Unified +30%, Long-Term Agreements Lock Supply Through 2027

Effective August 1, 2026, Samsung Electro-Mechanics raised shipment prices across all MLCC product categories by 30%, covering consumer electronics, industrial controls, automotive, and AI server lines. The company has signed long-term agreements with over 10 cloud vendors and semiconductor majors, securing delivery schedules through 2027.

2.1.7 TSMC: CoWoS Capacity Tight, Orders Spill to Intel, JV with Sony for Fab

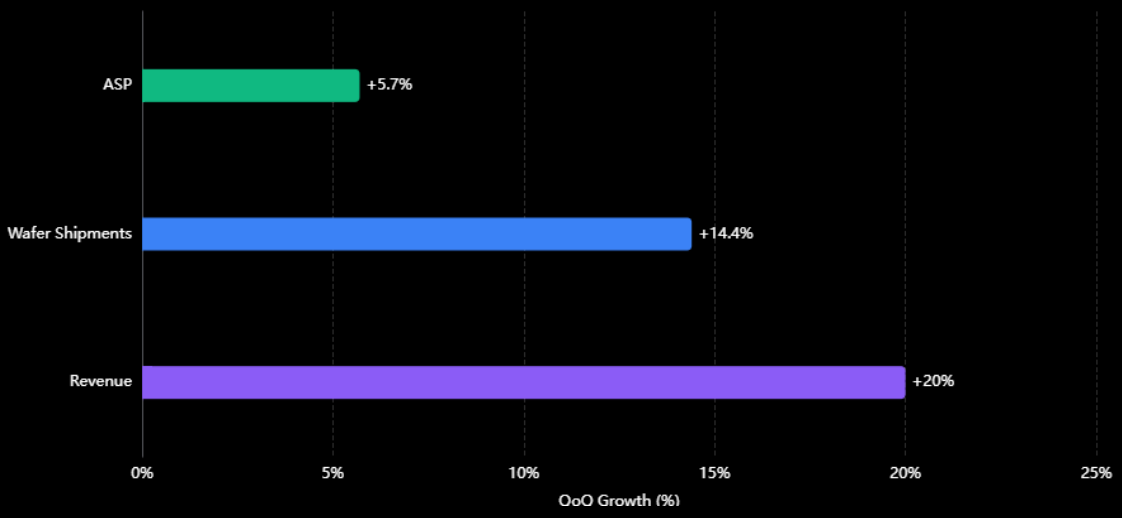
In August 2026, TSMC's advanced packaging CoWoS capacity remained severely undersupplied, with some backend orders spilling over to Intel's Malaysia facility. Monthly capacity is expected to reach 120k–140k wafers by year-end, and with outsourced support, nearly 200k; however, full-year shortfalls persist, with orders booked through 2027, constrained mainly by backend ramp-up lagging front-end. On August 11, TSMC approved a joint venture with Sony to establish Advanced Vision Semiconductor in Kumamoto, Japan, with Sony as the sole controlling shareholder. Sony will invest JPY 465.0 billion (approx. USD 3.32 billion) and TSMC

JPY 282.0 billion (approx. USD 2.01 billion), subject to Japanese government support, targeting mass production of smartphone image sensors in 2029. Separately, TSMC has notified major cloud and networking customers of a planned 5%–10% base price increase for foundry services in 2027, signaling continued upward pressure on base IC and packaging costs.



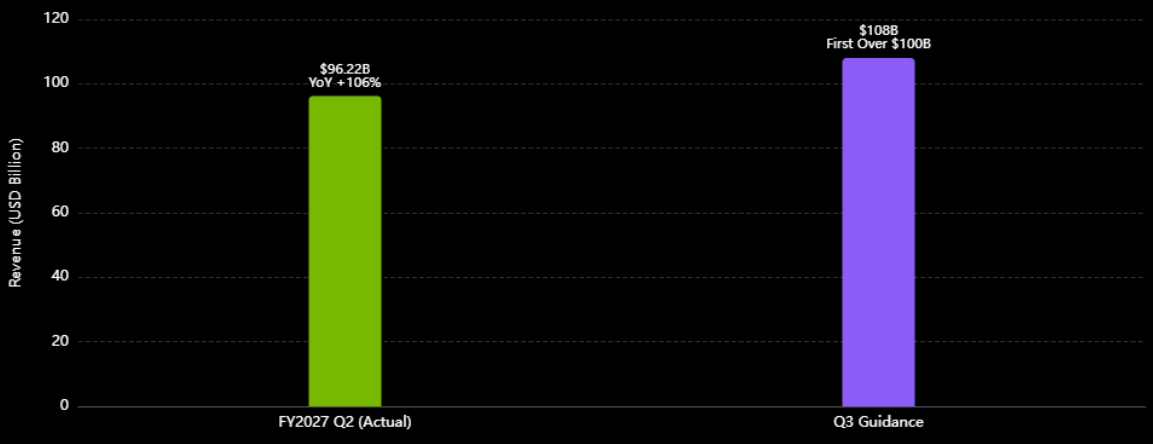
2.1.8 SMIC: Q2 Revenue Breaches USD 3B for First Time, AI Demand Drives Volume and Price Gains

On August 13, 2026, SMIC reported Q2 revenue of USD 3.006 billion, +20% QoQ, surpassing USD 3.0 billion for the first time. Gross margin was 25.3%, +5.2 ppts QoQ, above guidance. Growth came from higher wafer shipments (2.8695 million wafers, +14.4% QoQ), a 5.7% QoQ ASP increase, and mix improvement, with pricing contributing more to margin expansion than utilization. Capacity utilization rose to 93.7%, approaching full capacity. Monthly capacity reached 1.0965 million wafers (8-inch equivalent), with 12-inch revenue accounting for 78.2%. Management explicitly cited AI industry momentum and spillover effects as the core driver of surging supporting-chip demand. Q3 revenue guidance: +2%–4% QoQ, gross margin 26%–28%.



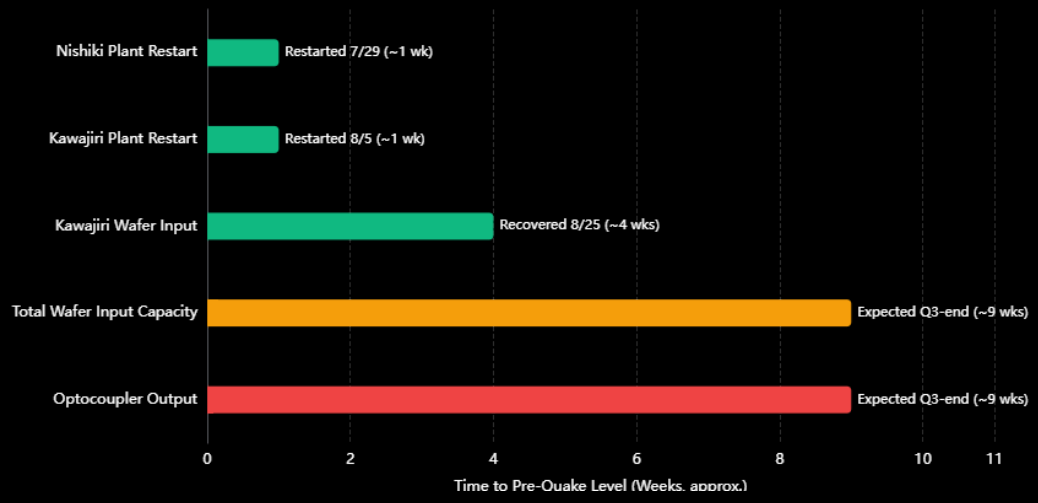
2.1.9 NVIDIA: Q2 Revenue Doubles to USD 96.2B, Q3 Guidance Tops USD 100B for First Time

NVIDIA reported Q2 FY2027 revenue of USD 96.221 billion (+106% YoY, +18% QoQ), beating consensus by USD 4.0 billion, marking 13 consecutive quarterly records; net income of USD 59.688 billion (+126%), gross margin 75%. Data center revenue reached USD 89.0 billion (+117%), with hyperscale contributing USD 48.71 billion. Q3 revenue guidance of USD 108.0 billion, USD 3-4 billion above consensus; Jensen Huang unusually guided FY2028 growth of ~70% (vs. market expectation of ~45%). Due to rising memory costs, some AI server manufacturers have notified large cloud clients that server quotes powered by NVIDIA AI chips may rise over 15%.



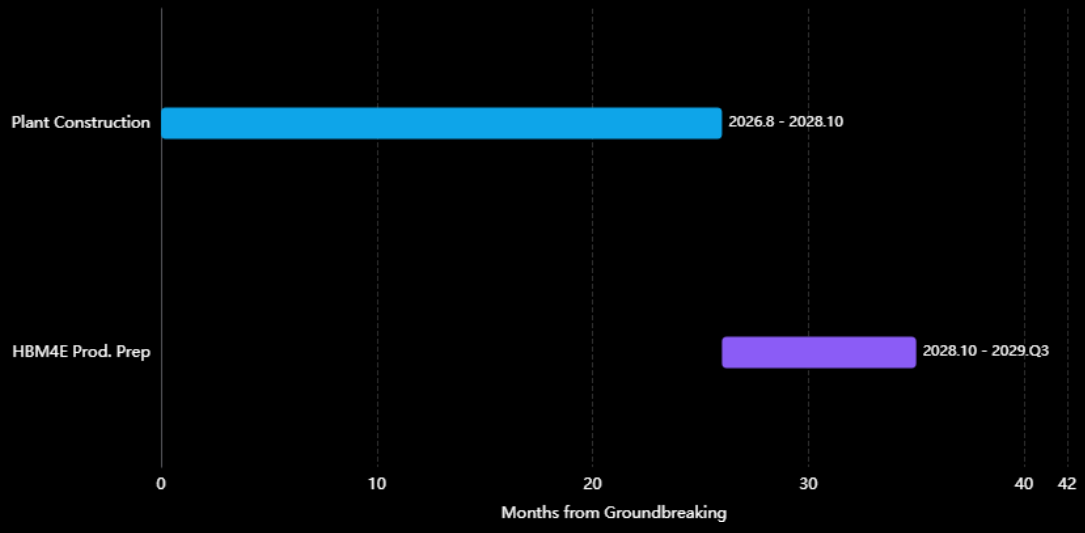
2.1.10 Renesas: Kumamoto Earthquake Aftermath Persists, Optocoupler and Automotive MCU Production Constrained

Following the late-July Kumamoto earthquake, Renesas restarted its two fabs in phases: the Nishiki plant resumed operations from July 29, and the Kawashiri plant from August 5. Per Renesas, Kawashiri is expected to restore pre-earthquake wafer input levels within about three weeks of restart; by media reports on August 25, wafer input capacity had largely recovered. However, total wafer input and optocoupler output are still not expected to fully normalize until end-Q3, with panic buying persisting in the short term. The optocoupler line remains idle or in slow recovery, while automotive MCU (RL78, RH850 series) backlog orders face substantial delays, continuously disrupting deliveries to downstream automotive and industrial customers.



2.1.11 SK Hynix: U.S. Fab to Mass-Produce HBM4E in Q3 2029, CEO Predicts Shortage Through End-2030

On August 27, 2026, SK Hynix broke ground on its next-generation HBM advanced packaging fab in West Lafayette, Indiana, U.S. The project represents a total investment of over USD 4.0 billion, with cleanroom completion scheduled for October 2028 and mass production of 7th-gen HBM4E starting in Q3 2029. Upon completion, it will be the first U.S. facility to achieve HBM (HBM4E) mass production. CEO Kwak Noh-jung projected that global memory chip shortages will persist through end-2030, with low risk of oversupply, as memory chips are no longer "mere standardized commodities" in the AI era.



03

Application Updates

3. Application Updates Overview

Category	Updates	Insight
Artificial Intelligence	The world's four largest tech giants continue raising AI data centre spending, with total commitments reaching approximately US$2.4 trillion.	This investment will keep demand for AI servers, switches, optical modules, power modules and passive components high for the next 3–5 years.
Artificial Intelligence	TrendForce expects the nine largest CSPs' capital expenditure to rise about 90% year-on-year in 2026, with AI server shipment growth reaching 31%.	This 31% growth will drive demand for server motherboards, GPU accelerator cards, HBM, high-speed optical modules, high-layer-count PCBs and power modules.
Artificial Intelligence	CoreWeave raised its 2026 capital expenditure guidance to US$35–39 billion and plans to build three Indonesian data centres totalling 360MW.	AI computing demand is expanding beyond the four giants, boosting demand for GPU servers, HBM, high-speed networking and liquid cooling systems.
Automotive	Tesla's 50GWh Texas energy storage factory began production, with Megapack 3 rolling off the line just 16 months after construction began.	The 50GWh capacity will drive demand for BMS chips, IGBT/SiC power modules, current/voltage sensors, relays and connectors.
Robotics	XPENG plans to mass-produce its IRON humanoid robot by end-2026 and launch commercial sales in 2027, with monthly capacity reaching several thousand units.	Automakers entering robotics will reuse automotive electronics such as MCUs, power devices, sensors and connectors while creating new demand for robot-specific components.

Category	Update	Insight
Robotics	UBTECH and BASiC Semiconductor will jointly develop SiC power devices for humanoid robot power management and motion control.	Demand for robot-specific SiC MOSFETs, driver ICs and passive components will continue growing.
Industrial	Siemens will invest over US$200 million in two new factories in Georgia and Texas to supply AI data centre power infrastructure.	This will drive demand for IGBT/SiC power devices, current/voltage sensors, relays, contactors and temperature-control chips.

3.1 Artificial Intelligence

3.1.1 Four Tech Giants' AI Infrastructure Investment Approaches US$2.4 Trillion

Google parent Alphabet, Meta, Microsoft and Amazon have committed nearly US$2.4 trillion to data centre construction over the coming years, intensifying the AI infrastructure race. Regulatory filings show Alphabet's related purchase commitments and leases total US$902 billion, while Meta's future spending approaches US$700 billion. Despite pressure on free cash flow, the four tech giants have raised spending plans, driven by massive AI computing demand. Amazon's capital expenditure rose to US$220 billion this year, while cloud revenue grew 37% year-on-year.

3.1.2 Nine CSPs' Capital Expenditure to Surge 90% in 2026, with AI Server Shipments Growing 31%

TrendForce reports that, driven by AI infrastructure demand, total capital expenditure by the world's nine largest CSPs is expected to grow about 90% year-on-year in 2026 and reach US$1.3 trillion in 2027, up 49%. With hyperscale CSPs and Tier-2 providers increasing purchases of NVIDIA's rack-scale solutions, Google and AWS ramping up new ASIC platforms in the second half, and Chinese companies expanding local AI solutions, TrendForce raised its 2026 AI server shipment growth forecast from 28% to 31%.

3.1.3 CoreWeave Raises Capital Spending and Plans 360MW Indonesia Data Centres

CoreWeave released its Q2 results and raised its 2026 full-year capital expenditure guidance from US$31–35 billion to US$35–39 billion. Q2 capital expenditure was US$9.4 billion, with Q3 guidance of US$11.5–13.5 billion. The company has over 1GW of contracted power outside the US and uses liquid cooling and high-speed interconnect architecture. On August 4, CoreWeave announced plans to build three new data centres in Indonesia with a total capacity of 360MW and an investment of several billion dollars. They are expected to begin operations in 2028, serving laboratories, start-ups and enterprise customers across Southeast Asia.

3.2 Automotive

3.2.1 Tesla Megapack 3 enters mass production; Texas Megafactory reaches 50GWh annual capacity

Tesla's Megapack 3 has entered mass production at its Texas Megafactory, built in just 16 months with 50GWh annual capacity. This brings Tesla's global Megafactory capacity to 110GWh. Each 5MWh unit features a modular design, built-in transformers and switchgear, up to eight-hour storage, silicon carbide PCS and improved fire and thermal management. Connections are reduced by 78%, lowering failure rates.

3.3 Robotics

3.3.1 XPENG IRON to Enter Mass Production by Year-End, Launching for Retail and Services in 2027

XPENG announced plans to begin mass production of its IRON humanoid robot by the end of 2026, initially deploying it in company stores and campuses. Commercial sales to retail and service customers will begin in 2027, with monthly capacity reaching several thousand units. XPENG has developed humanoid robots for eight years and will leverage its Guangzhou factory as the manufacturing base.

3.3.2 UBTECH Partners with BASiC Semiconductor on SiC to Develop Power and Motion Control

UBTECH and BASiC Semiconductor have formed a strategic partnership to develop high-performance, reliable SiC power devices for humanoid robot power management and motion control systems. UBTECH raised its annual Walker S shipment target from 2,000–3,000 to 5,000 units. SiC devices will improve energy efficiency and power density in joint drives and power conversion modules, reducing switching losses by over 30% and extending battery life.

3.4 Industrial

3.4.1 Siemens Invests US$200 Million in Two New US Factories to Expand AI Power Equipment Production

Siemens will invest over US$200 million in two new US factories in Georgia and Texas. The Georgia plant will produce low-voltage electrical infrastructure, while the Texas facility will expand testing and storage for switchgear used in AI data centres. Siemens said AI data-centre power demand is shifting from megawatts to gigawatts, requiring dedicated production lines. It is also developing power solutions for next-generation AI servers with NVIDIA.

04

Memory Market Trends

4. Memory Market Trends

4.1 Memory Market Overview

- **DRAM**: TrendForce expects conventional DRAM contract prices to rise 13%–18% QoQ in Q3, while Morgan Stanley, UBS and other banks forecast a 20%–32% increase.

- **DDR3**: Supply remains tight and prices continue rising, though spot price gains have slowed.

- **DDR4:** Contract prices strengthen (up around 50% in Q3), while some spot prices have eased.

- **DDR5**：Prices remain high, driven by costs and cloud procurement.

- **HDD**: AI storage demand continues to drive prices higher, with the supply gap expected to last until 2028.

4.2 Memory Category / Brand Spot Market Price Trends

DRAM Chips (DDR3): Overall stable, with minor fluctuations

- DDR3 chips stabilized this month, with most prices unchanged and only minor adjustments in some low-capacity models as supply and demand became more balanced.

DRAM Chips · DDR3 · Price Change Ranking (%) — Ranking by model from July to August; increases on the right, decreases on the left and (Feb–Jul)

DRAM Chips (DDR4): High-capacity prices rise broadly, while low-capacity prices weaken, showing clear divergence

- DDR4 chips showed clear divergence this month: high-capacity chips rose on AI server and data-centre demand, while mid- and low-capacity chips declined due to looser supply and demand, with some models falling sharply.

DRAM Chips · DDR4 · Price Change Ranking (%) — Ranking by model from July to August; increases on the right, decreases on the left

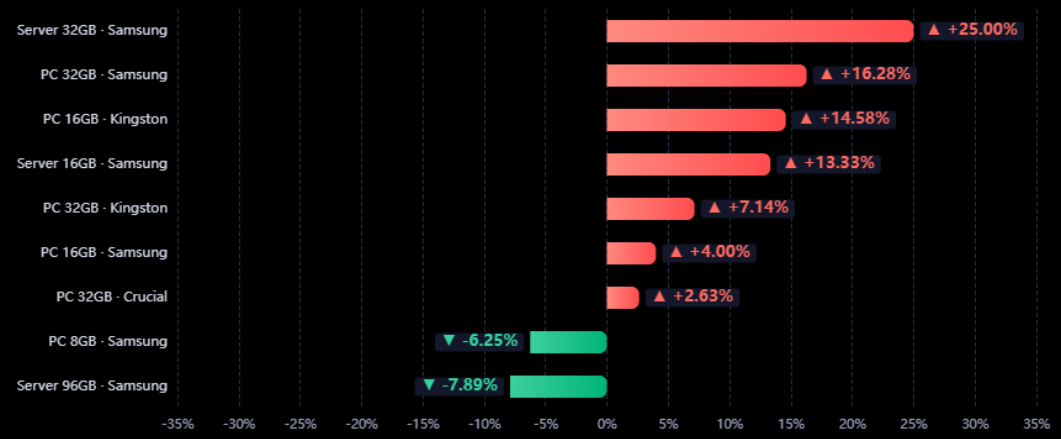
DDR4 Memory Modules: More declines than gains, with overall prices shifting lower

- More DDR4 memory module models declined than rose this month. As DDR5 adoption continues to increase in servers and PCs, DDR4 demand is shrinking and overall prices are steadily declining.

DDR4 Memory Modules · Price Change Ranking (%) — Ranking by model from July to August; increases on the right, decreases on the left

DDR5 Memory Modules: Strong demand drives broad price increases across mainstream capacities

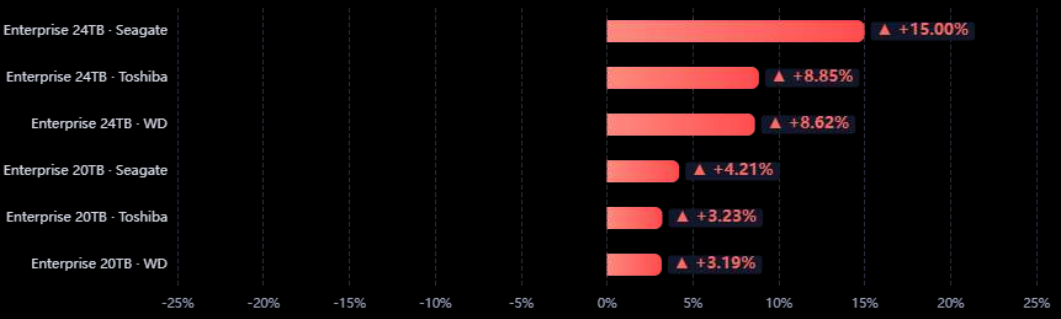
- DDR5 memory module gains were concentrated in mainstream capacities, led by major brands with stronger production and pricing power. Only a few high-priced, high-capacity models declined. Growing AI server and next-generation PC shipments continue to support DDR5 demand and near-term price growth.



DDR5 Memory Modules · Price Change Ranking (%) — Ranking by model from July to August; increases on the right, decreases on the left

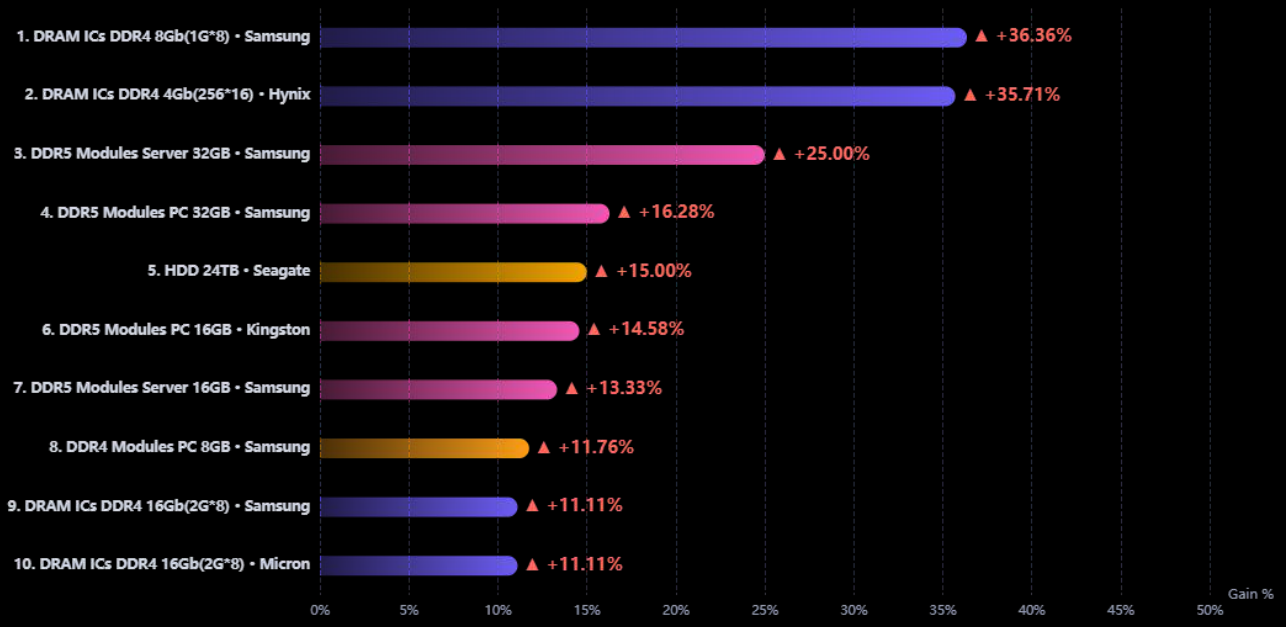
HDD: High-capacity models lead gains, with prices more likely to rise than fall

- HDD price gains this month were driven by high-capacity models, which rose across the board and led the rankings. Mid-capacity models increased slightly, while low-capacity models remained unchanged. Growing demand for cold data and large-scale archival storage from AI model training and cloud services continue to tighten high-capacity HDD supply, keeping prices upward.



HDD · Price Change Ranking (%) — Ranking by model from July to August; increases on the right, decreases on the left

August Top 10 Price Increase Ranking



Ranked by price increase from July to August; figures on the right show the increase.

*Data as of August 2026. Prices are subject to significant market-driven fluctuations; figures are for reference only.

References

[1]優分析產業數據中心，【意法半導體再傳漲價】需求回來、產能又在轉換，拆解MCU供應吃緊原因，2026.08.21

[2]华尔街见闻，新一轮半导体涨价潮将至！意法半导体拟于8月23日宣布提价，2026.08.21

[3]东方财富网，半导体现新一轮涨价潮 意法半导体、卓胜微等密集调价，2026.08.31

[4]半导体器件应用网，恩智浦二季报出炉，净利大涨72%！2026.8.01

[5]Smile，NXP两月内两次提价，ST跟涨释放供给紧张信号，2026.08.13

[6]恩投資財經網，《科技》搶攻智慧工廠商機 恩智浦MCX A5強化邊緣裝置連接力，2026.08.24

[7]观点网，豪恩汽电加入ASA-ML生态 携手微芯科技推进座舱及ADAS连接标准化，2026.08.26

[8]第e理财网，瑞薩車用晶片工廠產能恢復至地震前水準，2026.08.25

[9]电子产品世界，ADI FY2026 Q3：营收首破40亿美元，把AI数据中心机会定义为“grid-to-chip”，2026.08.20

[10]半导体器件应用网，41.7亿，英飞凌AI电源业务起飞！2026.08.6

[11]全球半导体观察，市场 | 全线调涨30%，MLCC提价风暴，愈演愈烈！2026.08.03

[12]格隆汇，“全力生产也跟不上需求”，美光CEO称数据中心需求高出产能50%，2026.08.26

[13]財報狗，美光砸 3000 億元押注 AI 記憶體　宣布十年百億美元打造研究中心，2026.08.21

[14]南方财经网，订单爆满！台积电先进封装CoWoS产能供不应求，全球封测行业量价齐升丨盘中雷达，2026.08.19

[15]集微网，台积电 CoWoS 先进封装产能告急：订单外溢英特尔打破生态惯例，2026.08.21

[16]橙芯世界，索尼台积电签最终协议，7470亿日元熊本合资，2029年量产先进传感器，2026.08.13

[17]证券时报网，涨价超过15%！人工智能芯片巨头，爆出大消息！影响多大？，2026.08.23

[18]NVIDIA, NVIDIA Groq 3 LPX Now in Full Production With World-Class Speed for Agentic AI，2026.08.24

[19]界面新闻，英伟达创4年来最长连跌纪录，市值一夜蒸发万亿元，2026.08.26

[20]新浪财经，AI基建竞赛持续升温 谷歌(GOOGL.US)、Meta(META.US)、微软(MSFT.US)、亚马逊(AMZN.US)未来承诺投资总额逼近2.4万亿美元，2026.08.01

[21]上海证券报，九大云厂商加码资本支出 AI服务器出货量预期增长，2026.08.04

[22]新浪财经，东海研究 | 电子：全球AI服务器出货增速上调至31%，AMD数据中心营收翻倍，2026.08.12

[23]Whalesbook，CoreWeave Lifts 2026 Spending Forecast to $39B After Q2 Beat，2026.08.13

[24]新浪财经，CoreWeave计划通过印尼数据中心进军亚洲市场，2026.08.04

[25]北极星储能网，Megapack3下线！特斯拉美国50GWh储能工厂正式投产，2026.08.07

[26]gmt8press，Lates News，2026.08.27

[27]先进半导体晶体材料，基本半导体与优必选达成合作！碳化硅杀入人形机器人赛道？，2026.08.25

References

[28]网易，西门子2亿美元投资美国制造业，为AI数据中，2026.08.09

[29]同花顺inews,券商观点|电子行业点评报告：存储涨价持续兑现，原厂业绩验证景气上行，2026.08.07

[30]太平洋科技，内存厂忙着造HBM DDR4没人管了！三季度还要再涨50%，2026.08.19

[31]电子发烧友网，涨幅219%!DDR3价格反超DDR5，工控硬件遭遇存储供给变局，2026.08.27

[32]AMD Investor Relations, AMD Reports Second Quarter 2026 Financial Results, 2026.08.04

[33]新浪财经，AMD 盘后大跌超 9%!Q2 营收利润均超预期 Q3 指引未满足乐观投资者预期，2026.08.05

[34]华尔街见闻，博通电话会：2027 年 AI 芯片营收将破 1000 亿美元，2026.08.25

[35]ZAKER 新闻，博通重申 2027 年 AI 营收破千亿 六大客户撑起半壁江山，2026.08.27

[36]中芯国际，中芯国际发布 2026Q2 财报 单季销售收入首次突破 30 亿美元，2026.08.13

[37]新浪财经，中芯国际第二季度业绩出炉 财报透露这些信号，2026.08.13

[38]NVIDIA Newsroom, NVIDIA Announces Financial Results for Second Quarter Fiscal 2027, 2026.08.26

[39]英伟达博客，NVIDIA 发布 2027 财年第二季度财务报告，2026.08.26

[40]全天候科技，英伟达上季营收超预期翻倍大增 本季料首破千亿大关，2026.08.27

[41]电子产品世界（经新浪财经），Renesas 川尻工厂恢复至震前晶圆投入能力，2026.08.25

[42]新浪财经，熊本地震后半导体工厂集中复产！瑞萨、索尼分阶段复工，台积电熊本厂恢复运行，2026.08.04

[43]DIGITIMES, 瑞萨熊本 2 厂提前复工 产能估 8 月底全面恢复，2026.08.05

[44]芯资讯，官宣！台积电与索尼成立合资公司！，2026.8.11

[45]WSTS, Global Semiconductor Market records exceptional growth in Q2 2026。2026.08.06

[46]启元洞见，AI安全快讯0803 | 欧盟就人工智能模型入侵事件约谈OpenAI与Anthropic，2026.08.3

[47]每日经济新闻，最新发布！8月份，中国制造业PMI为49.8%，比上月上升0.6个百分点，景气水平回升，2026.08.31

[48]搜狐，【奥伟斯OWEIS】最新消息，德州仪器开启本年度第四轮涨价，10月1日执行!，2026.08.12

[49]每日经济新闻，特朗普宣布对多晶硅及其衍生产品加征关税，多晶硅、太阳能电池等设置最低进口价格，2026.08.07

[50]安泰科，从贸易限制到供应链重构——美国多晶硅232关税措施评析，2026.08.28

[51]韩联社，南韓8月出口982.5億美元 為單月第三高，2026.09.01

[52]BT财经，韩国8月出口暴增68.7%：466亿美元卖芯片，汽车跌近三成，2026.09.01

[53]博思财经，AI点火亚洲製造业中日韩台景气8月齐旺，2026.09.01

[54]韩联社，SK海力士在美举行HBM先进封装厂动工仪式，2026.08.28

[55]金十数据，SK海力士CEO：内存芯片短缺将持续至2030年，2026.08.30

[56]TrendForce，【洞察】内存现货价格更新：DRAM现货价格涨幅放缓，而DDR4和DDR3继续上涨，2026.08.05

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