Q1 2026

Market Insights

Rebound Electronics

Global Semiconductor Market Insights

For detailed Lead Times and Sourcing Guidance, view the Market Insights Buyers Guide here.

Q1 2026 Outlook

The global semiconductor industry entered 2026 with sustained momentum following a strong recovery in 2025, driven largely by artificial intelligence infrastructure, electrification in mobility, and continued digitalisation across industries. Global semiconductor sales reached approximately US$791.7 billion in 2025, and the market is projected to continue expanding through the latter part of the decade, according to the Semiconductor Industry Association (SIA).

At the beginning of Q1 2026, demand remains concentrated in AI computing, high-performance processors, memory technologies, and automotive semiconductors, while segments such as consumer electronics and industrial equipment show a more gradual recovery. The World Semiconductor Trade Statistics (WSTS) forecasts the global semiconductor market to grow by approximately 8–9% in 2026, supported by strong investments in new fabrication facilities and advanced packaging technologies.

However, geopolitical developments - particularly escalating tensions in the Middle East - have begun introducing new uncertainties into global supply chains, highlighting the semiconductor sector's sensitivity to energy markets, logistics routes, and international security risks.

Global Semiconductor Market Overview

AI and Compute Continue to Shape Demand

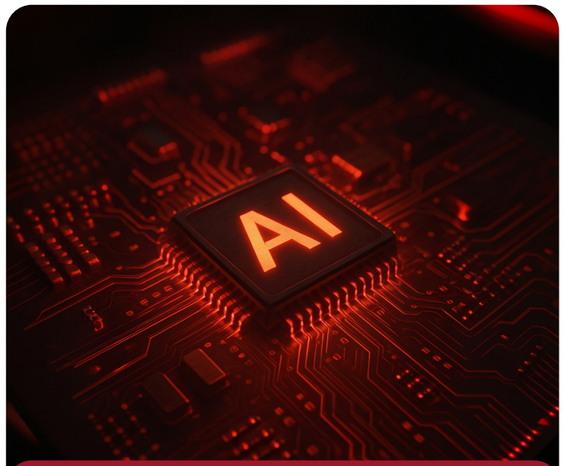
Artificial intelligence infrastructure remains the primary structural driver of semiconductor demand in early 2026. Data centre expansion and AI model training requirements are accelerating demand for advanced processors and high-bandwidth memory.

Logic chips remained the largest semiconductor category in 2025, generating approximately US$301.9 billion in revenue, according to the Semiconductor Industry Association. Meanwhile, memory markets - particularly DRAM and High-Bandwidth Memory (HBM) - have experienced renewed demand driven by AI workloads and hyperscale computing infrastructure.

As a result, semiconductor manufacturers are increasingly investing in advanced nodes below 3nm, as well as heterogeneous integration and advanced packaging technologies, which allow chip designers to improve performance while managing power efficiency and manufacturing costs.

Geopolitical Developments: Middle East Conflict and Supply Chain Sensitivity

A notable development influencing market sentiment in Q1 2026 has been the emergence of regional security disruptions affecting key logistics and energy infrastructure. Isolated incidents temporarily impacted air freight operations at a major global aviation hub, highlighting the sensitivity of semiconductor supply chains to external shocks.



"Q1 2026 OPENS WITH STRUCTURALLY DRIVEN DEMAND - AI-LED COMPUTE AND MEMORY CYCLES ARE NO LONGER CYCLICAL, BUT REDEFINING THE SEMICONDUCTOR GROWTH TRAJECTORY"

At Rebound Electronics, our global operations team has remained closely aligned with partners and logistics networks to ensure continuity, proactively managing any potential disruption and maintaining business as usual for our customers.

At a broader level, disruption risks to energy infrastructure have introduced renewed concerns around supply stability and cost volatility, reinforcing the industry's exposure to external dependencies across both logistics and energy inputs.

Although the Middle East is not a major semiconductor manufacturing region, the conflict has implications for the semiconductor industry through several indirect channels:

Energy price volatility

Semiconductor fabrication plants are highly energy-intensive operations. Rising oil and natural gas prices driven by geopolitical instability can increase operational costs for semiconductor manufacturers globally.

Logistics and air freight disruptions

Dubai serves as a major logistics hub for high-value electronics and semiconductor components. Disruptions to airspace or cargo operations could introduce delays in the global semiconductor distribution network.

Industrial gas supply risks

The Gulf region is also a notable supplier of helium, a critical industrial gas used in semiconductor manufacturing processes such as lithography and wafer cooling. Supply disruptions could affect material availability across global fabs.

While the conflict has not yet caused direct semiconductor production interruptions, it has introduced additional geopolitical risk considerations for the semiconductor supply chain as the industry continues to expand globally.

Helium Supply – A Quiet but Critical Constraint

As the semiconductor industry scales further into 2026, helium has emerged as an increasingly strategic dependency, underpinning key processes such as wafer cooling, plasma etching, leak detection, and EUV lithography. It remains non-renewable and difficult to substitute, with no scalable alternative matching its performance. Supply is structurally tight and concentrated across a limited number of regions, creating inherent vulnerability. For manufacturers, this translates into cost volatility, potential allocation pressure, and heightened yield sensitivity at advanced nodes.

While recycling and optimisation efforts are progressing, helium is quickly becoming a hidden chokepoint in the semiconductor supply chain as demand continues to grow in AI, automotive, and high-performance computing applications.

"GEOPOLITICAL INSTABILITY IS RE-EMERGING AS A MATERIAL RISK, WITH INDIRECT PRESSURES BUILDING ACROSS ENERGY COSTS, FREIGHT FLOWS AND CRITICAL INPUTS."

Regional Market Dynamics

Asia-Pacific – Global Semiconductor Manufacturing Hub

Asia remains the dominant region in semiconductor production and consumption, accounting for roughly two-thirds of global semiconductor demand, according to industry market analysis.

Taiwan and South Korea continue to lead in advanced logic and memory manufacturing, while China is investing heavily in domestic semiconductor capacity as part of its long-term technology strategy.

Recent developments include continued expansion of memory manufacturing facilities in Taiwan, as well as additional investment in power semiconductor production across Japan and Southeast Asia to support the growing electric vehicle market.

The region's ecosystem of suppliers, materials providers and advanced packaging facilities continues to reinforce Asia's central role in the global semiconductor industry.

Americas – AI Infrastructure and Strategic Manufacturing

The Americas remain a key centre for semiconductor design, innovation and AI computing infrastructure.

Demand growth is largely driven by hyperscale data centres, artificial intelligence development, and advanced computing platforms. Major technology firms are increasing investment in custom silicon for AI workloads.

Government-led initiatives such as the US CHIPS and Science Act are also accelerating domestic semiconductor manufacturing investment. Notable projects include large-scale fabrication facilities currently under construction in Arizona, aimed at strengthening domestic semiconductor supply resilience.

Europe, Middle East and Africa – Industrial Demand and Automotive Strength

The EMEA semiconductor market remains closely tied to industrial production and automotive manufacturing cycles.

Europe continues to prioritise semiconductor supply chain security through initiatives under the European Chips Act, with particular emphasis on automotive semiconductors, power electronics, and industrial automation technologies.

Although overall market recovery has been slower than in Asia and North America, demand remains stable due to Europe's strong position in automotive electronics and industrial equipment manufacturing.

Key End-Market Drivers

Automotive and Electric Vehicles

Automotive electronics continue to be one of the most structurally resilient semiconductor segments. Electric vehicles and advanced driver assistance systems are significantly increasing semiconductor content per vehicle.

Power semiconductors such as Silicon Carbide (SiC) and Gallium Nitride (GaN) are seeing rapid adoption due to their efficiency advantages in EV powertrains and fast-charging infrastructure.

Consumer Electronics

The consumer electronics sector is stabilising after the demand correction observed between 2023 and early 2024.

Growth is now primarily driven by AI-enabled smartphones, PCs, and edge computing devices, while inventory levels across the supply chain continue normalising.

Defence and Aerospace

Rising geopolitical tensions globally are increasing demand for semiconductors used in defence systems, satellite communications, radar technologies and secure computing infrastructure.

Governments are prioritising secure semiconductor supply chains to reduce reliance on foreign technology suppliers for critical defence applications.

Healthcare and Medical Technology

Healthcare technology continues to expand semiconductor demand through applications in medical imaging, wearable diagnostics, remote monitoring devices and AI-assisted clinical systems.

Low-power processors, sensors and specialised AI chips are becoming increasingly essential in next-generation medical technologies.

> "ELECTRIC VEHICLES, AI-ENABLED DEVICES, DEFENCE SYSTEMS, AND HEALTHCARE TECHNOLOGIES ARE NOW THE PRIMARY ENGINES OF SEMICONDUCTOR CONTENT GROWTH, WITH ADVANCED POWER AND LOGIC TECHNOLOGIES DRIVING HIGHER INTENSITY PER APPLICATION."

Semiconductor Manufacturing and Fab Expansion

Global semiconductor manufacturing capacity continues to expand as demand for advanced computing grows.

According to SEMI industry forecasts, approximately 18 new semiconductor fabrication plants are expected to begin construction globally between 2025 and 2027, reflecting sustained capital investment in advanced semiconductor manufacturing.

These projects are largely focused on

- Sub-3nm logic nodes
- Advanced memory technologies
- Advanced packaging and chiplet integration

Equipment spending for 300mm wafer fabrication facilities has also surpassed US$100 billion, highlighting the scale of ongoing industry investment in next-generation semiconductor production technologies.

Strategic Outlook for 2026

Looking ahead, three structural trends are expected to shape the semiconductor industry throughout 2026 and beyond:

Artificial intelligence as the dominant demand driver

AI infrastructure and high-performance computing will continue driving demand for advanced processors and memory technologies.

Supply chain regionalisation

Governments and corporations are prioritising semiconductor manufacturing diversification to mitigate geopolitical risks.

Advanced packaging and heterogeneous integration

Chiplet architectures and advanced packaging technologies will become increasingly important as traditional transistor scaling approaches physical limits.

The semiconductor industry entered 2026 in a structurally strong position, supported by transformative demand from artificial intelligence, electrification, and digital infrastructure. However, geopolitical developments - including tensions in the Middle East - demonstrate how global supply chains remain vulnerable to external shocks.

For semiconductor supply chain stakeholders, the priority moving forward will be balancing technological innovation with supply chain resilience and geopolitical risk management, as the industry continues its transition into the next phase of global expansion.

"AI INFRASTRUCTURE AND HIGH-PERFORMANCE COMPUTING WILL CONTINUE DRIVING DEMAND FOR ADVANCED PROCESSORS AND MEMORY TECHNOLOGIES."

Largest Companies by Market Capitalization in the Industry (Q1 2026)

01	NVIDIA	$4.380T
02	TSMC	$1.754T
03	Broadcom	$1.527T
04	Samsung	$843.28B
05	ASML	$528.39B
06	Micron Technology	$479.61B
07	SK Hynix	$449.49B
08	AMD	$315.30B
09	Applied Materials	$271.04B
10	Lam Research	$266.52B

Company - Specific Updates

AMD

- Advanced Micro Devices unveiled new Instinct MI400-series AI accelerators and Helios rack-scale systems at CES 2026 to strengthen its data-centre AI portfolio.
- The company signed a multi-year AI chip supply agreement with Meta worth up to $60 billion, deploying Instinct GPUs and EPYC “Venice” CPUs for large-scale AI infrastructure.
- Advanced Micro Devices launched Ryzen AI 400 Series processors for AI-enabled PCs, with systems from major OEMs starting availability in Q1 2026.

Analog Devices

- ADI reported fiscal Q1 2026 revenue of about $3.16 billion, up ~30% YoY and beating expectations, with strong bookings across industrial and data-center markets.
- The company raised its quarterly dividend by 11% to $1.10, marking 22 consecutive years of increases, following robust Q1 performance.
- ADI guided for even stronger Q2 2026 results with revenue near $3.5 billion, boosted by resilient demand from AI-related and industrial end markets.

Broadcom

- Broadcom reported record Q1 FY2026 revenue of $19.3 billion with AI semiconductor sales up 106% year-over-year and strong guidance for Q2.
- The company projected AI chip revenue exceeding $100 billion by 2027 on robust custom silicon demand from hyperscale customers.
- Broadcom authorized a new $10 billion share repurchase program alongside accelerating AI and networking product demand.

Diodes Inc.

- Diodes reported Q4 2025 results with ~15 % YoY revenue growth and strong full-year performance as it heads into 2026.
- The company launched a new automotive-grade AL8859Q multi-phase SPI boost controller to enhance power efficiency in automotive headlight systems.
- Diodes dismissed Baker Tilly and engaged PwC as its independent auditor for fiscal year 2026.

Infineon

- Infineon reported Q1 FY2026 revenue growth of about €3.66 billion with a 7 % YoY increase and boosted AI-related manufacturing investments
- The company announced it is accelerating AI investment to €2.7 billion with product launches and sustainability partnerships to drive future growth.
- Infineon’s stock fell sharply after an analyst downgrade citing demand risks despite solid Q1 performance.

Intel

- Intel launched its Core Ultra Series 3 “Panther Lake” processors built on its new 18A process technology at CES 2026, marking a key product milestone for AI-ready PCs.
- Intel forecasted Q1 2026 revenue below Wall Street estimates and reported ongoing supply constraints limiting server chip sales, leading to a share price drop.
- Intel’s foundry segment continued ramping its 18A and 14A process technologies in Oregon and Arizona fabs, advancing its manufacturing competitiveness.

Kyocera

Kyocera Corporation developed a pluggable optoelectronic module supporting PCIe 6.0 to boost high-speed, power-efficient AI data-centre connectivity.

Kyocera Corporation completed a major share buyback, retiring ~91.4 million shares (~6.63 %) under its equity repurchase plan by March 12, 2026.

Kyocera Corporation revised up its fiscal 2026 sales forecast, backing stronger-than-expected demand and a positive earnings outlook.

Lattice

Lattice won the “Best in Show” award at embedded world 2026 for its new PQC-ready MachXO5-NX TDQ FPGA family.

Lattice announced a partnership with SEALSQ to integrate post-quantum TPM security into select FPGA solutions showcased at Embedded World.

Lattice launched a Cyber Resilience Reference Kit with EXOR International and TrustiPhi to accelerate secure industrial and edge system design.

Murata

Murata is set to begin mass production of AI server power modules in 2026, targeting about ¥50 billion in sales through fiscal 2027 on rising AI demand.

The company has initiated internal discussions to raise prices on key multilayer ceramic capacitors amid surging demand for AI data-centre components.

Murata's stock has faced downward pressure in early 2026 due to softening orders and inventory adjustments in consumer and automotive electronics.

Nexperia

Nexperia's Chinese subsidiary started producing its own 12-inch wafer chips independently of its Dutch parent, marking a major operational shift amid governance disputes.

China's commerce ministry warned that corporate actions disrupting Nexperia's operations could trigger another global chip supply crisis amid the ongoing China–EU dispute.

Ongoing governance and ownership tensions between Nexperia's Dutch headquarters and its Chinese unit continued disrupting supply chains and automotive chip deliveries in Q1 2026.

NVIDIA

NVIDIA reported record Q4 and full-year fiscal 2026 revenue with data-centre sales surging ~75 % YoY, underscoring explosive AI demand.

NVIDIA launched its next-generation Vera Rubin AI platform at CES 2026, entering full production to drive more efficient large-scale AI workloads.

NVIDIA struck a $2 billion investment and supply deal with AI cloud provider Nebius for Rubin-based AI infrastructure expansion.

NXP

NXP approved a quarterly interim dividend, reflecting continued capital return confidence amid strong financial positioning.

The company announced a strategic shutdown of its ECHO GaN fab and exit from the 5G RF power amplifier market to refocus resources.

Institutional investors increased stakes in NXP, signalling rising confidence in long-term growth prospects despite market volatility.

Onsemi

Onsemi reported its Q4 and full-year 2025 results with $1.53 billion revenue and record free cash flow used for shareholder returns.

Onsemi is collaborating with GlobalFoundries to co-develop next-generation 650 V GaN power devices for AI, automotive, and industrial markets with customer samples expected in the first half of 2026.

Onsemi hosted its 2026 Financial Analyst Day to outline its strategic roadmap across intelligent power and sensing technologies.

Panasonic

Panasonic is set to combine three IT subsidiaries into a new unit “Panasonic Digital” on April 1, 2026 to strengthen its B2B solutions business.

Panasonic’s new R&D hub “Technology CUBE” in Osaka begins full operation in April 2026 to accelerate innovation and co-creation with partners.

Panasonic announced a strategic TV partnership with Skyworth to lead European TV sales and co-develop future OLED models while shifting its distribution model.

Rapidus

Rapidus will design and trial production of image-processing semiconductors for Canon and Synopsys, marking initial customer engagements in 2026.

FUJIFILM completed a ¥5 billion investment in Rapidus to support advanced semiconductor development and domestic manufacturing.

Rapidus is gaining strategic funding momentum including a reported $1.7 billion backing as Japan pushes to accelerate its advanced chip ambitions toward 2 nm mass production.

Renesas

Renesas Electronics launched its **cloud-based design platform “Renesas 365” with Altium to simplify and accelerate embedded system development.

Renesas Electronics forecast higher consolidated revenue and improved profitability in Q1 2026 as data-centre and industrial demand offsets automotive weakness.

Renesas Electronics entered discussions with SiTime on the potential sale of its timing business to sharpen focus on core semiconductor growth areas.

Samsung

Samsung Electronics is expanding DRAM production capacity at its Pyeongtaek facility to boost 6th-generation 1c DRAM output for HBM4 memory to meet rising AI demand.

Samsung Electronics’s foundry business is showing recovery with fab utilization rising toward ~60 % in early 2026, narrowing prior losses.

Samsung Electronics is set to discuss memory chip supply partnerships with AMD’s CEO amid global AI memory demand surges.

Siemens

Siemens and NVIDIA expanded their strategic partnership to build an Industrial AI Operating System for next-generation smart factories and digital twin solutions.

Siemens unveiled Digital Twin Composer at CES 2026, a new industrial metaverse software to accelerate AI-driven product and factory simulation.

Siemens’ industrial software was adopted by Inventec to improve server and notebook design-for-manufacturing efficiency globally.

ST Microelectronics

STMicroelectronics entered high-volume production of its PIC100 silicon photonics platform to support hyperscaler AI infrastructure demand.

STMicroelectronics unveiled the STM32V8 18 nm microcontroller family for high-performance applications built in its fab ecosystem.

STMicroelectronics announced robot deployment and worker retraining plans to modernize older fabs and avoid closures amid rising global competition.

Toshiba

Toshiba and Ingenico launched a enterprise mobile checkout solution for UK and global retail, combining mobile payment and handheld devices to modernize in-store transactions.

Toshiba delivered its advanced "TT-2000" mixed-mail processing system to Slovenia, expanding global deployments of high-efficiency logistics equipment.

Toshiba-Lifestyle unveiled its new "FREEZA" refrigerator series with industry-leading central freezer capacity, scheduled for launch in late April 2026.

Texas Instruments

Texas Instruments began production at its newest 300 mm semiconductor fab in Sherman, Texas, part of its large-scale U.S. manufacturing expansion.

TI expanded its microcontroller portfolio with new AI-enabled MCUs and TinyEngine™ NPU support to accelerate edge AI deployment.

Texas Instruments announced a $7.5 billion acquisition of Silicon Labs to strengthen its wireless connectivity and IoT chip offerings.

TSMC

TSMC forecasted 2026 sales growth of nearly 30 % and a ~37 % increase in capital expenditure to meet robust AI and non-AI chip demand.

TSMC's January–February 2026 sales rose about 30 % year-over-year on strong AI-related wafer demand.

TSMC is planning a US $17 billion investment to mass-produce advanced 3 nm chips at its Kumamoto, Japan facility.

Vishay

Vishay reported Q4 and full-year 2025 financial results with new product introductions including a phototransistor optocoupler series.

The company declared a quarterly cash dividend of $0.10 per share for March 2026, reflecting shareholder returns.

Vishay adjusted base salaries and bonus targets for executive officers in early 2026 as part of corporate governance updates.

For a complete view of the Market Insights, download our Buyers Guide.

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	Trend	Lead time trend	Lead time (weeks)
		<--->	18+
		<--->	18+
		<--->	18+
		<--->	18+
		<--->	18+
		^^	18+
		^^	28
		^^	18+
		<--->	18+
		^^	28
		^^	18+
		<--->	28+
		<--->	28+
		^^	18+
		<--->	28+
		<--->	28+
		<--->	28+
		^^	12 - 18
			18+
		<--->	18+
Other power	<--->	<--->	12 - 18
	^^	<--->	12 - 18

Memory	Pricing trend	Lead time trend	Lead time (weeks)
NOR	<--->	<--->	12 - 18
NAND	^^	^^	12 - 18
eMMC	^^	<--->	18+
EEPROM	<--->	<--->	18+
DRAM	^^	^^	18+
SRAM	<--->	^^	18+
Solid state drives	^^	^^	18+
Sensors	<--->	^^	18+
OPTO			
LEDS (Low power)	^^	<--->	4 - 10
LEDS (Mid power)	^^	<--->	4 - 10
LEDS (High power)	^^	<--->	12 - 18
Couplers	^^	<--->	12 - 18
Fibre - Optic	^^	<--->	12 - 18
Infrared	<--->	<--->	12 - 18
Other opto	<--->	<--->	12 - 18
Discrete			
Small signal	<--->	^^	12 - 18
RF	<--->	^^	12 - 18

Custom Solutions for Every Stage of Your Supply Chain

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