

2026 Outlook Series: Global semiconductor

The global semiconductor industry remains strong – arguably the most robust we have seen in over three decades. This strength is supported by cutting-edge innovation, rising revenues and robust capital spending. While risks remain, the outlook for 2026 appears constructive, with demand for artificial intelligence (AI) applications showing few signs of slowing. Beyond AI, the non-AI markets could be poised for positive revisions as cyclical recovery gains traction after several years of consolidation.

Semiconductors poised for long-term growth amid AI boom

Summary:

- The global semiconductor industry is valued at over US\$500 billion and is projected to exceed US\$1 trillion by 2030, driven largely by AI adoption across data centres, automotive, and industrial sectors.
- Capital spending by hyperscale data centres is expected to rise significantly in 2026 and 2027, underpinned by strong cash flows and earnings, signalling sustained demand for advanced chips.
- While AI has dominated markets and headlines in 2025, we are encouraged by recent contributions from other areas, both in semiconductors and AI beneficiaries, which should continue in future periods.

Market value on the rise

The semiconductor market is valued at over US\$500 billion¹ and is projected to surpass US\$1 trillion by 2030². Growth is being fuelled primarily by AI, especially in data centres, alongside accelerating demand from automotive and industrial sectors. Regionally, the focus is on Asia Pacific, which has the largest market share.

While fluid as more companies update their plans, capital expenditure among major data-centre hyperscalers is forecast to rise 30% in 2026 and 15% in 2027³, supported by strong free cash flow generation, healthy earnings and favourable returns on investment (ROI). This trend suggests continued momentum for the industry.

Resilience after volatility

The PHLX Semiconductor Sector Index (SOX) experienced sharp declines in April 2025 following tariff-related uncertainty, but the recovery was swift. Historically, when the SOX bottoms, it has outperformed the S&P 500 over one- and two-year periods – a pattern worth noting for long-term investors⁴.

¹ Source: Bloomberg, NXP Semiconductor company reports, and Manulife Investment Management, data as of November 2025.

² Source: Bloomberg, NXP Semiconductor company reports, and Manulife Investment Management, data as of November 2025.

³ Source: Hyperscale capital expenditure forecasts; FactSet and Manulife Investment Management, data as of November 2025.

⁴ Source: SOX historical outperformance before and after major declines; SOX outperformance relative to S&P 500; Manulife Investment Management and FactSet Research Systems, data as of November 2025.

Current “weather outlook” for semiconductors and AI-related industries

Outlook by end market		
End market	Outlook	Our view
 AI/DC		Strength continuing into 2026, as multi-year arms race plays out.
 Automotive		Tariff risks are lower, but end-market still slow.
 Industrials/IoT		Still uncertain but getting better. Expecting improvement from trough levels.
 Mobile/PC		Selective within mobile market, but CPU demand strengthening.
 Semi-cap Equipment		Broadening demand environment driven by AI and memory investments.

For illustrative purposes only.

AI-driven demand is broad-based and shows little sign of slowing, even as we stay mindful of risks such as supply-chain constraints and evolving regulations.

We also continue to see multi-year tailwinds for AI beneficiaries outside of the semiconductor space. Within advertising, AI is being leveraged to expand monetisation and create more efficient campaigns. Hyperscale companies report record backlogs as enterprises sign larger and longer deals to support internal AI efforts. Consumer applications like ChatGPT and Gemini should continue to see more usage, while enterprise use-cases should help to push ROI even higher in 2026 and beyond. More broadly, AI is expected to drive an explosion of data over the next decade, driving demand for solutions to manage data in a secure way. Overall, we see increasing opportunities for AI beneficiaries as the technology proliferates further into day-to-day life.

Risks to monitor

While we believe the outlook for the semiconductor and AI beneficiary industries remains positive, several challenges warrant attention:

Power management

Data centres consume vast energy, raising efficiency concerns. AI generates large datasets, requiring robust safeguards for data security.

Moreover, rapid factory expansion in lightly regulated regions could pose sustainability issues.

Debt capital

We expect an increase in debt issuance to finance capital spending through 2026. While overall leverage remains reasonable, and we do not anticipate significant changes, we continue to monitor developments.

Trade tensions

Recent signs of easing between the US and China are encouraging. Our globally diversified exposure provides flexibility to adjust allocations should conditions change.

Conclusion

While global growth concerns and geopolitical risks remain on the radar, they key uncertainty heading into 2026 could be investor sentiment toward semiconductors if AI momentum slows. That said, we expect company fundamentals to stay resilient throughout the year. Our long-term view remains constructive on the extended semiconductor industry and on sectors benefitting from AI adoption.

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