

Market Trend Forum

The Global Semiconductor Market: Crossing the \$1 Trillion Milestone in Q3 2026 and the Outlook Ahead

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Abstract

The global semiconductor industry is experiencing an unprecedented period of growth, reaching a historic milestone by surpassing **US\$1 trillion** in annual sales already in August 2026. Driven primarily by accelerating investments in artificial intelligence, data center infrastructure, and advanced computing, the market is expanding at a pace never seen before.

Drawing on the latest statistics from **World Semiconductor Trade Statistics (WSTS)**, this presentation examines the key developments shaping the global semiconductor market in 2026. It highlights the extraordinary growth of the Memory and Logic segments, regional market dynamics, and the contrasting developments across major end-use applications. Particular attention is given to the European semiconductor market and the differences between traditional Automotive and Industrial applications and the rapidly expanding AI-driven data center segment.

Looking ahead, the presentation provides an updated market outlook based on WSTS forecasts, with global semiconductor sales projected to exceed US\$1.6 trillion in 2026 and reach approximately US\$2.1 trillion in 2027. The analysis offers insights into the underlying growth drivers, evolving market structure, and future opportunities for the global semiconductor industry.

Biography

Tobias Pröttel

CEO, World Semiconductor Trade Statistics (WSTS)

Tobias Pröttel is the CEO of World Semiconductor Trade Statistics (WSTS), a global non-profit organization providing semiconductor market statistics and forecasts. In his role, he leads the organization's worldwide activities, working closely with leading semiconductor companies and regional industry associations to ensure reliable and transparent market intelligence.

With extensive experience in the semiconductor industry, Tobias focuses on global market developments, industry trends, and forecasting. He regularly engages with industry leaders and international organizations to provide insights into the evolving semiconductor landscape and the key drivers shaping its future.

References

From AI Demand to Manufacturing Reality: Scaling Across Fabs, Packaging, and Materials

C. Tseng
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SEMI, Milpitas, United States of America

Abstract

AI infrastructure is reshaping the semiconductor manufacturing cycle, driving stronger investment in leading-edge logic, advanced memory, test, packaging, and the materials required to support increasingly complex devices and systems. This presentation will examine how these demand shifts are translating into fab investment, equipment spending, capacity expansion, and technology migration across the global semiconductor industry.

The discussion will also look beyond the fab. As AI systems depend increasingly on advanced packaging, higher-bandwidth memory, interconnect, and more complex material requirements, manufacturing constraints are becoming more interconnected across the value chain. The presentation will explore how process intensity, packaging complexity, and materials demand are evolving alongside wafer capacity, and what these changes mean for investment priorities, supply-chain readiness, and regional manufacturing strategies in Europe and globally.

Biography

Clark Tseng is Senior Director of Market Intelligence at SEMI, where he leads the development and execution of global market intelligence strategies covering the semiconductor manufacturing supply chain. He oversees SEMI's market research portfolio and global research partnerships, providing analysis and forecasts on fab investment, capacity, equipment, materials, and semiconductor manufacturing trends. Clark has extensive experience analyzing the semiconductor industry across foundry, IDM, memory, fabless, and OSAT markets, with a particular focus on manufacturing investment, technology transitions, and regional supply-chain dynamics.

Before joining SEMI, Clark held strategic and analytical roles at leading technology companies. At MediaTek, he served as Deputy Director of the Computing, Connectivity, and Metaverse Business Group, providing market intelligence and competitive analysis across computing, connectivity, automotive, and emerging technology markets. Previously, he was Division Manager for Strategy and Business Development at Qimonda, where he led market and competitive intelligence activities for the Asia-Pacific region. He began his career as an analyst at IDC, covering semiconductor, flat-panel display, and telecommunications markets.

Clark holds a Bachelor of Business Administration and a Bachelor of Arts in International Relations from National Chengchi University in Taiwan.

References