Americas Technology: Semiconductors: 2026 Communacopia + Technology Conference Wrap

Communacopia + Technology
September 8-11, 2026 | San Francisco

Explore >



James Schneider, Ph.D.
+1(212)357-2929
jim.schneider@gs.com
Goldman Sachs & Co. LLC

Anmol Makkar
+1(212)357-1366
anmol.makkar@gs.com
Goldman Sachs & Co. LLC

Luya You
+1(212)902-5297 luya.you@gs.com
Goldman Sachs & Co. LLC

Khalil Fenina
+1(212)357-6392
khalil.fenina@gs.com
Goldman Sachs & Co. LLC

Marshall Wong
+1(646)446-0222
marshall.wong@gs.com
Goldman Sachs & Co. LLC

Key Takeaways + Debates

Companies across AI & Digital Semis, EDA Software, Analog Semis, SemiCap Equipment, and Memory/Storage sectors presented throughout the Goldman Sachs Communacopia + Technology Conference. We hosted 32 companies across the sectors, including company presentations from Nvidia, Broadcom, AMD, Cadence, Credo, NXP Semiconductors, Qualcomm, Camtek, Amkor, IBM, EPAM, KLAC, Lam Research, TSMC, Applied Materials, Qnity, SiTime, Teradyne, GlobalFoundries, Seagate and SanDisk. We highlight key takeaways on the top debates, along with company-specific takeaways for each sub-sector below.

Key Takeaway #1: AI Adoption Trends and ROI - Companies cited concrete ways in which they are implementing AI in their internal business processes to drive incremental revenue growth via new product development and faster innovation cycles in services. Companies also cited their use of internal AI tools to drive cost efficiencies. Notably, Broadcom expects the majority of AI economics to accrue to owners of leading frontier models. Nvidia sees a strong need for both open-weight and closed frontier models in the market.

Key Takeaway #2: Digital Semis & EDA Software - Companies remained highly bullish on AI infrastructure spending, with Nvidia's Jensen Huang reiterating $3-$4tn in AI infrastructure spending level by 2030. Supply remains constrained across both upstream components and downstream datacenter capacity, though we believe land, power, and facility availability are emerging as the bigger bottlenecks. Meanwhile, Cadence noted chip complexity is expected to increase 48x over the next five years, driving demand for its agentic AI-driven design solutions.

Key Takeaway #3: Semi Cap Equipment - Companies continued to highlight datacenter buildouts as a multi-year growth driver, with orders and backlog reaching historically elevated levels. Although Semi Cap Equipment vendors stopped short of providing 2027 guidance, commentary around 8-10 new fabs coming online next year supports an acceleration in WFE spending. In rough order of growth rate,

Goldman Sachs does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html. Analysts employed by non-US affiliates are not registered/qualified as research analysts with FINRA in the U.S.

DRAM, foundry/advanced logic, advanced packaging, and NAND are expected to be the biggest drivers of industry growth in 2027.

Key Takeaway #4: Memory and Storage - AI inference workloads are driving structurally higher levels of data usage for context windows, which is creating substantially higher levels of demand both for NAND and mass storage. As a result, companies expect persistent tightness in both of these areas to support higher pricing and margins for at least the next 12-18 months. Although the companies we hosted stressed the need to maintain supply prudence, they also noted that visibility into longer-term demand is improving and remain confident in a strong CY27.

Key Takeaway #5: Foundry and Back-End - AI demand continues to outstrip supply, driving aggressive capacity expansion across the foundry ecosystem. TSMC continues to add more N3 capacity, GlobalFoundries plans to increase CapEx, and Amkor announced its Phase 2 of Arizona campus for advanced packaging. All companies highlighted that AI datacenter and Physical AI demand is growing faster than available capacity can support.

Key Takeaway #6: Analog - Datacenter and aerospace/defense remain key idiosyncratic growth drivers for the analog sector; however, broad-based industrial and automotive demand continues to improve. Companies struck a bullish tone on a broad-based recovery across end markets - including industrial and automotive - driven by lean inventory levels, content growth, and steadily improving demand.

Key Takeaway #7: IT Services - Companies highlighted the increased focus of customers on generative AI as a continued growth driver. Overall industry demand remains uneven - with EPAM pointing to a weaker demand environment across several verticals. However, IBM expressed optimism on its 2H26 outlook in Consulting - which it attributed to its high exposure to generative AI relative to competitors.

Updating our views on key investor debates

Below, we revisit the key debates outlined in our conference preview (here), and update our views based on takeaways from management discussions at the conference.

Key Debate #1 - Digital Compute: What are the drivers of and constraints on AI infrastructure spending, and how is competition shifting?

Companies continued to strike a very bullish tone on the trajectory of AI infrastructure spending, with Nvidia's Jensen Huang reiterating his outlook of AI infrastructure spending of $3 - $4tn in 2030. Both elements of the supply chain remain tight - including upstream (components) and downstream (land/power/datacenter capacity) supply, even as companies continue to add more capacity to cater to structurally higher levels of demand. On the margin, our view is that downstream constraints could be more significant. We also expect competitive intensity between merchant and ASIC providers to remain elevated.

- **Nvidia:** Nvidia reiterated its outlook of AI infrastructure spending of $3 - $4tn in 2030, and noted that its co-design capabilities - software, system, and components - as a source of competitive differentiation. Mr. Huang noted that upstream and downstream supply constraints remain significant. Management noted that its

financial guarantees are designed to help seed the ecosystem, but the ultimate returns generated and variety of investment partners involved are inconsistent with the notion of circular financing. Finally, Mr. Huang is bullish on physical AI, with self-driving cars as an existing use case, and expects reasoning-based manipulation and 6G to be additional drivers of physical AI in the next few years.

- **Broadcom:** Broadcom reaffirmed its FY27/FY28 AI revenue targets of $115 bn/$230 bn, while emphasizing that supply is constraining this outlook. Broadcom expects the majority of AI economics to accrue to owners of leading frontier models. Its $35 bn XPV partnership is designed to accelerate AI infrastructure buildouts, funding more than 20GW of compute capacity while minimizing balance sheet risk.
- **TSMC:** TSMC continues to view AI as a multi-year megatrend that remains at a very early stage, with lower compute costs expected to accelerate AI adoption and ultimately drive greater demand for advanced silicon. TSMC noted that execution in Arizona continues to progress well, with Phase 1 achieving yields comparable to Taiwan and already generating profits, while TSMC expects approximately 30% of its N2-and-beyond capacity to be located outside Taiwan in five years, primarily in Arizona. Despite dilution from the N2 ramp and overseas expansion, management remains comfortable achieving its long-term gross margin target of 56% and above, supported by disciplined capacity planning, high utilization, productivity improvements, cost reductions, and pricing that reflects TSMC's value.
- **AMD:** AMD described its AI adoption journey as progressing from building and optimizing its data foundation to deploying agents, and expects both frontier and open-source models to coexist, with customers increasingly optimizing model selection based on workload requirements, cost, and security. The company noted that its AI strategy mirrors its successful server playbook of scaling first in the cloud before expanding into the enterprise. Management added that while ISA remains important, it sees workload optimization and a broad portfolio of tailored SKUs as increasingly important differentiators.
- **Qualcomm:** Qualcomm expects its datacenter segment to lead the company's diversification strategy, and the company reiterated its FY29 datacenter revenue target of $15 bn. Qualcomm expects its automotive hardware stack to provide strong technical leverage for the Robotics and Physical AI market. In its three-year financial model, management expects gross margins to remain stable, with operating margins approaching 30%.
- **Credo:** Credo struck a bullish tone on its growth trajectory beyond FY27, with multiple vectors of growth in its optics portfolio, even as its copper-based AEC solutions are expected to remain mainstream in the medium term. Credo also noted that customer engagements across its optics products remain strong and continue to broaden. Finally, Credo expects gross margins in FY27 to remain at similar levels to FY26, with OpEx growing 55% in FY27 before trending toward a mo
revenue to OpEx ratio of 2:1.

Key Debate #2 - What's the duration of the WFE upturn, and how big c
Companies continued to focus on their exposure to datacenter build

人在草木间

multi-year structural growth driver. Almost universally, companies are seeing significantly increased orders and backlog, driving visibility that was broadly described as historically unprecedented. Although Semi Cap Equipment companies stopped short of providing quantitative guidance for 2027, we believe commentary around 8-10 new fabs coming online in 2027 is supportive of acceleration in WFE spending.

- **Applied Materials:** Applied Materials expects leading-edge logic, advanced packaging, and memory to account for ~80% of WFE in 2026 and similar mix going ahead and also reiterated its outlook for ~40% revenue growth in 2026. Management sees strong growth continuing into 2027 and 2028 given increasing orders and backlog with longer-dated visibility. The company also expressed confidence in its Process Control business, which is expected to grow more than 50% in 2026, driven by increasing demand for yield improvement, performance optimization, and materials engineering at advanced nodes.
- **Lam Research:** Lam expects WFE growth in 2027 to be driven by DRAM, followed closely by leading edge foundry/logic and a resurgence in NAND. The company noted increasing 3D architectures are driving additional demand for process technologies such as through-silicon vias (TSVs) and also creating further equipment content growth opportunities. Lam Research highlighted that a richer mix of differentiated products, manufacturing and R&D capabilities closer to customers, and higher pricing are improving its value proposition, enabling stronger value capture over time, and take gross margins close to mid-50% range over the next several years.
- **KLA:** KLA believes WFE spending will grow at a similar or accelerated pace next year. Within this envelope of spending, it believes it can also grow its revenue at a similar or faster rate in 2027, with steady increases in process control intensity over time. Additionally, it expects to take incremental share in advanced packaging over time, which it sees as a structural tailwind. Management also expects its US market share to be similar or higher than its global share, especially in light of new market entrants ramping capacity, where process control is critically important.
- **Teradyne:** Teradyne sees increasing opportunities with hyperscale customers, whose diverse requirements across chip, system, and datacenter testing create reinforcing demand across all three businesses. Management also expects the test equipment market to at least grow in line with overall semiconductor CapEx. Teradyne expects AI-driven growth to accelerate through 2027, supported by rising share gains at a major merchant compute customer, expanding engagements with hyperscale custom silicon customers, and strong momentum in ASIC testing.
- **GlobalFoundries:** Datacenter remains a key idiosyncratic growth driver for the company, led by strength in silicon photonics. In the near term, smartphones will represent a headwind to revenue, although its exposure to the high end of the market may moderate this impact. GlobalFoundries expects to grow its IP business strongly over the coming years as a result of several recent acquisitions.
- **Qnity:** Management highlighted outsized growth in advanced packaging and interconnect solutions as key growth drivers for the company in the near term.

Broadly, the company sees advanced node transitions as a structural tailwind, although it added that trailing-edge nodes have begun to recover, benefiting its semiconductor segment. Qnity sees continuing revenue momentum, combined with steady margin expansion, as providing a further boost to near-term earnings power.

- **Amkor:** Management discussed phase 2 of its Arizona campus, driven by strong demand for advanced packaging. Amkor expects compute revenue to continue to grow at 30% YoY in 2027. Amkor reiterated its $11 bn 2030 revenue target and expects 2028 CapEx levels to be elevated and sustained in 2029 before moderating in 2030 and 2031.
- **Camtek:** Camtek's growing order backlog supports demand visibility for the company well into 2027. Management is confident in the company's ability to grow in line with or better than industry WFE spending given continued strength in advanced packaging. Hawk and Eagle 5 are well on track to represent more than half of revenue in 2026.

Key Debate #3 - Memory & Storage: What emerging factors are impacting industry supply/demand, and what other items are impacting valuations?
AI inference workloads are driving structurally higher levels of data usage for context windows, which is creating substantially higher levels of demand, both for NAND and mass storage, and supporting pricing and margins. Additionally, increased visibility into longer-term demand from customers, particularly for SanDisk given the level of coverage from its NBMs (long-term agreements), have the potential to mute industry cyclicality - although we believe further evidence of this impact is still needed.

- **SanDisk:** The company remains confident in its long-term financial targets underpinned by its long-term agreements (NBMs), which themselves have been enabled in part by strong and growing datacenter demand. Management also highlighted its low capital intensity and reiterated that it sees share repurchases as central to its capital return policy.
- **Seagate:** Seagate sees the current demand environment for storage tied to AI infrastructure, combined with limited supply growth, continuing to support pricing uplift with higher earnings through FY27. Management reiterated that HAMR volumes are well on track to cross over PMR by the end of calendar 2026 and added that it believes HAMR will represent 80%-90% of the company's bit volumes in the next few years. Seagate also expects to continue its high-yield debt retirement plans and to accelerate share repurchases - which it sees as the primary vehicle for returning excess capital to shareholders.

Key Debate #4 - Analog: Can end-market trends sustain a broad cyclical recovery that lasts longer than expected, and what role will pricing play?
Datacenter and aerospace/defense remained top of mind as the primary idiosyncratic growth drivers in the near term. However, companies also struck a bullish tone on a broad-based recovery across end other markets - including industrial and automotive - as evidenced by growing lead times and driven by lean inventory levels, content growth, and steadily improving demand. On pricing,

management teams largely expect selective ASP increases to offset higher input costs, and for the positive topline effect to be gradual.

- **NXP:** Management highlighted improving demand trends across end markets, including in automotive, and improving revenue visibility through longer lead times despite a lack of OEM inventory restocking. NXP also discussed its strategic pivot to physical AI, its hybrid manufacturing strategy, and its gradual price increases and their impact on revenue and margins.
- **SiTime:** The company discussed its constructive outlook for datacenter, which remains its key growth driver, driven by AI server units, increasing market share, and higher content. SiTime also noted that its Renesas IC clock revenue growth is expected to inflect in 2027 and that overall revenue growth is likely to exceed its long-term targets over the next few quarters.

Key Debate #5 - Can EDA Software Accelerate Its Growth Trajectory?
For EDA software, Cadence noted chip complexity is expected to grow by 48X over the next five years, which is a key driver for its agentic AI solutions - enabling accelerated recurring revenue growth.

- **Cadence:** Cadence continues to see design momentum with traditional and non-traditional chip and system designers. The company noted chip complexity is expected to grow by 48X over the next five years, which is a key driver for its agentic AI solutions - enabling accelerated recurring revenue growth. The company also shared optimism around physical AI and expects it to be a large market opportunity in the medium term.