



Semiconductor Weekly News

September 14–20, 2026

AI memory tightens, US data-center pushback grows, and autonomous driving expands into Asia

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Sources: Bloomberg, Reuters, CNBC, TechCrunch, DigiTimes, and more

Editor's Picks



250K/mo

Samsung to double HBM4

Samsung plans to raise total HBM capacity ~40% to ~250K wafers/month by 2027, doubling HBM4/HBM4E output year-over-year. ([Seoul Economic Daily, Sep 20](#))



2027

Waymo enters Tokyo

Waymo will partner with Nihon Kotsu and GO for a phased Tokyo robotaxi launch — its first market in Asia. ([Yahoo Autos/Bloomberg, Sep 14-16](#))



417–3

House passes Ratepayer Act

Bipartisan bill would make data centers over 100MW bear the grid-upgrade costs they trigger. ([Tech Times, Sep 17](#))



1. AI Chips & GPUs

Huawei unveils Ascend 960 roadmap

At Huawei Connect 2026, Huawei detailed its Ascend 960 supernode — said to be the industry's first using near-packaged optics — built to train and infer models up to 10 trillion parameters. A split training/inference variant is being pulled forward to Q1 2027. ([DigiTimes, Sep 17](#))

Axelera AI launches Europa inference processor

The European AI-chip startup launched its Europa AIPU, claiming 6x tokens/sec/watt versus GPUs, with validated systems from Dell and Supermicro. Axelera says its sales pipeline now exceeds \$1.5B across 600+ customers in defense and robotics. ([Axelera AI, Sep 15](#))

Google's TPU payback under a year

Google Cloud CEO Thomas Kurian disclosed that TPU-equipped servers pay back in under 12 months — about half the fleet average — underscoring hyperscaler custom-silicon economics. DigiTimes sees upside for ASIC partners MediaTek and Broadcom. ([DigiTimes, Sep 14](#))



2. Fab & Supply Chain

TSMC to boost 2nm and 3nm capacity

TSMC plans to raise 2nm capacity 22% and 3nm over 16% between end-2026 and mid-2027, while CoWoS packaging capacity roughly doubles by 2028 — with three new 3nm fabs in Taiwan, Arizona and Japan.

(TrendForce, Sep 14)

Samsung to nearly double HBM4 output

Samsung plans to raise total HBM capacity nearly 40% to ~250K wafers/month, with HBM4/HBM4E output at least doubling year-over-year and HBM4-series products rising to ~80% of shipments, from ~40% today. (Seoul

Economic Daily, Sep 20)

SK Hynix in talks with Intel on US memory manufacturing

SK Hynix is reportedly weighing two structures with Intel — leasing capacity at Intel's delayed Ohio fab, or a joint venture with Intel and cloud customers — to produce AI memory domestically. A deal could erode Micron's position as the only major US-headquartered memory maker. (Reuters via Benzinga, Sep 16-17)

3. Consumer Chips

MediaTek launches first 2nm flagship chip

The Dimensity 9600 Pro's all-big-core 2+3+3 design claims 17% higher single-core performance and 61% lower multi-core power draw than its predecessor, paired with a dual-NPU 'Agentic AI Engine' supporting on-device models up to 30 billion parameters. ([MediaTek, Sep 15](#))

MediaTek and Vivo bring 30B-parameter AI to phones

Vivo, an early Dimensity 9600 Pro adopter, built a software stack running mixture-of-experts models up to 30B parameters on-device, putting 'agentic AI' at the center of the 2026 flagship race against Qualcomm. ([DigiTimes, Sep 19](#))



4. Data Centers & Energy

US House passes Ratepayer Protection Act, 417–3

The bipartisan bill (H.R. 9340) passed the House on Sept 16, making data centers over 100MW bear the grid-upgrade costs they trigger. US data centers now use 4.4% of electricity, projected to reach up to 12% by 2028. ([Tech Times, Sep 17](#))

Generac signs deal worth up to \$8B to supply Amazon

Generac signed a \$2.4B initial contract for backup generators at Amazon's data centers, with potential future orders reaching \$8B. Amazon received warrants for Generac shares as part of the deal. ([24/7 Wall St., Sep 17](#))

San Francisco proposes 45-day data-center moratorium

City supervisors introduced legislation freezing new data-center approvals for up to 220 days, citing outdated building codes and environmental burden on Bayview. Similar moratoriums are being prepared in Richmond and Oakland. ([KQED, Sep 15](#))

5. AV & Automotive Chips

Waymo to launch Tokyo robotaxi service in 2027

Waymo will partner with Nihon Kotsu and the GO app for a phased launch in Tokyo — its first market in Asia — with an initial fleet of roughly 100 vehicles. ([Yahoo Autos/Bloomberg, Sep 14-16](#))

Lucid and Bolt bring NVIDIA robotaxis to Europe

Lucid and mobility platform Bolt will deploy autonomous-ready Lucid vehicles built on Nvidia's Hyperion AV architecture across Europe, targeting 25,000 vehicles initially and 100,000 by 2035. ([TechCrunch, Sep 17](#))

Pony.ai unveils Gen-4 autonomous robotruck with GAC

At IAA Hannover, Pony.ai and GAC unveiled a Level-4 autonomous truck using the same domain controller as its robotaxis, claiming a 70% bill-of-materials cost cut. Volume production starts later in 2026. ([PR Newswire, Sep 14](#))

6. Chip Startups & Venture

Cornelis Networks \$205M

Intel spinoff funds an open GPU-fabric tech that cuts idle GPU time. ([TechCrunch, Sep 14](#))

Euclyd €200M+

Ex-ASML CEO Wennink joins as chairman; reaches test-chip stage at Samsung Foundry. ([Tech Startups, Sep 15](#))

Altera \$2B+ (IPO)

Intel-backed FPGA maker (51% Silver Lake, 49% Intel) files confidentially for a US listing. ([Bloomberg, Sep 15](#))

Positron AI \$875M (\$5B valuation)

HBM-free inference chip; Atlas system already runs at Oracle Cloud. ([StorageNewsletter, Sep 16](#))

EVAS Intelligence \$295M

Beijing RISC-V AI chip built to sit outside US export controls. ([Tech Times, Sep 20](#))

7. Industry Deals & Policy

US backs Anderson with \$1B CHIPS award

The IBM subsidiary will build a 300mm quantum-chip foundry in Albany, NY; IBM is matching with roughly \$1B of its own investment. ([NIST, Sep 16](#))

India unveils \$13.5B chip mission

PM Modi launched the next phase at SEMICON India 2026, spanning design through packaging; 12 projects approved, 3 in production. ([BusinessToday, Sep 17](#))

Infineon sells NOR/F-RAM unit to Winbond

The \$1.12B cash deal, expected to close in H2 2027, lets Infineon redirect capital toward core semiconductor operations. ([SemiEngineering](#))

Japan-US discuss chip fab in tariff talks

Nikkei Asia reported Japan and the US are discussing a US-based fab, possibly run by GlobalFoundries, as part of tariff talks. ([Nikkei Asia](#))



Tariffs & State Policy Watch

Newsom signs order accelerating AI 'kill switch' work

On September 18, California Gov. Newsom signed an executive order accelerating implementation of SB 813 (a framework for independent AI verification organizations) and AB 1405 (a state AI-auditor registry, signed into law Sept 9), directing frontier AI labs to undergo regular independent audits and advancing work on a verifiable AI 'kill switch,' while adding loss-of-control incidents — including what the order calls 'the Hugging Face attack' — to its critical-incident definition. Newsom called on Congress and the President to adopt California's framework nationally. (gov.ca.gov, Sep 18)

Tariff watch: no new Section 232 semiconductor/equipment action was identified this week — the existing 25% framework remains in place.

8. What It Means for Japan

What this week's news means for Japan:

Materials makers

Samsung's HBM4 expansion and TSMC's CoWoS doubling point to sustained demand for high-purity chemicals — a tailwind for Shin-Etsu, SUMCO, JSR, TOK, Resonac, plus niche suppliers like Toto and Nittobo.

Equipment makers

TSMC's 2nm/3nm roadmap and Samsung's HBM4 ramp are a multi-year tailwind for Tokyo Electron, Advantest, Lasertec and Disco, with Disco and Advantest especially exposed via packaging and test gear.

Foundry

Reported Japan-US fab talks (possibly GlobalFoundries) signal continued US courting of foundry capacity, worth weighing against Rapidus's 2nm plans, while India's \$13.5B Mission 2.0 shows rising competition.

Government

The fab element in US-Japan tariff talks deserves METI's attention. South Korea's toughened espionage law offers a model worth studying, as does the US CHIPS award for IBM's quantum foundry.



Sources

Bloomberg, Reuters (via Benzinga, Investing.com), CNBC, TechCrunch, DigiTimes, TrendForce, Seoul Economic Daily, Tech Times, SemiEngineering, BusinessToday, Texas Tribune, KQED, 24/7 Wall St., PR Newswire, Tech Startups, StorageNewsletter, NIST/US Dept. of Commerce, gov.ca.gov, and more.

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