

Semiconductor Pulse

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Taiwan monthly signals. Global quarterly context.

Taiwan's monthly disclosures provide an early view inside the earnings cycle. In August 2026, 379 of 434 comparable ecosystem reporters grew revenue year over year. This supports a broad participation thesis; it does not establish a validated forecast of global semiconductor demand.

What the combined evidence reveals

Relationship window: 2021-09 to 2026-08. This editorial revision adds analysis to the frozen data as of 2026-09-20; it does not refresh the underlying disclosures.

Systems & ODM: broad participation accompanies faster growth

+51.2% median revenue growth · 21/23 growing · +33.1 pp momentum change

The signal reaches the companies assembling finished systems. This strengthens the case for examining a wider hardware ramp alongside the chip cycle.

21 of 23 companies grew in Aug 2026; median revenue growth was +51.2% YoY. Three-month growth changed by a median +33.1 pp versus three months earlier across 19 eligible reporters. The median change across 12 other eligible segments was +15.1 pp.

Historical context: 55.9% three-month growth, at the 100th percentile across 60 monthly readings for 19 companies with complete history. Membership is held fixed; it can differ from the latest-print sample.

What could challenge this reading? Reported revenue mixes price, volume, currency and product mix. Company-wide classifications cannot isolate AI demand or identify the customer behind a shipment.

What to watch next. Watch whether Systems & ODM sustains participation over the next two prints and whether relevant global earnings confirm the economics.

Memory is growing on a different scale

+256.4% median YoY · +206.9% three-month growth · 15/16 growing

The size and persistence of this move warrant a separate cycle interpretation. Treating it as representative of the whole industry would overstate the typical company's experience.

Median revenue grew +256.4% YoY, with 15/16 companies growing. The three-month measure was +206.9% across 16 companies; 15 companies support a median +290.3% two-year comparison.

Historical context: 209.9% three-month growth, at the 100th percentile across 60 monthly readings for 15 companies with complete history. Membership is held fixed; it can differ from the latest-print sample.

What could challenge this reading? Fast revenue growth does not establish a similar increase in unit demand. Pricing, product mix and the comparison base need independent evidence.

What to watch next. Compare the next monthly print with global revenue, margin and inventory disclosures before inferring a durable demand shift.

Revenue growth is reaching margins unevenly

8 of 44 growing companies have lower gross margins · 48 matched comparisons

The revenue cycle is translating into different economic outcomes. Margin pressure among growing companies is a reason to examine pricing, mix and ramp costs before extrapolating profit growth.

44 of 48 comparable global companies grew revenue in their latest covered quarter. 36 of those maintained or improved gross margin year over year; 8 saw margin contraction. Synopsys Inc: +42.4% sales, -5.6 pp gross margin; Veeco Instruments Inc: +16.5% sales, -2.7 pp gross margin; Acme Research, Inc.: +36.0% sales, -2.5 pp gross margin.

Matched quarter ends are on or after 2026-04-01 and no later than the selected month. Among the covered sectors with at least three matched companies, Compute & design has 50.1% median sales growth and 2.6 pp median gross-margin change (3 companies); Analog, power & embedded has 22.8% median sales growth and 2.9 pp median gross-margin change (13 companies); Connectivity & data infrastructure has 35.8% median sales growth and 2.0 pp median gross-margin change (5 companies); Equipment & process control has 24.8% median sales growth and 0.3 pp median gross-margin change (9 companies); Test & packaging has 39.3% median sales growth and 4.5 pp median gross-margin change (3 companies); Equipment subsystems has 23.5% median sales growth and 1.9 pp median gross-margin change (4 companies). These are company medians, not weighted industry results.

What could challenge this reading? This comparison covers 48/61 relevant anchors with recent revenue and matched gross-margin data. Fiscal dates and scopes differ; acquisitions, amortization and product mix can affect margins. It is not a weighted global industry result.

What to watch next. Follow margin changes alongside inventory growth, management commentary and the next reported quarter. Rising sales with repeated margin pressure would weaken a simple demand-led expansion thesis.

Systems & ODM and power, cooling & interconnect: an unusually wide growth gap

+55.9% vs +24.3% three-month growth · +31.6 pp gap · 0.80 adjusted correlation

These exposures have usually moved together, yet current growth rates are separating unusually far. The gap raises a concrete question: is spending shifting within the hardware buildout, or are product mix and shipment timing temporarily separating the two?

Across 60 monthly observations, Systems & ODM and Power, cooling & interconnect had a growth correlation of 0.90, and 0.80 after a simple broad-cycle adjustment. Their current growth gap is +31.6 pp, versus a median +3.7 pp over the window (100th percentile). For Foundries and Substrates & PCB, 0.82 falls to -0.06 after the same adjustment.

Systems & ODM / Power, cooling & interconnect: 0.90 observed correlation; 0.80 after broad-cycle adjustment. Fixed membership: 19/23 and 21/37 companies; 60 monthly observations. Rank correlation 0.93; correlation of monthly changes in growth 0.68; first-half / second-half growth correlation 0.91 / 0.78.

Foundries / Substrates & PCB: 0.82 observed correlation; -0.06 after broad-cycle adjustment. Fixed membership: 9/9 and 33/47 companies; 60 monthly observations. Rank correlation 0.77; correlation of monthly changes in growth 0.25; first-half / second-half growth correlation 0.85 / 0.78.

What could challenge this reading? These are exploratory associations among selected corporate exposures, not verified customer links. Overlapping growth windows, common demand and FX can create correlation. The adjustment is a proxy, not a causal model.

What to watch next. Watch whether the relationship persists across future releases and whether a divergence is corroborated by company disclosures.

An earlier monthly report is useful before a forecasting lead is proven

2 selected relationships · same-quarter and ± 3 / ± 6 -month comparisons · exploratory evidence

Monthly Taiwan disclosures can help interpret an unfinished earnings cycle. A useful view of the current quarter does not require a reliable forecast of the next quarter.

Memory versus Micron: 16 matched quarters, with same-period correlation 0.87 and a three-month Taiwan lead 0.88; Equipment & facilities versus Applied Materials: 16 matched quarters, with same-period correlation 0.56 and a three-month Taiwan lead 0.58. These comparisons use the same quarters at every delay.

Memory / Micron: common quarter ends 2022-06-02 to 2026-02-26. Correlations with Taiwan later by six / three months, same period, and earlier by three / six months: 0.64 / 0.72 / 0.87 / 0.88 / 0.56. Same 16 quarters at every delay; fiscal periods approximately aligned to months.

Equipment & facilities / Applied Materials: common quarter ends 2022-05-01 to 2026-01-25. Correlations with Taiwan later by six / three months, same period, and earlier by three / six months: -0.29 / 0.17 / 0.56 / 0.58 / 0.52. Same 16 quarters at every delay; fiscal periods approximately aligned to months.

What could challenge this reading? Fiscal periods are approximately aligned to months. Historical publication timestamps and original release vintages are incomplete, so these correlations do not measure days of information advantage or validated predictive performance.

What to watch next. A timing claim requires dated releases, exact reporting-period alignment and a test against forecasts using only prior information. No fixed Taiwan-to-global delay is asserted.

Evidence and interpretation

Analytical observations calculated by Semi AI Foundry, LLC from the published archive. Taiwan figures use corporate revenue in nominal TWD; global figures preserve reporting scope. Monthly overlapping growth observations are not independent. Comparisons are exploratory; no statistical significance, causality or validated forecasting power is claimed. The current roster introduces survivorship bias. Historical selections are not an as-known-then replay.

Taiwan revenue sources: [TWSE / MOPS](#) and [Taipei Exchange](#), with archived history attributed to [FinMind](#). Global financial context: [SEC company disclosures](#).

Supporting company disclosures

[Synopsys Inc](#) - Quarter ended 2026-07-31, compared with 2025-07-31. Consolidated EDA, IP and simulation; acquisition effects remain included.

[Veeco Instruments Inc](#) - Quarter ended 2026-06-30, compared with 2025-06-30. Consolidated company.

[Acm Research, Inc.](#) - Quarter ended 2026-06-30, compared with 2025-06-30. Consolidated company.

Executive readout

Median revenue growth: +35.6% - YoY; equal company weight

Growth breadth: 87% - 379 of 434 comparable reporters

Three-month momentum: +33.1% - 336 companies with eligible history

Participation reaches beyond the headline names

The focus set shows +50.4% median growth, compared with +35.6% across the defined ecosystem. Use the broader reading when testing planning assumptions: the leading names give a stronger impression than the median company.

Three layers support the expansion hypothesis

Core semiconductors: 85% of eligible companies growing; Production adjacencies: 93% of eligible companies growing; Hardware demand: 84% of eligible companies growing. These are separate corporate-exposure views, not additive semiconductor revenues.

Durability needs a second test

258 of 336 eligible companies grew in each of the last three months. Revenue is +36.9% above the same month two years ago at the median (326 comparable companies). Pricing, mix, FX and shipment timing remain alternative explanations.

Why Taiwan illuminates the global cycle

Taiwan is a concentrated microcosm of critical parts of the semiconductor industry. Its depth across fabrication, packaging, test and downstream systems lets us examine how global demand, technology transitions and capacity constraints move through the value chain-month by month.

69% of sub-10nm capacity

Taiwan held 69% of global logic fabrication capacity below 10nm in the SIA/BCG study's 2022 baseline. This concentration gives its ecosystem unusual exposure to advanced computing demand.

Geographic fab capacity; historical benchmark, not a current estimate or a share of all chips.

From smaller chips to integrated systems

TSMC's CoWoS integrates logic with high-bandwidth memory; SoIC enables 3D chip stacking. These capabilities put Taiwan at the forefront of turning advanced silicon into high-performance computing systems.

Packaging, interconnect and memory integration help determine performance, power efficiency and the pace of a product ramp.

Front end to far back end

Pulse connects chipmakers with materials, fab suppliers, assembly and test, substrates, boards, server manufacturers, power and cooling. That breadth helps reveal where growth is spreading-and where it stops.

Mapped company exposures across the Taiwan ecosystem, including businesses with overseas operations.

From front end to far back end

Design & front end. Chip design, silicon wafers, materials, fab infrastructure and wafer fabrication. Compare design and foundry momentum with upstream suppliers to distinguish product ramps from a wider investment cycle.

Back end & advanced packaging. Assembly, chip integration, package substrates and interconnect. Look for alignment-or divergence-between fabrication and the capacity needed to package usable devices.

Far back end. Final test, burn-in, reliability screening and system-level test; related test infrastructure. Test and validation add another checkpoint between silicon production and qualified products ready to ship.

Downstream systems. Boards, modules, server / system manufacturing, networking, power and cooling. Examine whether chip demand is translating into a broader hardware buildout.

These stages describe the analytical lens. Monthly disclosures usually cover whole companies; they do not isolate each process, product, customer or facility. "Far back end" is used here for post-assembly test and qualification, with downstream systems shown separately.

Global implications

Demand breadth. Growth extending from foundries into packaging, test and systems would strengthen the case for a broader ramp. Strength confined to a few companies would suggest a narrower cycle.

Bottlenecks & investment. Diverging trajectories can flag questions about packaging throughput, substrates, test capacity or infrastructure spending. Earnings commentary, margins and inventory are needed to test the explanation.

Global cycle divergence. Compare AI-linked strength with memory, mature-node, analog, industrial and consumer exposures. This helps separate a technology-led buildout from a general semiconductor recovery.

Our synthesis uses this microcosm for an in-depth view of global dynamics: observe monthly changes, compare participation across stages, then test the interpretation against global quarterly results. These are analytical hypotheses, not verified customer flows or proof of causality.

Taiwan is a powerful observation point, but the global industry extends beyond it. Korean and US memory, US and European design and equipment, Japanese materials, and China's manufacturing and demand require their own evidence. Pulse pairs the Taiwan lens with its global quarterly coverage and makes remaining gaps visible. Earlier reporting offers an information lead; it does not establish a fixed forecasting lead.

Context sources

[SIA / BCG · capacity benchmark](#) - Emerging Resilience in the Semiconductor Supply Chain, May 2024, Exhibit 6, p. 14. Observed baseline: 2022. Capacity classified by fab location; fabs above 5,000 wafer starts/month with wafers of at least 8 inches; R&D fabs excluded. The 2032 figures are forecasts and are not used as current shares.

[TSMC · CoWoS](#) - Technology overview: logic and high-bandwidth-memory integration for AI and high-performance computing. Accessed 20 September 2026.

[TSMC · 3DFabric](#) - Technology overview: SoIC, CoWoS and InFO; 3D stacking and advanced packaging. Accessed 20 September 2026.

Selected Taiwan segments

Segment	Eligible	Median YoY	Growing
Foundries	9	+30.7%	100%
Design & IP	84	+24.9%	80%
Memory	16	+256.4%	94%
Assembly & test	22	+29.7%	95%
Power & discrete	15	+22.4%	80%
Silicon wafers	3	+20.0%	100%
Equipment & facilities	37	+37.3%	92%
Fab infrastructure	13	+59.1%	85%
Test infrastructure	10	+43.1%	90%
Substrates & PCB	47	+41.1%	91%
Materials & masks	9	+33.0%	78%
Systems & ODM	23	+51.2%	91%

Selected global quarterly evidence

NVIDIA - Compute & design; quarter ended 2026-07-26; revenue YoY +105.9%; gross margin 75.0%. Consolidated company; US GAAP. [Source](#).

TSMC - Foundry; quarter ended 2026-06-30; revenue YoY +33.7%; gross margin 67.7%. Consolidated; company-reported USD revenue; TIFRS; company-reported USD revenue. [Source](#).

Micron - Memory; quarter ended 2026-05-28; revenue YoY +345.7%; gross margin 84.6%. Consolidated company; US GAAP. [Source](#).

Tokyo Electron - Equipment & process control; quarter ended 2026-06-30; revenue YoY +33.3%; gross margin 46.8%. Consolidated company; Japanese GAAP. [Source](#).

Advantest - Test & packaging; quarter ended 2026-06-30; revenue YoY +39.3%; gross margin 69.5%. Consolidated company; IFRS. [Source](#).

Renesas - Analog, power & embedded; quarter ended 2026-06-30; revenue YoY +28.5%; gross margin 58.6%. Consolidated company; IFRS. [Source](#).

Synopsys Inc - EDA & design software; quarter ended 2026-07-31; revenue YoY +42.4%; gross margin 72.6%. Consolidated; acquisition effects included; US GAAP. [Source](#).

Entegris - Materials; quarter ended 2026-06-27; revenue YoY +11.5%; gross margin 47.6%. Consolidated company; US GAAP. [Source](#).

Arrow Electronics, Inc. - Semiconductor distribution; quarter ended 2026-07-04; revenue YoY +31.8%; gross margin 11.3%. Consolidated company; US GAAP. [Source](#).

What to watch

The next monthly releases

Look for sustained participation across chip production, equipment, materials and hardware demand. Repeated narrowing would weaken the expansion thesis and warrant revisiting inventory commitments.

The next quarterly results

Test growth against reported margins, inventories and management commentary. Revenue acceleration with deteriorating economics calls for more caution in capacity reservations and demand plans.

Signals outside the focus set

Review smaller suppliers and segments moving against their peers. A strong aggregate should not erase the first signs of weakening in specific end markets.

Coverage

434 Taiwan reporters: 206 official semiconductor issuers, 137 mapped production adjacencies and 91 hardware-demand companies. All official semiconductor-category issuers in the retrieved feeds are included; adjacent coverage is not a certified census. 336 reporters support three-month analysis. The global archive covers 61 companies and 1438 quarters; selected evidence is shown here. Important gaps remain in European/Japanese materials, China foundries and selected equipment and device leaders.

Monthly growth is nominal TWD, with no FX or seasonal adjustment. Company medians measure participation, not market share. Eligible counts vary over time; current membership and retrieved archive values are used, not historical release vintages. Quarterly dates, accounting bases and consolidation scopes differ. Missing values remain missing. Charts show published aggregate outputs only.

About this analysis

Semiconductor Pulse combines public company disclosures and industry information into an independent synthesis by Semi AI Foundry, LLC. The public edition presents selected findings, supporting evidence and material limitations. The complete source inventory, collection and integration workflows, analytical implementation and internal research record are maintained privately.

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Disclosure revision only. Underlying data remain frozen as of September 20, 2026; the analytical findings are unchanged.

Selected source credits

- [Taiwan Stock Exchange: monthly revenue disclosures](#)
- [Taipei Exchange: company disclosures](#)
- [Historical archive: FinMind \(attribution\)](#)
- [SEC: company financial disclosures](#)

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