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ASIA TECHNOLOGY

# ABF price hikes to outpace our estimates, with solid GM expansion from 2Q26; revise up TPs for all our TW ABF substrate players by 81% to 112%

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Following up on our ABF upgrade report from early this year (see here), we are seeing ABF substrate demand grow much faster than our original expectation. **We now expect the ABF TAM to expand at a 62% 2025-28E CAGR to US$33bn in 2028, up from US$7.7bn in 2025 (Exhibit 3, vs. our prior estimate of a 33% CAGR)**. **Moreover, we expect the S/D gap for ABF substrates to widen from an 8% undersupply in 2026 to 34/51% in 2027/28 (Exhibit 1 vs. 5%/21%/42% undersupply in 2026/27/28 previously)**, driven by stronger than expected demand from AI servers and general server CPU substrates, which together accounted for 26% of ABF industry demand in 2025, and should increase to 41/53/62% of demand in 2026/27/28; Exhibit 4). As a result, we expect the ABF substrate LTA/Spot prices to increase by 10-15%/20%+ QoQ per quarter from 3Q26 through at least the end of 2027, with shortages likely extending into 2028 or possibly beyond as ABF lead times have lengthened from 3-4 months at the start of the year to more than 12 months currently.

Given our bullish view on the ABF substrate pricing/profitability outlook, **we raise our TPs for NYPCB/Kinsus/Unimicron/ZDT to NT$2,310/1,120/1,140/824 from NT$1,115/555/630/388 with 4-22%/10-38% upward earnings revisions in 2027/28 and introduce our 2029 earnings estimates.** Maintain our Buy rating on NYPCB (on CL)/Kinsus/ZDT, but stay Neutral on Unimicron.

### ABF substrates could become a key bottleneck for the overall AI/server industry, supporting a solid price hike outlook

We began to see NYPCB/Kinsus UTR pick up rapidly (Exhibit 2) in 1H26, following Ibiden's nearly full utilization for GPU applications from 2H24 and Unimicron's full utilization from 2H25, and started seeing spot price hikes from April, which implies that shortages of substrate supply likely began much earlier than our original expectation, as we had expected them to emerge only from 2H26, thanks to the stronger than anticipated demand.

Our latest industry checks suggest that the ABF substrate lead times have now reached 12 months (vs. only 3-4 months as of early 2026), with more customers asking for ABF substrate capacity beyond 2029. Moreover, we started to see some tier 2/3 ABF substrate suppliers selling their on-hand capacity based on bidding, suggesting a much more favorable pricing/profitability outlook for the spot price for

ABF substrate suppliers.

All the above industry signs and data-point suggests to us that the ABF substrate shortage could last for more than 30 months, and **our supply demand analysis suggests the shortage ratio of ABF substrates could reach 14%/34%/51% in 2H26/2027/2028, indicating potential for an even faster pace of price increases for ABF substrates.** We expect the market to eventually recognize that substrate supply constraints could impact the overall AI server ramp up speed. **Overall, we expect substrate LTA/spot prices to increase 10-15%/20%+ QoQ from 3Q26 through to the end of 2027, suggesting a solid upside potential to our GM estimate for all 4 ABF substrate players in Taiwan.**

### AI ASIC servers and general server CPUs are the key drivers of stronger than expected demand growth

We now see the overall ABF substrate TAM expanding at a 62% 2025-28E CAGR vs. our original expectation of a 33% 2025-28E CAGR, with the stronger than expected demand growth mainly driven by **(1) the stronger than expected AI ASIC substrate volume/pricing growth, and (2) much more favorable than expected server CPU substrate demand growth.** We expect AI server demand (25% of ABF demand in 2026E) to grow at a 101% 2025-28E CAGR, benefiting Ibiden/Unimicron the most, as the two companies together still account for 74% of the AI server share in 2026. We also expect general server demand (15% of ABF demand in 2026E) to grow at a 47% 2025-28E CAGR, benefiting Kinsus the most, as server CPUs could account for 40%+ of the company's total ABF revenue in 2028, thanks to rising demand for high computing performance ICs and IC substrate technology migration.

For the other applications, we expect switches to grow the fastest, at a 20% 2025-28E CAGR, driven by solid expansion in ABF substrate size and layer count following the adoption of 1.6T/3.2T switch ICs starting in 2H26/2028. This should benefit NYPCB the most given the company's current 40%+ ABF revenue exposure to high-end networking ICs.

### 2Q26 preview and 3Q26 outlook: Spot price player to strongly outperform with a significant jump in GM/OPM

**For the upcoming 2Q results, we believe all four TW ABF substrate companies will report better than expected earnings, 4-38% above BBG consensus**, mainly driven by much stronger ABF substrate shipment volumes and better ASP/pricing.  We also expect **key spot price supplier, NYPCB, to enjoy the strongest GM/OPM expansion, from 15.8%/12.1% in 1Q26 to 26.3%/23.2% in 2Q26 (vs. consensus of 19.8%/17.5%)**, supported by the 40%+ spot price hikes in 2Q26.

Going into 3Q, we expect all four TW ABF substrate suppliers to deliver even stronger earnings growth, while **our 3Q26 operating income estimates for all 4 ABF substrate suppliers are 9-53% above BBG consensus**. We expect **the 4 TW ABF players' GM/OPM to expand by 3.5ppt/4.7ppt in 3Q26**, considering the even more positive ABF substrate ASP/price hike trend from 3Q26. **For NYPCB, we believe GM/OPM will again expand the most in 3Q26, by +6.7ppt/+7.2ppt GM/OPM QoQ**, further supported by our more favorable ABF substrate spot price outlook.

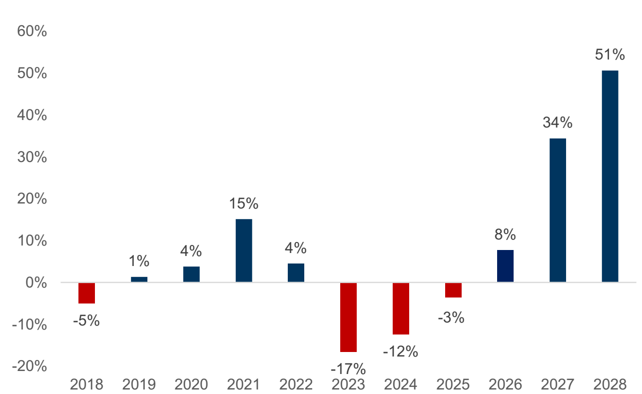
# ABF substrate supply/demand gap to widen to 14%/34%/51% in 2H26/2027/2028, with a much stronger pricing outlook

We revise up our ABF substrate TAM 2025-28E CAGR from 33% to 62%, driven by (1) our faster than expected AI IC substrate demand outlook, mainly from ASIC volume growth, as well as solid progress on specification upgrades, and (2) solid demand for agentic AI server CPUs. We also see NVDA's launch of the new Vera standalone rack suggesting further upside demand potential for server CPU substrate suppliers in the coming years.

On the other hand, we are starting to see all ABF substrate players' capacity located in Japan/Korea/Taiwan become fully utilized, thanks to the solid demand outlook and the comparatively slower capacity expansion plans from key suppliers. Also, we have started to see ABF substrate lead times reach 12+ months currently vs. 3-4 months at the beginning of this year, which further echos our view on the solid demand growth since 2Q25.

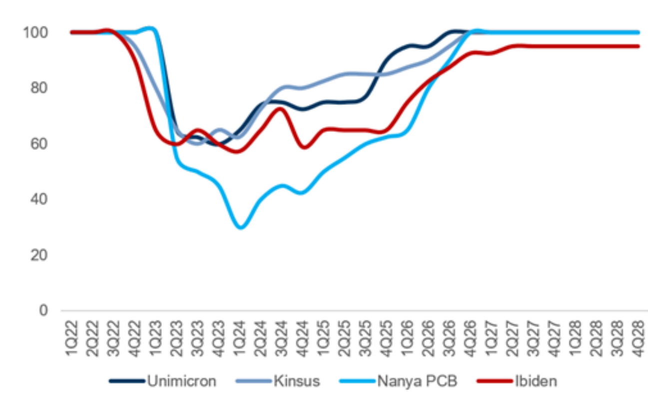
As such, we now expect the overall ABF substrate supply/demand gap to reach 8/34/51% in 2026/27/28 (vs. our original expectation at 5%/21%/42%), while we see the faster than expected demand ramp up from April 2026, creating a supply shortage 1 quarter ahead of our estimate—we originally expected a shortage to begin in 2H26, with spot price product pricing hikes, but the shortage actually started in early 2Q26. The ABF substrate supply shortage beginning from April this year has directly led to a 40-60% pricing increase in the spot price market in 2Q26. We believe the pricing outlook for spot ABF substrates may accelerate in 2H26, as the shortage ratio likely rises further from 2% in 1H26 to 14% in 2H26E. Heading into 2027/28, we believe ABF substrate supply could be the IC supply chain bottleneck, potentially suggesting an even stronger pricing outlook for ABF substrates, as most all AI related customers have been focusing more on time to market timing than cost control. Accordingly, we believe the spot price of ABF substrates is poised to rise further by 60-80% YoY in both 2027 and 2028.

**Exhibit 1: We expect the ABF industry S/D gap to continue expanding in coming years**
Supply shortage ratio



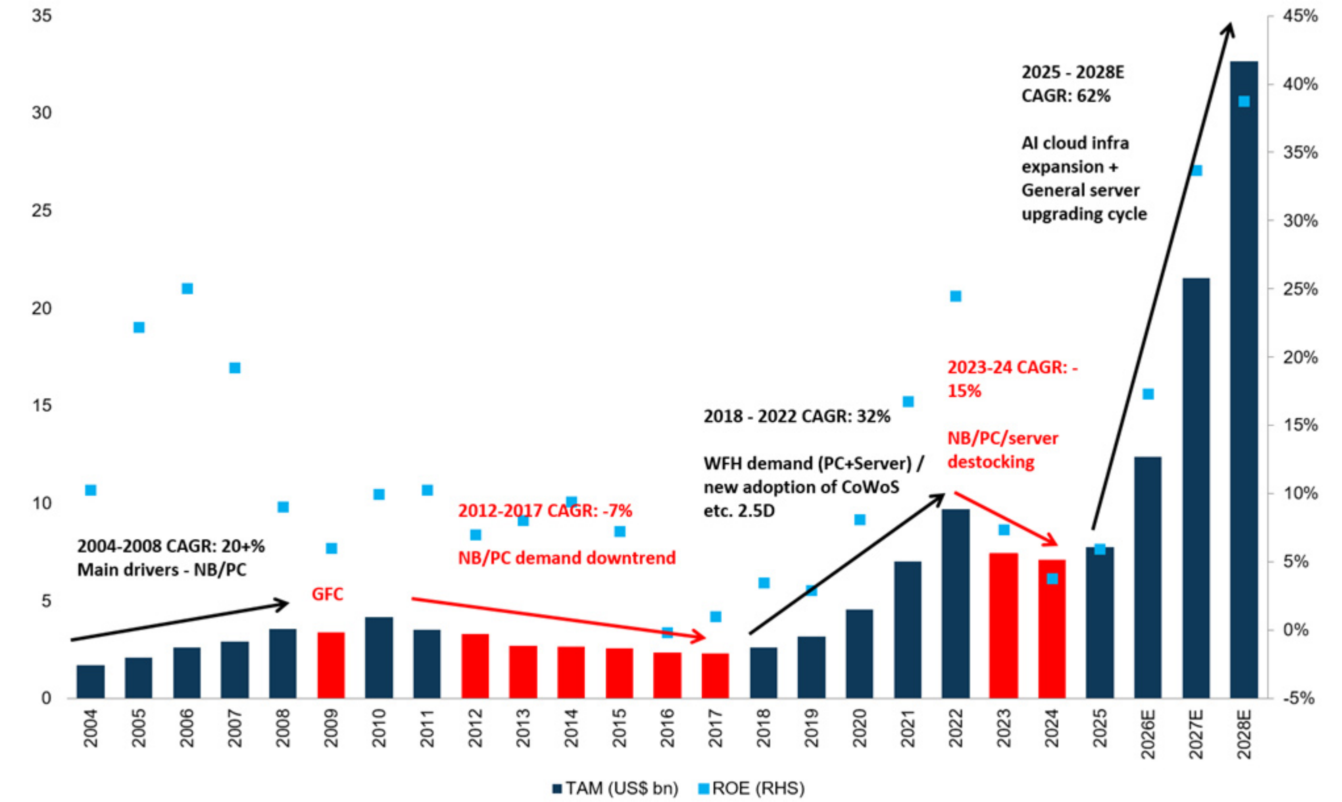

Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 2: We believe the ABF substrate industry UTR will continue trending up in 2H26 and reach full UTR**




Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 3: We believe we are in the early stages of a new ABF industry upcycle, and expect to see new ROE highs in coming years**

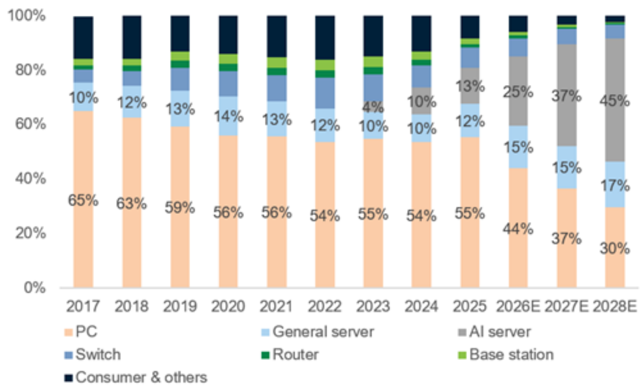



Source: Company data, Goldman Sachs Global Investment Research

**Demand update: AI servers and server CPUs are the key drivers the ABF substrate demand**

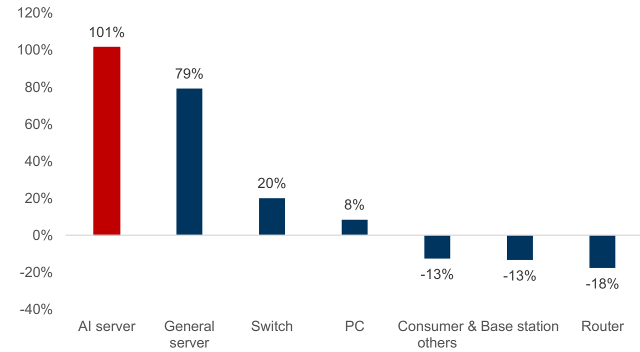
We expect ABF substrate TAM to reach US$33bn by 2028, up from US$7.7bn in 2025, implying a 62% 2025-28E CAGR (vs. our prior 33% estimate). Our upward revision is mainly due to (1) strong AI ABF substrate demand, driven primarily by a stronger ASIC substrate volume/price growth than we had expected, and (2) solid demand from general server CPUs, driven by agentic AI. We expect AI servers/general servers to account for 45%/17% of total 2028E demand, up from 13/12% in 2025 (Exhibit 4), and expect AI servers/general server ABF demand to grow at a 101/47% 2025-28E CAGR (Exhibit 5).

**Exhibit 4: ABF demand by application - AI server contribution continues to increase**




Source: Company data, Goldman Sachs Global Investment Research

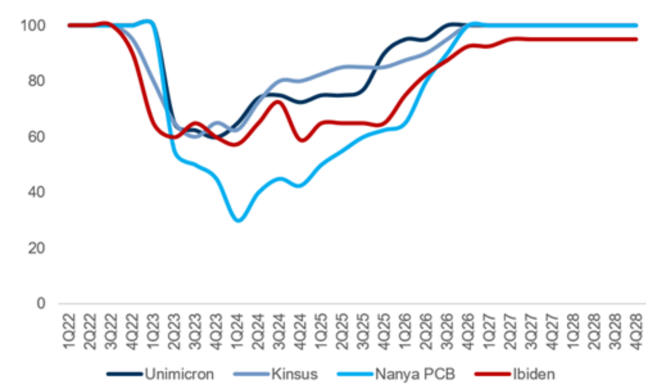
**Exhibit 5: AI servers to see strong 2025-28E demand growth, with a CAGR of 101%, followed by general servers at 79%**




Source: Company data, Goldman Sachs Global Investment Research

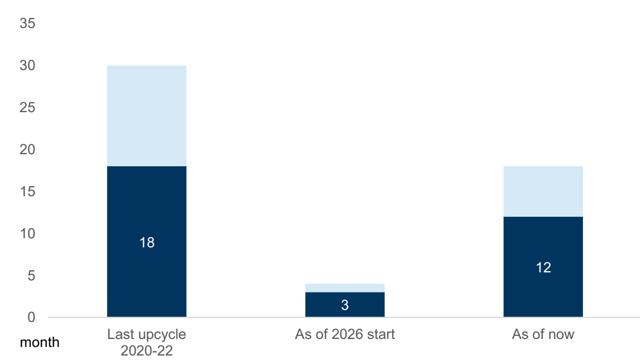
The substrate supply shortage started much earlier than our original expectation (we had expected that shortages would only start from 2H26), which is reflected in (1) increasing UTR, as NYPCB and Kinsus have already seen their UTRs trend up in 1H26, and we expect all major ABF suppliers to operate at full UTR from 2H26 through at least 2028; and (2) lengthening lead times, which have now extended to 12+ months, vs. 3-4 months in early 2026, and are likely to move closer to the 18-30 months range observed during the previous upcycle in 2020-22.

**Exhibit 6: We believe the ABF substrate industry UTR will continue trending up in 2H26 and reach full UTR**




Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 7: ABF substrate lead times have now reached 12+ months vs. 3-4 months at the start of 2026**
Lead time lower end and upper end




Source: Company data, Goldman Sachs Global Investment Research

We continue to see higher layer counts and larger body sizes for ABF substrates used in general server CPUs and AI chips, resulting in higher ABF area consumption per package. The ABF specification upgrade for general server CPUs is relatively moderate, and we expect a 30%+ increase in ABF area consumption for the next generation of Intel/AMD CPUs. However, we expect AI GPU's ABF area consumption to increase the most significantly. For example, we expect Nvidia's Rubin GPU to consume 123% more ABF area compared with the current Blackwell GPU, while the corresponding AI CPU is expected to see a 47% increase in ABF area consumption when comparing Nvidia's Vera and Grace CPUs. Current ASIC and switch platform upgrades also imply more ABF area consumption, but we expect their increase to fall behind that of AI GPUs.

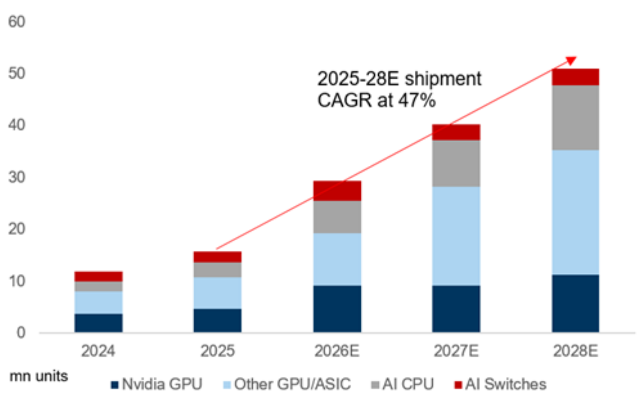
**Exhibit 8: Higher ABF area consumption driven by rising layer count and larger body size**

| Company | Type | Chip | Layer count | Length (mm) | Width (mm) | Body size ($mm^2$) | ABF area consumption |
|---|---|---|---|---|---|---|---|
| Intel | Server CPU | Eagle Stream | 16 | 100.0 | 56.5 | 5,650 | 90,400 |
| | | Birch Stream | 18 | 104.5 | 70.5 | 7,367 | 132,611 |
| | | Oak Stream | 20 | 109.2 | 88.0 | 9,606 | 192,129 |
| AMD | Server CPU | Genoa | 18 | 72.0 | 75.4 | 5,429 | 97,718 |
| | | Turin | 18 | 72.0 | 75.4 | 5,429 | 97,718 |
| | | Venice | 20 | 80.1 | 83.8 | 6,711 | 134,224 |
| Nvidia | AI CPU | Grace | 14 | 68.0 | 73.0 | 4,964 | 69,496 |
| | | Vera | 18 | 76.0 | 75.0 | 5,700 | 102,600 |
| Nvidia | AI GPU | Hopper | 14 | 60.0 | 55.0 | 3,300 | 46,200 |
| | | Blackwell | 16 | 80.0 | 70.0 | 5,600 | 89,600 |
| | | Rubin | 20 | 100.0 | 100.0 | 10,000 | 200,000 |
| Amazon | ASIC | Trainium 2 | 14 | 87.5 | 72.5 | 6,344 | 88,813 |
| | | Trainium 3 | 16 | 100.0 | 87.5 | 8,750 | 140,000 |
| | | Trainium 4 | 18 | 120.0 | 100.0 | 12,000 | 216,000 |
| Broadcom | Switch | Tomahawk 4 | 12 | 77.5 | 77.5 | 6,006 | 72,075 |
| | | Tomahawk 5 | 16 | 87.5 | 87.5 | 7,656 | 122,500 |
| | | Tomahawk 6 | 18 | 110.0 | 120.0 | 13,200 | 237,600 |

Source: Company data, Goldman Sachs Global Investment Research

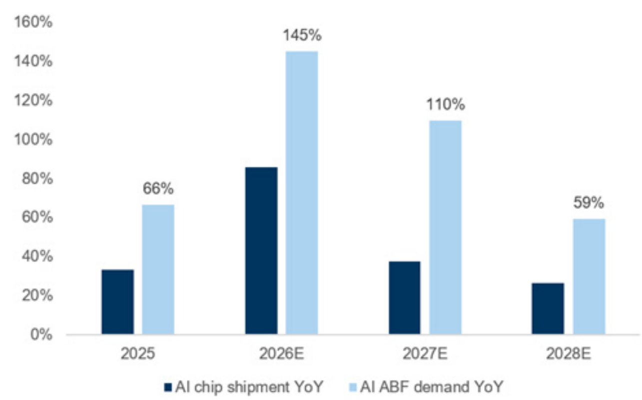
We expect AI ABF demand to grow at a 101% 2025-28E CAGR and account for 45% of total ABF demand by 2028, up from 13% in 2025, supported by strong shipment growth across all AI chips, especially for ASICs. For Nvidia GPUs, ABF demand growth is increasing driven by higher ABF content per chip, outpacing that of other AI chips. While we also expect increasing ABF content per chip for ASICs, ABF demand growth from ASICs over 2025-28E will likely be driven more by shipment volume growth, at a 58% 2025-28E CAGR. For AI CPUs, we also see NVDA's launch of the new Vera standalone rack implying more demand upside for AI CPU shipments. Overall, the increasing ABF area consumption for next gen AI chips should continue to drive overall ABF demand, and we expect AI ABF demand YoY growth to outpace AI chip shipment YoY growth in 2025-28E (Exhibit 10).

**Exhibit 9: AI chip shipments to grow at a 47% CAGR from 2025-28E**




Source: Company data, Goldman Sachs Global Investment Research

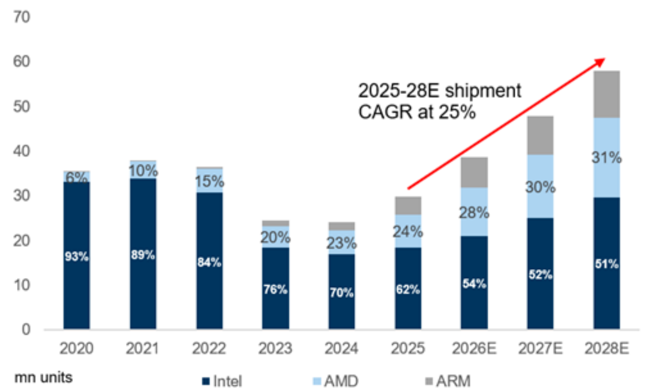
**Exhibit 10: AI ABF demand growth YoY should significantly outpace shipments growth YoY**




Source: Company data, Goldman Sachs Global Investment Research

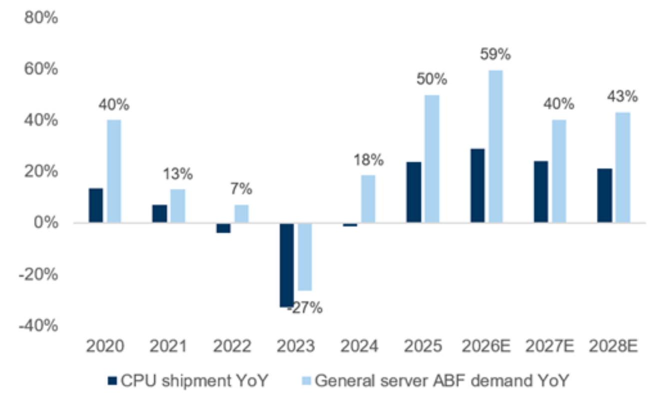
We expect general server CPU ABF demand to grow at a 47% 2025-28E CAGR and account for 17% of total ABF demand by 2028, up from 12% in 2025, with stable CPU shipments growing at a 25% 2025-28E CAGR. General server CPU demand is primarily driven by the growing adoption of agentic AI, which we could see lasting for another 3-5 years. As agentic AI applications become mainstream, we expect the GPU/CPU attach rates to move from 2x to 1.1-1.4x over time, implying that each GPU deployment will require more CPUs (see GS analyst Jim Schneider's Intel initiation). We expect a modest increase in ABF area consumption for general server CPUs compared with AI chips, with ABF area consumption increasing by 30%+ for next generation of Intel/AMD CPUs. As a result, we continue to expect general server CPU ABF demand YoY growth to outpace general server CPU shipments YoY in 2025-28E (Exhibit 12).

**Exhibit 11: General server CPU shipments to grow at a moderate 25% CAGR from 2025-28E**




Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 12: General server ABF demand YoY will continue to outpace shipments YoY**




Source: Company data, Goldman Sachs Global Investment Research

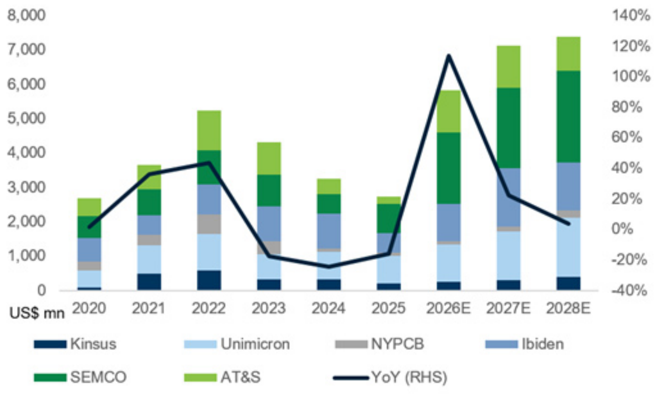
**Supply update: We expect ABF suppliers will start to announce more CAPEX plans in coming quarters, although new capacity will likely only come online after 2H28**

Compared with our previous ABF report update, we have seen some Taiwan ABF suppliers revise up their 2026 CAPEX plans since then: ZDT raised its plan from NT$50bn to NT$80bn in April and Unimicron raised theirs from NT$25bn to NT$34bn on their 1Q26 results call). Considering ongoing upgrades in ABF substrate specifications (including higher layer count, larger body size, etc.) and ABF suppliers continuing to invest in technology upgrades to support next generation packaging (including CoPoS, glass substrate, EMIB-T, etc.), customers are requesting more long-term capacity, with some already requesting capacity beyond 2029. As a result, we expect ABF suppliers to announce additional CAPEX plans over the coming quarters/years to support sustained demand growth.

However, ABF substrate capacity volume will continue to decline as packaging body sizes increase and layer counts rise. This capacity inefficiency is driven by increasing production complexity associated with more advanced substrate designs; hence, we expect existing capacity efficiency to continue declining by ~10% annually if specification upgrades continue at their current pace.

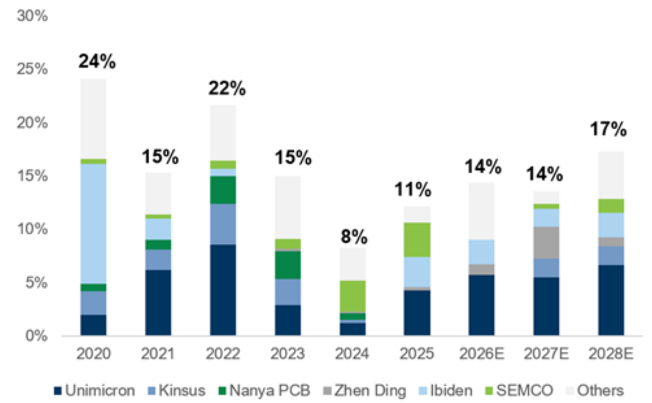
We expect overall ABF supply to reach a 15% CAGR in 2025-28E (Exhibit 14), supported by elevated CAPEX plans across the major ABF suppliers growing at 40% CAGR in 2025-28E (Exhibit 13). The current pace of capacity expansion is tracking behind CAPEX increases mainly due to (1) long equipment lead times, with some newly announced capacity becoming available only after 2028 and (2) some suppliers are also allocating CAPEX to other segment of their businesses (including MLCC, PCB, etc). However, we are seeing more ABF suppliers planning capacity beyond 2029, as their customers request more long-term capacity (Exhibit 15).

**Exhibit 13: We expect ABF suppliers' combined CAPEX to remain elevated in order to meet growing capacity requirements**




Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 14: We believe the overall pace of ABF substrate industry capacity will increase gradually in the coming years**




Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 15: ABF suppliers' capacity expansion plan going forward**

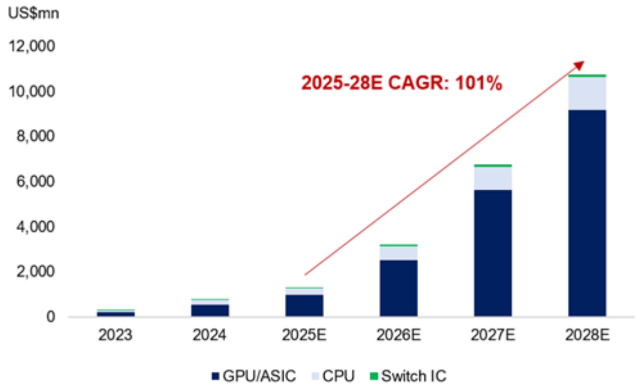
| Company | Expansion plant | Capex | Time of new capacity come on-line | Capacity expansion |
|---|---|---|---|---|
| **Unimicron** | KF plant 2<br>YM plant 2 | KF plant 1: NT$30bn+<br>KF plant 2: NT$35-40bn<br>YM plant 2: NT35-40bn | KF plant 1 phase 3: starts in 3Q26<br>KF plant 2: start in 2H27<br>YM plant 2: start in mid 2028 | KF plant 1 phase 3: Additional 15-20% of total capacity per GSe<br>KF plant 2: Additional 15-20% of total capacity per GSe<br>YM plant 2: Additional 10-15% of total capacity per GSe |
| **Kinsus** | Yangmei K6 plant | Yangmei K6 plant phase 2: NT$7bn in 2026<br>Yangmei K6 plant phase 3: NT$8bn in 2027 per GSe<br>Yangmei K6 plant phase 4: NT$8bn+ in 2028 per GSe | Yangmei K6 plant phase 2: 2027<br>Yangmei K6 plant phase 3: 2028<br>Yangmei K6 plant phase 4: 2029 | Yangmei K6 plant phase 2: 10mn units<br>Yangmei K6 plant phase 3: 15mn units<br>Yangmei K6 plant phase 4: 15mn units |
| **Ibiden** | Gama Plant<br>Ono Plant | Gama Plant: ~220bn JPY<br>Ono Plant: ~280bn JPY | Gama Plant: From FY27, Mass Production From FY28<br>Ono Plant: 1/4 each from FY25-FY28 (280bn investment is for latter half) | Gama Plant: ~15% vs FY24 ASIC/AI Server Capacity<br>Ono Plant: ~85% vs FY24 ASIC/AI Server Capacity |
| **AT&S** | Kulim plant | Kulim Phase 2: EUR1.5-2.0bn (supported by LT customer commitments) | Kulim phase 2: 2028 per GSe | Kulim Phase 2: additional 25% of total capacity per GSe |
| **ZDT** | Kaohsiung plant<br>Shenzhen plant | Capex for IC substrate at NT$12-16bn in 2026 | Shenzhen fab 2: equipment installation in 2H26/2027, MP in 2027<br>Kaohsiung AI fab: MP in 2H26 | Kaohsiung: Additional 38% capacity expansion per GSe |
| **TOPPAN** | AST Phase1 (Singapore)<br>Ishikawa (Advanced packaging)<br>New Ishikawa FC-BGA<br>AST Phase2 (Singapore) | N/A | AST Phase1 line : Mass production launch scheduled for FY27<br>Ishikawa (Advanced packaging) : Statup schedules for July 2026, mass production scheduled for FY28 or later<br>New Ishikawa FC-BGA line : Mass production scheduled for FY30 or later<br>AST Phase2 line : Timing TBD | Ishikawa (Advanced packaging) : limited contribution to the overall capacity<br>Others : roughly the same size as the existing three domestic lines |
| **SEMCO** | Vietnam plant | KRW1.8bn | Vietnam plant: operation starts in 2H27 | Vietnam plant: additional 15% of total capacity per GSe |

Source: Company data, Goldman Sachs Global Investment Research

### Supply / demand update: We believe the overall ABF substrate industry will see shortage ratios of 14%/34%/51% in 2H26/2027/2028, leading to a favorable pricing outlook

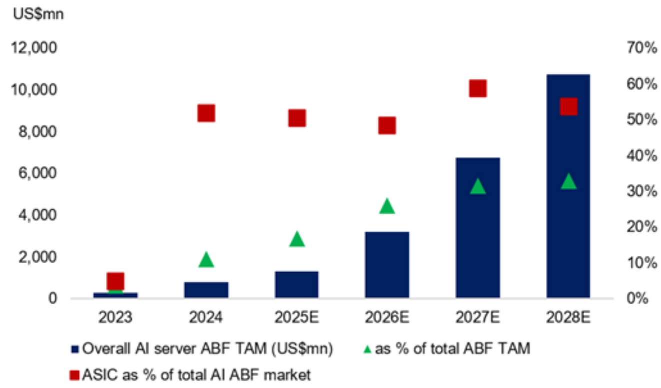
We update our ABF industry model, and now expect the ABF TAM to grow at a 62% 2025-28E CAGR (vs. 33% over 2025-28E, previously). The upward revision is mainly driven by (1) the strong AI server growth, especially on the ASIC shipments, and (2) rapid growth in general server CPU shipments which we expect to continue ramping at a 25% 2025-28E CAGR, driven mainly by solid agentic AI demand. Furthermore, while several suppliers have announced new capacity expansion plan for the coming years and some ABF substrate suppliers are even evaluating new CAPEX plans for the long term (beyond 2029), we expect near term supply to remain constrained by long equipment lead times, resulting in overall ABF supply growing at only a 15% 2025-28E CAGR, leading to overall undersupply ratios of 14%/34%/51% in 2H26/27/28, respectively.

**Exhibit 16: We forecast key AI IC substrate TAM will continue to grow at a 101% 2025-28E CAGR (revised up from 66%)**




Source: Company data, Goldman Sachs Global Investment Research

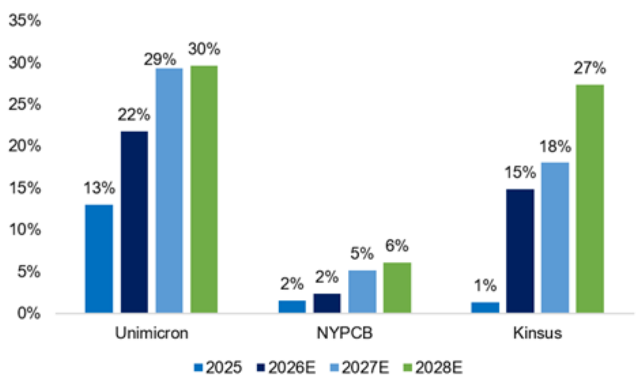
**Exhibit 17: ASIC to account for 50%+ of total AI ABF substrate demand in 2028E**




Source: Company data, Goldman Sachs Global Investment Research

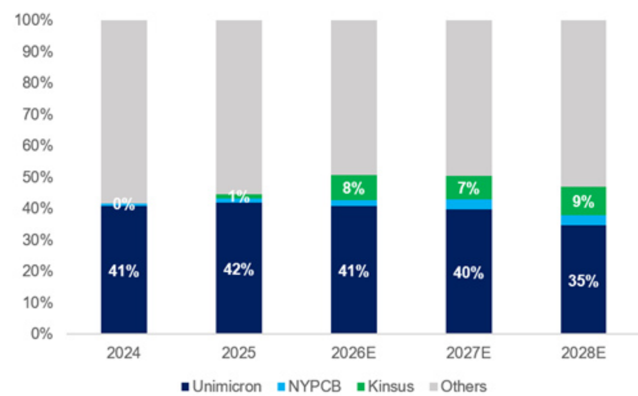
In terms of market share, we continue to see Kinsus gaining market share in the NVDA supply chain (especially for AI server CPUs and NVSwitch ICs). We expect Kinsus to hold 8/7/9% of AI substrate market share in 2026/27/28E (up from 1% in 2025E) and AI to account for 15%/18%/27% of the company's total revenue in 2026/27/28E (vs. 2% in 2025).

**Exhibit 18: We believe Kinsus' AI ABF revenue exposure will accelerate in 2025-28E**




Source: Company data, Goldman Sachs Global Investment Research

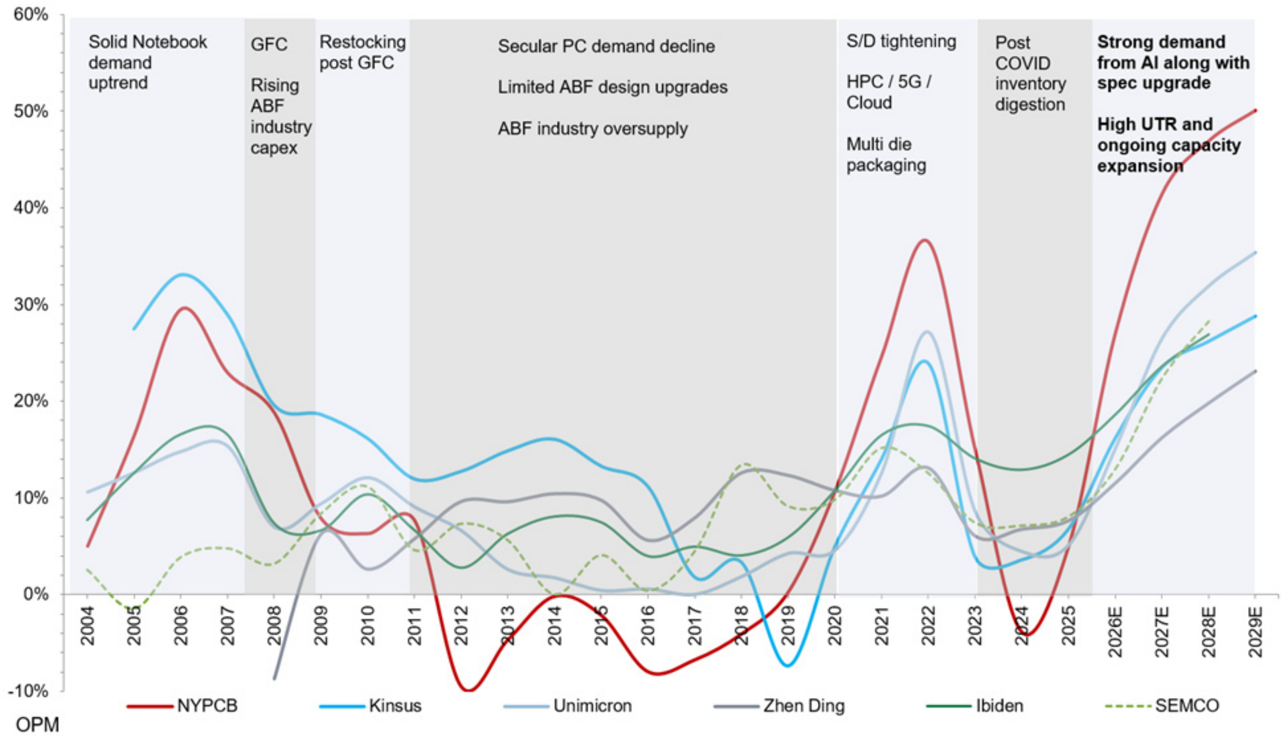
**Exhibit 19: We expect Kinsus will continue to gain share in the AI ABF market in coming years**




Source: Company data, Goldman Sachs Global Investment Research

Due to the accelerating shortage ratio we anticipate in 2025-28E, we now expect the ABF substrate LTA/spot prices to increase by 10-15%/20%+ QoQ per quarter from 3Q26 through to at least the end of 2027, and expect the shortages will continue into 2028 and possibly beyond. The stronger ABF pricing environment suggests a solid upside potential to our OPM estimates for all 4 ABF substrate players in Taiwan in the coming quarters/years (Exhibit 20).

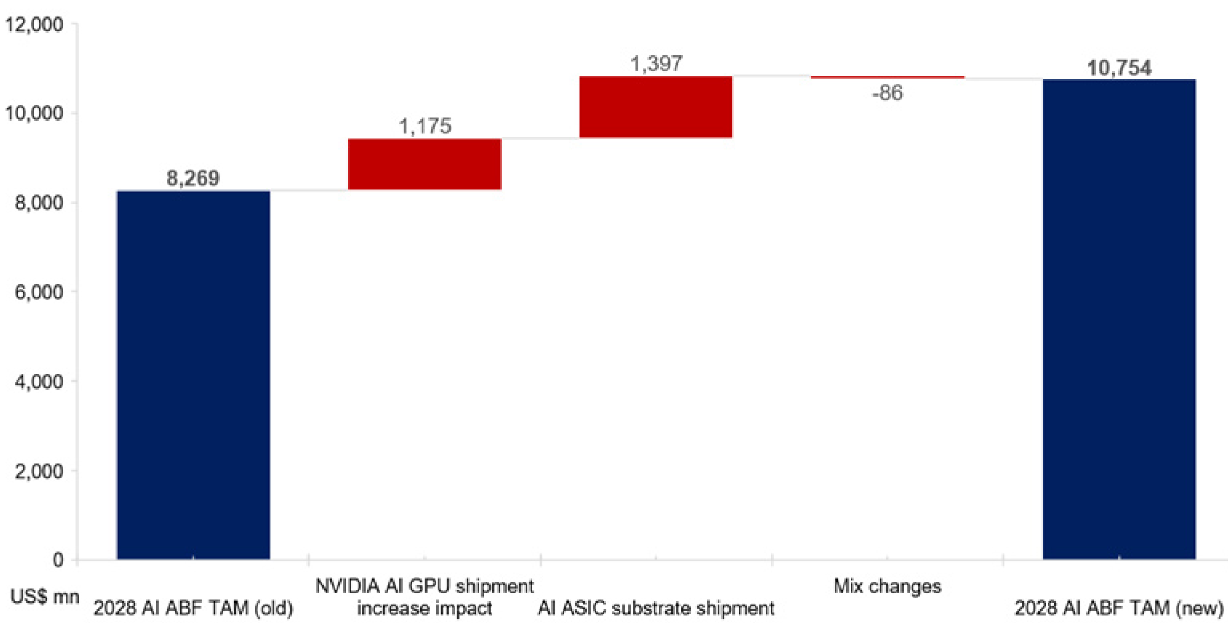
**Exhibit 20: We expect the ongoing OPM uptrend to continue, while we believe spot price players could deliver their strongest OPM growth in coming quarters/years**




OPMs are on a companywide basis

Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 21: We revise up our 2028E AI ABF substrate TAM by 30% to factor in our more positive view on stronger AI substrate shipments and larger AI substrate sizes**




Source: Company data, Goldman Sachs Global Investment Research

## 2Q26 & 3Q26 preview - stronger ABF substrate pricing to drive GM expansion

For the upcoming 2Q result, **we believe all four TW ABF substrate companies will see better than expected earnings (4-38% higher than BBG consensus)**, mainly driven by much higher ABF substrate volume shipments and stronger ASP/pricing thanks to the substrate supply tightness from 2Q.

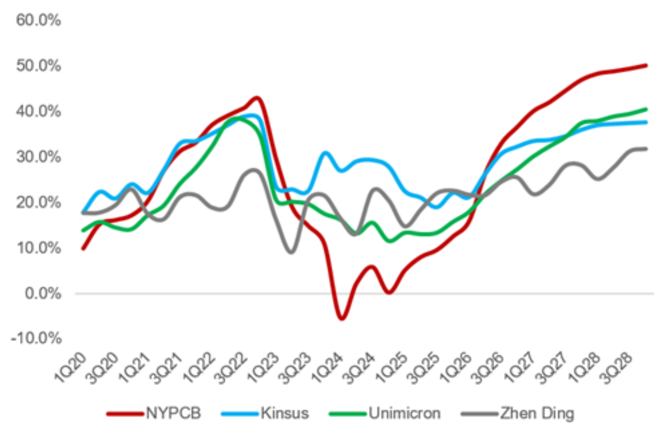
Considering that spot prices increased by 40%+ from April, we expect key spot price player NYPCB, which had 80% exposure to the spot price market in 1Q26, to see its GM expand from <16% in 1Q26 to 26%+ in 2Q26. The 10ppt QoQ GM expansion should mainly be due to better pricing, likely allowing NYPCB to continue to outgrow all other ABF substrate suppliers who have greater LTA exposure. For Unimicron/Kinsus/ZDT, we expect the three companies' GM to surpass BBG consensus by 0.2/1.2/0.3ppt, respectively, on strengthening product mix and improving pricing conditions.

Going into 3Q, we expect all four TW ABF substrate suppliers to deliver even stronger earnings growth, while **our 3Q26 operating income estimate for all 4 ABF substrate suppliers are 9-53% higher than BBG consensus**. We expect the **4 TW ABF players' GM/OPM to expand by 3.5ppt/4.7ppt in 3Q26**, reflecting even more positive ABF substrate ASP/price hike trends in 3Q26. **For NYPCB, we believe the GM/OPM will again expand the most in 3Q26 with +6.7ppt/+7.2ppt GM/OPM QoQ**, again supported by a more favorable ABF substrate spot price outlook. For Unimicron/Kinsus/ZDT, we expect these three companies' OPM to surpass BBG consensus by 1.5/3.7/0.9ppt, on a stronger product mix and improved pricing conditions.

Overall, **we believe the ABF substrate pricing uptrend just started in 2Q26, and we should see further acceleration in ABF substrate pricing given the shortage conditions (i.e., no IC can be packaged without a substrate), leading to a favorable profitability outlook over the coming quarters/years.** Within the Taiwan ABF substrate industry, we prefer the spot price players (with NYPCB (CL-Buy) as the key spot price player here), considering the potential upside to their GM/OPM outlook, which are both still 15ppt below the peak level. We believe sustained AI infrastructure investment demand and long equipment lead times will continue to drive spot prices much more strongly than LTA pricing, suggesting solid earnings upside potential, which we should start seeing in 2Q26 results.

**Exhibit 22: We believe NYPCB will start seeing a major jump in GM from 2H26, while all our covered ABF players should see better GMs in coming quarters**

4 TW ABF substrate players' quarterly GM trend




Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 23: 4 TW ABF substrate players' 3Q26 vs 2Q26 earnings estimate, we expect solid margin expansion for NYPCB/Kinsus**

| NT$ mn; GSe | NYPCB | | | Kinsus | | | Unimicron | | | ZDT | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2Q26 | 3Q26 | QoQ | 2Q26 | 3Q26 | QoQ | 2Q26 | 3Q26 | QoQ | 2Q26 | 3Q26 | QoQ |
| Sales | 13,575 | 17,659 | 30% | 12,496 | 14,756 | 18% | 42,920 | 50,138 | 17% | 48,431 | 63,831 | 32% |
| Gross Profit | 3,568 | 5,815 | 63% | 3,282 | 4,533 | 38% | 9,306 | 12,435 | 34% | 10,430 | 15,637 | 50% |
| EBIT | 3,144 | 5,354 | 70% | 1,717 | 2,814 | 64% | 5,743 | 8,474 | 48% | 4,013 | 8,488 | 112% |
| Net Income | 2,755 | 4,316 | 57% | 1,093 | 2,065 | 89% | 5,339 | 6,225 | 17% | 2,418 | 5,393 | 123% |
| **EPS (NT$)** | **4.26** | **6.68** | **57%** | **2.34** | **4.42** | **89%** | **3.47** | **4.05** | **17%** | **2.26** | **5.03** | **123%** |
| *GM (%)* | *26.3%* | *32.9%* | *6.7ppt* | *26.3%* | *30.7%* | *4.5ppt* | *21.7%* | *24.8%* | *3.1ppt* | *21.5%* | *24.5%* | *3.0ppt* |
| *OPM (%)* | *23.2%* | *30.3%* | *7.2ppt* | *13.7%* | *19.1%* | *5.3ppt* | *13.4%* | *16.9%* | *3.5ppt* | *8.3%* | *13.3%* | *5.0ppt* |

Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 24: 2Q26 & 3Q26 GSe vs. BBG consensus comp table**

| NT$ mn | 2Q26E | | | | 3Q26E | | | |
|---|---|---|---|---|---|---|---|---|
| **GSe** | **NYPCB** | **Kinsus** | **Unimicron** | **ZDT** | **NYPCB** | **Kinsus** | **Unimicron** | **ZDT** |
| Sales | 13,575 | 12,496 | 42,920 | 48,431 | 17,659 | 14,756 | 50,138 | 63,831 |
| Gross Profit | 3,568 | 3,282 | 9,306 | 10,430 | 5,815 | 4,533 | 12,435 | 15,637 |
| EBIT | 3,144 | 1,717 | 5,743 | 4,013 | 5,354 | 2,814 | 8,474 | 8,488 |
| Net Income | 2,755 | 1,093 | 5,339 | 2,418 | 4,316 | 2,065 | 6,225 | 5,393 |
| **EPS (NT$)** | **4.26** | **2.34** | **3.47** | **2.26** | **6.68** | **4.42** | **4.05** | **5.03** |
| *GM (%)* | *26.3%* | *26.3%* | *21.7%* | *21.5%* | *32.9%* | *30.7%* | *24.8%* | *24.5%* |
| *OPM (%)* | *23.2%* | *13.7%* | *13.4%* | *8.3%* | *30.3%* | *19.1%* | *16.9%* | *13.3%* |
| **BBG consensus** | **NYPCB** | **Kinsus** | **Unimicron** | **ZDT** | **NYPCB** | **Kinsus** | **Unimicron** | **ZDT** |
| Sales | 13,318 | 12,529 | 42,338 | 45,704 | 16,449 | 14,451 | 48,869 | 62,737 |
| Gross Profit | 2,633 | 3,136 | 9,082 | 9,711 | 3,834 | 3,892 | 11,446 | 15,367 |
| EBIT | 2,329 | 1,602 | 5,285 | 3,821 | 3,498 | 2,225 | 7,542 | 7,802 |
| Net Income | 1,953 | 1,077 | 5,034 | 2,323 | 2,879 | 1,600 | 6,348 | 4,899 |
| **EPS (NT$)** | **3.10** | **2.24** | **3.28** | **2.11** | **4.58** | **3.16** | **4.11** | **4.50** |
| *GM (%)* | *19.8%* | *25.0%* | *21.5%* | *21.2%* | *23.3%* | *26.9%* | *23.4%* | *24.5%* |
| *OPM (%)* | *17.5%* | *12.8%* | *12.5%* | *8.4%* | *21.3%* | *15.4%* | *15.4%* | *12.4%* |
| **Differences (GSe vs. BBG)** | **NYPCB** | **Kinsus** | **Unimicron** | **ZDT** | **NYPCB** | **Kinsus** | **Unimicron** | **ZDT** |
| Sales | 2% | 0% | 1% | 6% | 7% | 2% | 3% | 2% |
| Gross Profit | 35% | 5% | 2% | 7% | 52% | 16% | 9% | 2% |
| EBIT | 35% | 7% | 9% | 5% | 53% | 26% | 12% | 9% |
| Net Income | 41% | 1% | 6% | 4% | 50% | 29% | -2% | 10% |
| **EPS (NT$)** | **38%** | **4%** | **6%** | **7%** | **46%** | **40%** | **-2%** | **12%** |
| *GM (%)* | *6.5ppt* | *1.2ppt* | *0.2ppt* | *0.3ppt* | *9.6ppt* | *3.8ppt* | *1.4ppt* | *0.0ppt* |
| *OPM (%)* | *5.7ppt* | *1.0ppt* | *0.9ppt* | *-0.1ppt* | *9.1ppt* | *3.7ppt* | *1.5ppt* | *0.9ppt* |

Source: Company data, Goldman Sachs Global Investment Research, Bloomberg

## Earnings estimate changes: Faster than expected margin expansion driven by better ABF substrate

## Earnings revisions

### NYPCB

We revise up our 2026/27/28E earnings estimates by 9%/22%/36% to factor in much more favorable supply/demand outlook for ABF substrate, with higher pricing driven by supply constraints. The stronger-than-expected demand pull-in for ABF substrates should continue to support pricing uplift longer term. Considering the stronger ABF substrate pricing outlook, we revise up our 2026/27/28E GM by 4.8/8.3/10.5ppt. We revise down 2026E revenue by 12% due to the weaker-than-expected shipments driven by material shortages the in near term but revise up our 2028E revenue by 9% to factor in stronger long-term demand for ABF substrates.

Also, we introduce our 2029E earnings estimates in this report.

**Exhibit 25: NYPCB earnings revision table**

| NYPCB P&L (NT$ mn) | 2026E New | 2026E Old | Diff. | 2027E New | 2027E Old | Diff. | 2028E New | 2028E Old | Diff. | 2029E New |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 64,805 | 73,477 | -12% | 127,361 | 127,932 | 0% | 194,486 | 178,551 | 9% | 295,639 |
| Gross Profit | 19,351 | 18,378 | 5% | 55,812 | 45,427 | 23% | 95,782 | 69,255 | 38% | 155,062 |
| EBIT | 17,488 | 16,279 | 7% | 52,764 | 42,363 | 25% | 91,270 | 65,114 | 40% | 148,104 |
| Net Income | 14,478 | 13,232 | 9% | 41,783 | 34,166 | 22% | 71,191 | 52,209 | 36% | 116,387 |
| **EPS (NT$)** | **22.41** | **20.48** | **9%** | **64.66** | **52.88** | **22%** | **110.17** | **80.80** | **36%** | **180.12** |
| **Ratio analysis** | | | | | | | | | | |
| Gross margin | 29.9% | 25.0% | 4.8pp | 43.8% | 35.5% | 8.3pp | 49.2% | 38.8% | 10.5pp | 52.4% |
| EBIT margin | 27.0% | 22.2% | 4.8pp | 41.4% | 33.1% | 8.3pp | 46.9% | 36.5% | 10.5pp | 50.1% |
| Net margin | 22.3% | 18.0% | 4.3pp | 32.8% | 26.7% | 6.1pp | 36.6% | 29.2% | 7.4pp | 39.4% |

Source: Goldman Sachs Global Investment Research

### Kinsus

We revise down our 2026E net earnings by 2% after applying a more conservative margin assumption on its IC substrate business in 2Q26E but revise up our 2027/28E net earnings by 8/38%, driven by a better ABF substrate pricing outlook and a much more favorable supply demand outlook for the overall ABF substrate market. We revise up our 2027/28 revenue estimate by 9%/34% and revise up our 2028 GM by 0.5ppt.

Also, we introduce our 2029E earnings estimates in this report.

**Exhibit 26: Kinsus earnings revision table**

| Kinsus P&L (NT$ mn) | 2026E New | 2026E Old | Diff. | 2027E New | 2027E Old | Diff. | 2028E New | 2028E Old | Diff. | 2029E New |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 54,949 | 55,190 | 0% | 95,645 | 87,849 | 9% | 154,185 | 114,962 | 34% | 236,684 |
| Gross Profit | 15,529 | 15,580 | 0% | 33,138 | 30,449 | 9% | 57,734 | 42,497 | 36% | 94,697 |
| EBIT | 8,895 | 8,864 | 0% | 22,494 | 20,669 | 9% | 40,422 | 29,592 | 37% | 68,211 |
| Net Income | 6,250 | 6,358 | -2% | 17,030 | 15,702 | 8% | 31,701 | 22,986 | 38% | 54,488 |
| **EPS (NT$)** | **13.36** | **13.60** | -2% | **36.42** | **33.58** | 8% | **67.79** | **49.15** | 38% | **116.52** |
| **Ratio analysis** | | | | | | | | | | |
| Gross margin | 28.3% | 28.2% | 0.0ppt | 34.6% | 34.7% | 0.0ppt | 37.4% | 37.0% | 0.5ppt | 40.0% |
| EBIT margin | 16.2% | 16.1% | 0.1ppt | 23.5% | 23.5% | 0.0ppt | 26.2% | 25.7% | 0.5ppt | 28.8% |
| Net margin | 11.4% | 11.5% | -0.1ppt | 17.8% | 17.9% | -0.1ppt | 20.6% | 20.0% | 0.6ppt | 23.0% |

Source: Goldman Sachs Global Investment Research

### Unimicron

We revise down our 2026E revenue by 1% to reflect weaker-than-expected shipments due to material shortages but revise up our 2027/28E revenue estimate by 2/6% to factor in the better demand visibility for ABF substrates, supporting a steeper pricing uplift in the longer term. We revise up our 2026/27/28E GM by 0.8/2.4/2.1ppt, resulting in 7/12/10% higher EPS estimates with improvement in operating leverage.

Also, we introduce our 2029E earnings estimates in this report.

**Exhibit 27: Unimicron earnings revision table**

| Unimicron P&L (NT$ mn) | 2026E New | 2026E Old | Diff. | 2027E New | 2027E Old | Diff. | 2028E New | 2028E Old | Diff. | 2029E New |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 188,516 | 191,063 | -1% | 299,174 | 293,972 | 2% | 424,900 | 402,458 | 6% | 583,347 |
| Gross Profit | 44,333 | 43,497 | 2% | 101,274 | 92,603 | 9% | 166,786 | 149,463 | 12% | 246,555 |
| EBIT | 28,373 | 27,336 | 4% | 79,287 | 70,995 | 12% | 135,710 | 120,028 | 13% | 206,613 |
| Net Income | 25,490 | 23,874 | 7% | 61,401 | 54,844 | 12% | 102,742 | 93,527 | 10% | 162,368 |
| **EPS (NT$)** | **16.58** | **15.53** | **7%** | **40.33** | **36.03** | **12%** | **66.82** | **60.83** | **10%** | **106.66** |
| **Ratio analysis** | | | | | | | | | | |
| Gross margin | 23.5% | 22.8% | 0.8pp | 33.9% | 31.5% | 2.4pp | 39.3% | 37.1% | 2.1pp | 42.3% |
| EBIT margin | 15.1% | 14.3% | 0.7pp | 26.5% | 24.2% | 2.4pp | 31.9% | 29.8% | 2.1pp | 35.4% |
| Net margin | 13.5% | 12.5% | 1.0pp | 20.5% | 18.7% | 1.9pp | 24.2% | 23.2% | 0.9pp | 27.8% |

Source: Goldman Sachs Global Investment Research

### ZDT

We revise down our 2026E revenue by 1% considering the material shortage, which has led to weaker-than-expected shipments and revise up our 2027/28E revenue estimates by 2/11% to factor in the stronger-than-expected ABF substrate pull-ins and a better pricing outlook. We revised down ZDT's 2026E GM by 0.2ppt due to weaker shipments, resulting in 3% lower 2026E EPS estimates, but we revise up 2027/28 GM by 0.4/2.3ppt to reflect a much stronger than expected ABF substrate pricing outlook, resulting in 4/25% higher EPS estimates.

Also, we introduce our 2029E earnings estimates in this report

**Exhibit 28: ZDT earnings revision table**

| ZD Tech P&L (NT$ mn) | 2026E New | 2026E Old | Diff. | 2027E New | 2027E Old | Diff. | 2028E New | 2028E Old | Diff. | 2029E New |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 224,680 | 226,449 | -1% | 327,764 | 321,782 | 2% | 454,047 | 407,834 | 11% | 602,605 |
| Gross Profit | 53,140 | 54,060 | -2% | 85,019 | 82,163 | 3% | 133,376 | 110,548 | 21% | 197,093 |
| EBIT | 25,882 | 26,593 | -3% | 53,206 | 50,922 | 4% | 89,985 | 71,561 | 26% | 139,326 |
| Net Income | 16,363 | 16,789 | -3% | 33,322 | 31,958 | 4% | 54,498 | 43,500 | 25% | 83,856 |
| **EPS (NT$)** | **15.27** | **15.66** | **-3%** | **31.09** | **29.81** | **4%** | **50.84** | **40.58** | **25%** | **78.23** |
| **Ratio analysis** | | | | | | | | | | |
| Gross margin | 23.7% | 23.9% | -0.2pp | 25.9% | 25.5% | 0.4pp | 29.4% | 27.1% | 2.3pp | 32.7% |
| EBIT margin | 11.5% | 11.7% | -0.2pp | 16.2% | 15.8% | 0.4pp | 19.8% | 17.5% | 2.3pp | 23.1% |
| Net margin | 7.3% | 7.4% | -0.1pp | 10.2% | 9.9% | 0.2pp | 12.0% | 10.7% | 1.3pp | 13.9% |

Source: Goldman Sachs Global Investment Research

## Valuation

### NYPCB

We are Buy rated (on CL) with a new 12-month TP of NT$2,310 (from NT$1,115), based on the same 21.0x P/E on 2028E EPS (rolled over from 2027E). We believe the company could trade at 1.5x STDV above the past upcycle average P/E of 13.3x, as we continue to expect better pricing condition for ABF substrates, and factor in our latest earnings revisions.

## Exhibit 29: NYPCB P&L table

| NT$mn | 1Q25 | 2Q25 | 3Q25 | 4Q25 | 1Q26 | 2Q26E | 3Q26E | 4Q26E | 1Q27E | 2Q27E | 3Q27E | 4Q27E | 2024 | 2025 | 2026E | 2027E | 2028E | 2029E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue | 8,458 | 9,583 | 10,967 | 11,165 | 11,177 | 13,575 | 17,659 | 22,393 | 25,209 | 29,637 | 34,098 | 38,417 | 32,283 | 40,173 | 64,805 | 127,361 | 194,486 | 295,639 |
| Gross profit | 430 | 769 | 1,050 | 1,398 | 1,771 | 3,568 | 5,815 | 8,197 | 10,106 | 12,457 | 15,202 | 18,047 | 358 | 3,647 | 19,351 | 55,812 | 95,782 | 155,062 |
| Operating expense | (397) | (403) | (429) | (435) | (419) | (424) | (461) | (559) | (635) | (706) | (808) | (899) | (1,624) | (1,665) | (1,863) | (3,048) | (4,511) | (6,958) |
| Operating income | 33 | 366 | 620 | 963 | 1,352 | 3,144 | 5,354 | 7,638 | 9,471 | 11,751 | 14,394 | 17,147 | (1,267) | 1,982 | 17,488 | 52,764 | 91,270 | 148,104 |
| Pretax income | 256 | (227) | 907 | 1,409 | 1,598 | 3,444 | 5,534 | 7,818 | 9,471 | 11,751 | 14,394 | 17,147 | 163 | 2,346 | 18,394 | 52,764 | 91,270 | 148,824 |
| Taxes expense | (49) | 39 | (182) | (207) | (290) | (689) | (1,217) | (1,720) | (1,800) | (2,585) | (3,167) | (3,429) | 41 | (399) | (3,916) | (10,981) | (20,079) | (32,437) |
| Net income | 207 | (187) | 725 | 1,202 | 1,309 | 2,755 | 4,316 | 6,098 | 7,672 | 9,166 | 11,228 | 13,718 | 204 | 1,947 | 14,478 | 41,783 | 71,191 | 116,387 |
| **EPS, NT$** | **0.32** | **(0.29)** | **1.12** | **1.86** | **2.03** | **4.26** | **6.68** | **9.44** | **11.87** | **14.19** | **17.38** | **21.23** | **0.32** | **3.01** | **22.41** | **64.66** | **110.17** | **180.12** |
| **Ratio analysis and assumption** | | | | | | | | | | | | | | | | | | |
| **As % of sales** | | | | | | | | | | | | | | | | | | |
| Gross margin | 5.1% | 8.0% | 9.6% | 12.5% | 15.8% | 26.3% | 32.9% | 36.6% | 40.1% | 42.0% | 44.6% | 47.0% | 1.1% | 9.1% | 29.9% | 43.8% | 49.2% | 52.4% |
| Operating expense ratio | 4.7% | 4.2% | 3.9% | 3.9% | 3.8% | 3.1% | 2.6% | 2.5% | 2.5% | 2.4% | 2.4% | 2.3% | 5.0% | 4.1% | 2.9% | 2.4% | 2.3% | 2.4% |
| Operating margin | 0.4% | 3.8% | 5.7% | 8.6% | 12.1% | 23.2% | 30.3% | 34.1% | 37.6% | 39.6% | 42.2% | 44.6% | -3.9% | 4.9% | 27.0% | 41.4% | 46.9% | 50.1% |
| Net margin | 2.5% | -2.0% | 6.6% | 10.8% | 11.7% | 20.3% | 24.4% | 27.2% | 30.4% | 30.9% | 32.9% | 35.7% | 0.6% | 4.8% | 22.3% | 32.8% | 36.6% | 39.4% |
| **QoQ growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | 7.5% | 13.3% | 14.4% | 1.8% | 0.1% | 21.5% | 30.1% | 26.8% | 12.6% | 17.6% | 15.1% | 12.7% | - | - | - | - | - | - |
| Gross profit | 2441.0% | 78.7% | 36.5% | 33.2% | 26.7% | 101.4% | 63.0% | 41.0% | 23.3% | 23.3% | 22.0% | 18.7% | - | - | - | - | - | - |
| Operating income | -108.5% | 1006.2% | 69.4% | 55.2% | 40.4% | 132.5% | 70.3% | 42.7% | 24.0% | 24.1% | 22.5% | 19.1% | - | - | - | - | - | - |
| Net income | 16.1% | -190.3% | -486.7% | 65.8% | 8.9% | 110.5% | 56.7% | 41.3% | 25.8% | 19.5% | 22.5% | 22.2% | - | - | - | - | - | - |
| **YoY growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | 19.1% | 18.0% | 19.3% | 41.9% | 32.1% | 41.7% | 61.0% | 100.6% | 125.5% | 118.3% | 93.1% | 71.6% | -24% | 24% | 61% | 97% | 53% | 52% |
| Gross profit | -213.1% | 319.0% | 95.2% | N.A. | 311.7% | 364.0% | 453.9% | 486.3% | 470.5% | 249.2% | 161.4% | 120.2% | -96% | 920% | 431% | 188% | 72% | 62% |
| Operating income | -104.2% | -276.9% | 396.4% | -346.5% | 3986.2% | 758.8% | 763.1% | 693.2% | 600.4% | 273.8% | 168.9% | 124.5% | -120% | -257% | 782% | 202% | 73% | 62% |
| Net income | -236.1% | -258.0% | 1130.9% | 572.7% | 530.8% | -1569.9% | 495.5% | 407.4% | 486.2% | 232.7% | 160.1% | 125.0% | -96% | 856% | 644% | 189% | 70% | 63% |

Source: Company data, Goldman Sachs Global Investment Research

### Kinsus

We are Buy rated with a new 12-month TP of NT$1,120 (from NT$555), based on the same 16.5x P/E on 2028E EPS (rolled over from 2027E). We believe the company could trade at 1.2x STDV above the average PE multiple during previous upcycle of 14.2x as we expect the company's profitability to continue improving driven by increasing AI exposure and better ABF substrate pricing conditions, and factor in our latest earnings revisions.

## Exhibit 30: Kinsus P&L table

| NT$mn | 1Q25 | 2Q25 | 3Q25 | 4Q25 | 1Q26 | 2Q26E | 3Q26E | 4Q26E | 1Q27E | 2Q27E | 3Q27E | 4Q27E | 2024 | 2025E | 2026E | 2027E | 2028E | 2029E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue | 8,620 | 9,564 | 10,356 | 10,811 | 11,105 | 12,496 | 14,756 | 16,592 | 17,988 | 22,768 | 26,835 | 28,054 | 30,535 | 39,351 | 54,949 | 95,645 | 154,185 | 236,684 |
| Gross profit | 1,942 | 2,016 | 1,964 | 2,393 | 2,349 | 3,282 | 4,533 | 5,365 | 6,037 | 7,695 | 9,290 | 10,116 | 8,668 | 8,314 | 15,529 | 33,138 | 57,734 | 94,697 |
| Operating expense | (1,440) | (1,396) | (1,336) | (1,473) | (1,459) | (1,565) | (1,719) | (1,891) | (2,065) | (2,459) | (2,979) | (3,142) | (7,572) | (5,645) | (6,634) | (10,645) | (17,311) | (26,486) |
| Operating income | 501 | 620 | 628 | 921 | 890 | 1,717 | 2,814 | 3,473 | 3,972 | 5,236 | 6,311 | 6,974 | 1,095 | 2,670 | 8,895 | 22,494 | 40,422 | 68,211 |
| Pretax income | 700 | 619 | 713 | 1,055 | 964 | 1,817 | 2,914 | 3,473 | 4,022 | 5,286 | 6,311 | 6,959 | 1,603 | 3,087 | 9,168 | 22,579 | 40,507 | 68,396 |
| Taxes expense | (88) | (65) | (100) | (118) | (89) | (309) | (495) | (590) | (724) | (952) | (1,136) | (1,253) | (272) | (370) | (1,483) | (4,064) | (7,291) | (12,311) |
| Net income | 276 | 338 | 339 | 642 | 549 | 1,093 | 2,065 | 2,543 | 2,978 | 3,920 | 4,793 | 5,339 | 49 | 1,596 | 6,250 | 17,030 | 31,701 | 54,488 |
| **EPS, NT$** | **0.61** | **0.74** | **0.75** | **1.41** | **1.17** | **2.34** | **4.42** | **5.44** | **6.37** | **8.38** | **10.25** | **11.42** | **0.11** | **3.52** | **13.36** | **36.42** | **67.79** | **116.52** |
| **Ratio analysis and assumption** | | | | | | | | | | | | | | | | | | |
| **As % of sales** | | | | | | | | | | | | | | | | | | |
| Gross margin | 22.5% | 21.1% | 19.0% | 22.1% | 21.2% | 26.3% | 30.7% | 32.3% | 33.6% | 33.8% | 34.6% | 36.1% | 28.4% | 21.1% | 28.3% | 34.6% | 37.4% | 40.0% |
| Operating expense ratio | 16.7% | 14.6% | 12.9% | 13.6% | 13.1% | 12.5% | 11.7% | 11.4% | 11.5% | 10.8% | 11.1% | 11.2% | 24.8% | 14.3% | 12.1% | 11.1% | 11.2% | 11.2% |
| Operating margin | 5.8% | 6.5% | 6.1% | 8.5% | 8.0% | 13.7% | 19.1% | 20.9% | 22.1% | 23.0% | 23.5% | 24.9% | 3.6% | 6.8% | 16.2% | 23.5% | 26.2% | 28.8% |
| Net margin | 3.2% | 3.5% | 3.3% | 5.9% | 4.9% | 8.7% | 14.0% | 15.3% | 16.6% | 17.2% | 17.9% | 19.0% | 0.2% | 4.1% | 11.4% | 17.8% | 20.6% | 23.0% |
| **QoQ growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | 7.2% | 11.0% | 8.3% | 4.4% | 2.7% | 12.5% | 18.1% | 12.4% | 8.4% | 26.6% | 17.9% | 4.5% | - | - | - | - | - | - |
| Gross profit | -13.6% | 3.8% | -2.6% | 21.9% | -1.8% | 39.7% | 38.1% | 18.4% | 12.5% | 27.5% | 20.7% | 8.9% | - | - | - | - | - | - |
| Operating income | NM | 23.7% | 1.3% | 46.6% | -3.3% | 92.8% | 63.9% | 23.4% | 14.4% | 31.8% | 20.5% | 10.5% | - | - | - | - | - | - |
| Net income | -210.7% | 22.5% | 0.3% | 89.3% | -14.5% | 99.1% | 88.9% | 23.2% | 17.1% | 31.6% | 22.3% | 11.4% | - | - | - | - | - | - |
| | | | | | | | | | | | | | | | | | | |
| Revenue | 23.2% | 31.0% | 26.3% | 34.4% | 28.8% | 30.7% | 42.5% | 53.5% | 62.0% | 82.2% | 81.9% | 69.1% | 14% | 29% | 40% | 74% | 61% | 54% |
| Gross profit | 2.7% | -5.1% | -18.4% | 6.5% | 21.0% | 62.8% | 130.8% | 124.2% | 157.0% | 134.5% | 104.9% | 88.6% | 28% | -4% | 87% | 113% | 74% | 64% |
| Operating income | 56.0% | 74.5% | 48.8% | NM | 77.7% | 176.9% | 348.1% | 277.2% | 346.1% | 205.0% | 124.3% | 100.8% | 5% | 144% | 233% | 153% | 80% | 69% |
| Net income | 1026.8% | 281.9% | 83.2% | -357.5% | 98.9% | 223.2% | 508.5% | 295.9% | 442.5% | 258.6% | 132.1% | 110.0% | 3% | 3164% | 292% | 173% | 86% | 72% |

Source: Company data, Goldman Sachs Global Investment Research

### Unimicron

We are Neutral rated with a new 12-month TP of NT$1,140 (from NT$630), based on the same 17.4x P/E on 2028E EPS (rolled over from 2027E). We believe the company could trade at 2.7x STDV higher than past upcycle average P/E of 10.3x, and factor in our latest earnings revisions.

### Exhibit 31: Unimicron P&L table

| NT$mn | 1Q25 | 2Q25 | 3Q25 | 4Q25 | 1Q26 | 2Q26E | 3Q26E | 4Q26E | 1Q27E | 2Q27E | 3Q27E | 4Q27E | 2024 | 2025 | 2026E | 2027E | 2028E | 2029E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue | 30,090 | 32,466 | 33,994 | 34,691 | 37,446 | 42,920 | 50,138 | 58,012 | 60,983 | 67,742 | 79,801 | 90,648 | 115,373 | 131,241 | 188,516 | 299,174 | 424,900 | 583,347 |
| Gross profit | 4,026 | 4,246 | 4,549 | 5,472 | 6,726 | 9,306 | 12,435 | 15,866 | 18,299 | 21,819 | 27,337 | 33,819 | 16,315 | 18,292 | 44,333 | 101,274 | 166,786 | 246,555 |
| Operating expense | (2,759) | (2,736) | (3,016) | (3,106) | (3,969) | (3,562) | (3,961) | (4,467) | (4,540) | (4,955) | (5,843) | (6,649) | (11,198) | (11,618) | (15,960) | (21,987) | (31,076) | (39,941) |
| Operating income | 1,267 | 1,509 | 1,533 | 2,366 | 2,757 | 5,743 | 8,474 | 11,399 | 13,759 | 16,864 | 21,493 | 27,170 | 5,117 | 6,674 | 28,373 | 79,287 | 135,710 | 206,613 |
| Pretax income | 1,373 | 357 | 2,947 | 4,150 | 6,299 | 7,293 | 8,474 | 11,399 | 13,759 | 16,864 | 21,493 | 27,170 | 7,321 | 8,827 | 33,465 | 79,287 | 133,710 | 206,613 |
| Taxes expense | (450) | (97) | (496) | (235) | (918) | (1,605) | (1,949) | (2,215) | (2,752) | (3,710) | (4,944) | (5,281) | (1,765) | (1,277) | (6,687) | (16,686) | (29,768) | (43,676) |
| Net income | 915 | 30 | 2,194 | 3,535 | 5,043 | 5,339 | 6,225 | 8,884 | 10,707 | 12,854 | 16,250 | 21,589 | 5,082 | 6,673 | 25,490 | 61,401 | 102,742 | 162,368 |
| **EPS, NT$** | **0.60** | **0.02** | **1.44** | **2.32** | **3.28** | **3.47** | **4.05** | **5.78** | **7.03** | **8.44** | **10.67** | **14.18** | **3.34** | **4.38** | **16.58** | **40.33** | **66.82** | **106.66** |
| **Ratio analysis and assumption** | | | | | | | | | | | | | | | | | | |
| **As % of sales** | | | | | | | | | | | | | | | | | | |
| Gross margin | 13.4% | 13.1% | 13.4% | 15.8% | 18.0% | 21.7% | 24.8% | 27.3% | 30.0% | 32.2% | 34.3% | 37.3% | 14.1% | 13.9% | 23.5% | 33.9% | 39.3% | 42.3% |
| Operating expense ratio | 9.2% | 8.4% | 8.9% | 9.0% | 10.6% | 8.3% | 7.9% | 7.7% | 7.4% | 7.3% | 7.3% | 7.3% | 9.7% | 8.9% | 8.5% | 7.3% | 7.3% | 6.8% |
| Operating margin | 4.2% | 4.6% | 4.5% | 6.8% | 7.4% | 13.4% | 16.9% | 19.6% | 22.6% | 24.9% | 26.9% | 30.0% | 4.4% | 5.1% | 15.1% | 26.5% | 31.9% | 35.4% |
| Net margin | 3.0% | 0.1% | 6.5% | 10.2% | 13.5% | 12.4% | 12.4% | 15.3% | 17.6% | 19.0% | 20.4% | 23.8% | 4.4% | 5.1% | 13.5% | 20.5% | 24.2% | 27.8% |
| **QoQ growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | 2.4% | 7.9% | 4.7% | 2.0% | 7.9% | 14.6% | 16.8% | 15.7% | 75.8% | 11.1% | 17.8% | 13.6% | - | - | - | - | - | - |
| Gross profit | 18.5% | 5.5% | 7.1% | 20.3% | 22.9% | 38.4% | 33.6% | 27.6% | 234.4% | 19.2% | 25.3% | 23.7% | - | - | - | - | - | - |
| Operating income | 86.5% | 19.1% | 1.5% | 54.4% | 16.5% | 108.3% | 47.5% | 34.5% | 481.6% | 22.6% | 27.4% | 26.4% | - | - | - | - | - | - |
| Net income | 1531.2% | -96.8% | 7312.1% | 61.1% | 42.7% | 5.9% | 16.6% | 42.7% | 202.9% | 20.1% | 26.4% | 32.9% | - | - | - | - | - | - |
| **YoY growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | 14.0% | 16.5% | 7.2% | 18.1% | 24.4% | 32.2% | 47.5% | 67.2% | 102.7% | 108.7% | 134.7% | 161.3% | 11% | 14% | 44% | 59% | 42% | 37% |
| Gross profit | -6.2% | 15.3% | -8.0% | 61.0% | 67.1% | 119.2% | 173.4% | 189.9% | 354.5% | 413.9% | 501.0% | 518.0% | -20% | 12% | 142% | 128% | 65% | 48% |
| Operating income | -19.7% | 68.3% | -21.9% | 248.2% | 117.6% | 280.5% | 452.9% | 381.9% | 986.1% | 1017.3% | 1302.5% | 1048.5% | -43% | 30% | 325% | 179% | 71% | 52% |
| Net income | -62.4% | -98.1% | 120.1% | 6204.2% | 451.4% | N/A | 183.7% | 151.3% | 1070.8% | N/A | 640.5% | 510.8% | -58% | 31% | 282% | 141% | 67% | 58% |

Source: Company data, Goldman Sachs Global Investment Research

## ZDT

We are Buy rated with a new 12-month TP NT$824 (from NT$388), still based on our SOTP based valuation methodology of (1) 3.5x blended P/B (was 3.0x blended P/B) for ABF & BT substrate, which is 1 STDV above early upcycle industry average, (2) 20x P/E for high-growth AI server/switch related PCB (in line with industry average), and (3) 8x P/E for low-growth consumer electronics PCB (in-line with industry downcycle average valuation), and roll over our valuation period from 4Q26-3Q27 to 2028E, and factor in our latest earnings revision.

### Exhibit 32: ZDT P&L table

| NT$mn | 1Q25 | 2Q25 | 3Q25 | 4Q25 | 1Q26 | 2Q26E | 3Q26E | 4Q26E | 1Q27E | 2Q27E | 3Q27E | 4Q27E | 2024 | 2025 | 2026E | 2027E | 2028E | 2029E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue | 40,082 | 38,203 | 47,366 | 56,870 | 40,728 | 48,431 | 63,831 | 71,690 | 64,038 | 70,652 | 89,912 | 103,161 | 171,664 | 182,522 | 224,680 | 327,764 | 454,047 | 602,605 |
| Gross profit | 5,885 | 7,011 | 10,410 | 12,830 | 8,812 | 10,430 | 15,637 | 18,261 | 13,929 | 16,830 | 25,231 | 29,029 | 32,461 | 36,136 | 53,140 | 85,019 | 133,376 | 197,093 |
| Operating expense | (4,829) | (4,586) | (5,880) | (6,909) | (6,308) | (6,417) | (7,149) | (7,384) | (6,480) | (7,542) | (8,714) | (9,077) | (20,875) | (22,205) | (27,258) | (31,813) | (43,392) | (57,767) |
| Operating income | 1,056 | 2,425 | 4,530 | 5,921 | 2,503 | 4,013 | 8,488 | 10,877 | 7,449 | 9,288 | 16,517 | 19,951 | 11,586 | 13,932 | 25,882 | 53,206 | 89,985 | 139,326 |
| Pretax income | 1,457 | 2,272 | 4,661 | 5,673 | 2,400 | 4,113 | 8,988 | 11,877 | 8,249 | 9,988 | 16,617 | 20,951 | 15,045 | 14,063 | 27,378 | 55,806 | 91,285 | 140,626 |
| Taxes expense | (431) | (885) | (1,072) | (1,070) | (353) | (699) | (1,348) | (1,782) | (1,402) | (1,698) | (2,493) | (3,143) | (1,948) | (3,458) | (4,182) | (8,736) | (14,310) | (22,308) |
| Net income | 632 | 605 | 2,392 | 3,161 | 1,426 | 2,418 | 5,393 | 7,126 | 4,908 | 5,873 | 9,970 | 12,571 | 9,180 | 6,791 | 16,363 | 33,322 | 54,498 | 83,856 |
| **EPS, NT$** | **0.66** | **0.63** | **2.46** | **3.16** | **1.33** | **2.26** | **5.03** | **6.65** | **4.58** | **5.48** | **9.30** | **11.73** | **9.67** | **6.91** | **15.27** | **31.09** | **50.84** | **78.23** |
| **Ratio analysis and assumption** | | | | | | | | | | | | | | | | | | |
| **As % of sales** | | | | | | | | | | | | | | | | | | |
| Gross margin | 14.7% | 18.4% | 22.0% | 22.6% | 21.6% | 21.5% | 24.5% | 25.5% | 21.8% | 23.8% | 28.1% | 28.1% | 18.9% | 19.8% | 23.7% | 25.9% | 29.4% | 32.7% |
| Operating expense ratio | 12.0% | 12.0% | 12.4% | 12.1% | 15.5% | 13.3% | 11.2% | 10.3% | 10.1% | 10.7% | 9.7% | 8.8% | 12.2% | 12.2% | 12.1% | 9.7% | 9.6% | 9.6% |
| Operating margin | 2.6% | 6.3% | 9.6% | 10.4% | 6.1% | 8.3% | 13.3% | 15.2% | 11.6% | 13.1% | 18.4% | 19.3% | 6.7% | 7.6% | 11.5% | 16.2% | 19.8% | 23.1% |
| Net margin | 1.6% | 1.6% | 5.0% | 5.6% | 3.5% | 5.0% | 8.4% | 9.9% | 7.7% | 8.3% | 11.1% | 12.2% | 5.3% | 3.7% | 7.3% | 10.2% | 12.0% | 13.9% |
| **QoQ growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | -28.6% | -4.7% | 24.0% | 20.1% | -28.4% | 18.9% | 31.8% | 12.3% | -10.7% | 10.3% | 27.3% | 14.7% | - | - | - | - | - | - |
| Gross profit | -48.7% | 19.1% | 48.5% | 23.2% | -31.3% | 18.4% | 49.9% | 16.8% | -23.7% | 20.8% | 49.9% | 15.1% | - | - | - | - | - | - |
| Operating income | -81.0% | 129.6% | 86.8% | 30.7% | -57.7% | 60.3% | 111.5% | 28.1% | -31.5% | 24.7% | 77.8% | 20.8% | - | - | - | - | - | - |
| Net income | -85.5% | -4.3% | 295.3% | 32.2% | -54.9% | 69.6% | 123.0% | 32.1% | -31.1% | 19.7% | 69.8% | 26.1% | - | - | - | - | - | - |
| **YoY growth (%)** | | | | | | | | | | | | | | | | | | |
| Revenue | 23.3% | 17.9% | -6.4% | 1.3% | 1.6% | 26.8% | 34.8% | 26.1% | 57.2% | 45.9% | 40.9% | 43.9% | 13% | 6% | 23% | 46% | 39% | 33% |
| Gross profit | 10.3% | 65.1% | -8.7% | 11.9% | 49.7% | 48.8% | 50.2% | 42.3% | 58.1% | 61.4% | 61.4% | 59.0% | 18% | 11% | 47% | 60% | 57% | 48% |
| Operating income | 42.2% | -476.8% | -23.6% | 6.6% | 137.1% | 65.5% | 87.4% | 83.7% | 197.6% | 131.5% | 94.6% | 83.4% | 26% | 20% | 86% | 106% | 69% | 55% |
| Net income | -35.3% | 24.5% | -28.7% | -27.5% | 125.4% | 299.7% | 125.5% | 125.4% | 244.3% | 142.8% | 84.9% | 76.4% | 48% | -26% | 141% | 104% | 64% | 54% |

Source: Company data, Goldman Sachs Global Investment Research

## Investment thesis, PT methodology and risks

**Investment Thesis - NYPCB**

NYPCB manufactures and markets printed circuit boards (PCBs) and integrated circuit (IC) substrates (including ABF and BT substrates). We are Buy-rated on NYPCB considering the company's high exposure to BT substrates and non-LTA ABF substrate (70%+ of total revenue), where we expect GM/OPM to increase significantly in the coming quarters (from breakeven in OPM in 1H25 to 27/41% in 2026/27E) due to the favorable substrate pricing outlook. Despite the company's low exposure to high-end ABF substrate industry (<20% of total revenue in 1H25), we believe the expanding demand from ASIC AI server and high-end switch IC demand will drive the company's high-end ABF revenue exposure to 40%+ by 2027E, suggesting better GM/OPM outlook in the long term. In 2H25-2H26, we believe NYPCB will continue to benefit from stronger ABF/BT pricing and should be a key beneficiary of the pricing uptrend considering the company's key focus on BT and non-LTA ABF substrate industries. Moreover, in the long term (after 2026), we expect the ABF industry to return to supply tightness, and NYPCB's expanding high-end exposure will lead to a long term earnings growth outlook (122% 2026-28E earnings CAGR). As a result, we see solid upside potential for NYPCB's earnings and stock performance.

**Price Target Risks and Methodology - NYPCB**

**Valuation methodology:** Our 12-month target price of NT$2,310 for NYPCB is based on 21x 2028 P/E, which is +1.5x STDV higher than the past upcycle average P/E (13.3x).

**Key downside risks:** (1) Slower-than-expected PC demand recovery, (2) Slower-than-expected ABF substrates pricing upgrading outlook, and (3) Slower-than-expected NYPCB new high-end capacity qualification progress.

**Investment Thesis - Kinsus**

Kinsus is one of the key IC substrates suppliers globally with ~10% ABF/BT substrates market share in 2024, with ~18% of total 2025 revenue contributed by its contact lens subsidiary, Pegavision (6941.TW, Not Covered). With our view that the ABF substrate shortage started from 2Q26 (ABF substrate return to supply demand balance from late 2025), we believe Kinsus' performance will continue to improve compared with high-end ABF peers considering the company's increasing market share in the high-end ABF substrate market; however, ~36% of the company's revenue was contributed by BT substrates in 2025 and 30% of the company's ABF revenue is from non-LTA customers, which we believe will continue to enjoy a better pricing outlook. As a result, we believe Kinsus' earnings outlook should continue to be strong (~125% 2026-28E CAGR), mainly driven by better BT substrate and non-LTA ABF substrate pricing outlook, despite the unfavorable demand outlook before 2H26. We believe Kinsus is an experienced substrate supplier with a clear capacity expansion plan that can also upgrade its product portfolio in the long term. We believe we are at the beginning of an industry upcycle, making us positive on Kinsus' stock performance over the next 12 months.

**Price Target Risks and Methodology - Kinsus**

**Valuation methodology:** Our 12-month target price of NT$1,120 for Kinsus is based on

16.5x 2028E P/E, which is +1.2x STDV higher than Kinsus' past upcycle average P/E (14.2x).

**Key downside risks:** (1) Slower-than-expected PC demand recovery, (2) Slower-than-expected ABF substrates pricing upgrading outlook, (3) Slower/Less-than-expected AI server orders from 2H26.

**Investment Thesis - Unimicron Technology**

Unimicron is a key supplier of ABF substrates (25% market share in 2025) and BT substrates and also produces FPC/HDI/PCB products. We are Neutral rated on the shares given long-term growth opportunity prospects: (1) over 70% of ABF shipments are covered by long-term agreements (LTA), which limits pricing flexibility and makes price hike less likely; (2) the company's execution track record has been weaker than peers; (3) capacity expansion plan remains slower than peers, constraining its ability to capture incremental AI demand. The current ABF substrates market is seeing more favorable supply demand outlook, and Unimicron is likely to see better pricing outlook to reflect rising material costs in the coming quarters. AI ABF account for 10% of the company's total revenue, but the growth is likely to be slower than peers due to the company continuing to lose market share to peers given its less favourable production yield and slow capacity expansion. Overall, we are Neutral rated on Unimicron given our outlook for the limited upside potential, barring ASIC AI servers, despite our generally positive view on the long term on profitability trajectory.

**Price Target Risks and Methodology - Unimicron Technology**

**Valuation methodology:** Our 12-month target price of NT$1,140 for Unimicron is based on 17.4x 2028E P/E, which is 2.7x STDV higher than the past upcycle average P/E (10.3x).

**Key upside/downside risks:** (1) Slower/faster-than-expected PC demand recovery, (2) Slower/faster-than-expected ABF substrates upgrading pace, and (3) Slower/faster than-expected AI server PCB market share loss progress.

Zhen Ding Technology (ZDT) is the global leading PCB supplier (top 1 in market share in sales) with 7-10% market share, and started its ABF substrate business from 2023 in Shenzhen, China, and has the highest ABF revenue exposure to the China market compared to all other ABF substrate suppliers. We believe ZDT will hold more than 40% ABF substrate market share in China by 2027E (up from 31% in 2024) and benefit the most from the strong and growing China ABF substrate market (53% 2025E-27E CAGR) due to the increasing in-sourcing ratio for the AI computing ASIC/GPU market in China. We also expect the increasing foldable smartphone penetration rate in the long term to drive ZDT's FPC TAM, and account for 50% of the company's total revenue in 2027E. We see further revenue upside potential from foldable phones. We are Buy rated mainly due to our positive view on the company's China ABF substrate business opportunity, which should not only drive ZDT's revenue growth, but also improve its OPM level in the long term. We see upside for the stock price considering the company's solid growth opportunity, and our TP implied P/E multiple is still lower than the company's past 10+ year P/E average, which we believe is fair considering the potential upside from China ABF substrate market and increasing foldable phone penetration rate.

**Valuation**: Our 12-month TP of NT$824 is based on a SOTP valuation methodology, including (1) 3.5x blended 2028E P/B for ABF & BT substrate, (2) 20x 2028E P/E for high-growth AI server/switch related PCB (in line with industry average), and (3) 8x 2028E P/E for low-growth consumer electronics PCB (in-line with industry downcycle average valuation).

**Key downside risks include**: (1) weaker-than-expected iPhone demand or slower content upgrade, (2) delay in new substrate capacity or slower-than-expected yield rate ramp up progress, and (3) fiercer competition in China ABF market.

# Disclosure Appendix

## Reg AC

We, Chao Wang, Daiki Takayama, Allen Chang and Al Wang, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

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## GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our universe of rated stocks) and its sector peers. The four key attributes depicted are: Growth, Financial Returns, Multiple (e.g. valuation) and Integrated (a composite of Growth, Financial Returns and Multiple). Growth, Financial Returns and Multiple are calculated by using normalized ranks for specific metrics for each stock. The normalized ranks for the metrics are then averaged and converted into percentiles for the relevant attribute. The precise calculation of each metric may vary depending on the fiscal year, industry and region, but the standard approach is as follows:

**Growth** is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

For a more detailed description of how we calculate the GS Factor Profile, please contact your GS representative.

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## Quantum

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Goldman Sachs Investment Research global Equity coverage universe

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|---|---|---|---|---|---|---|
| | Buy | Hold | Sell | Buy | Hold | Sell |
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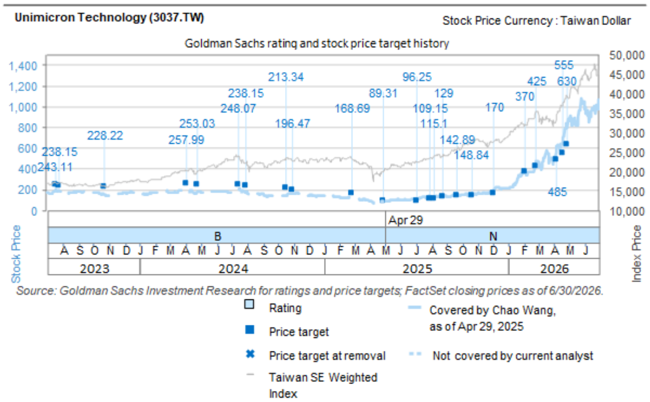
## Price target and rating history chart(s)

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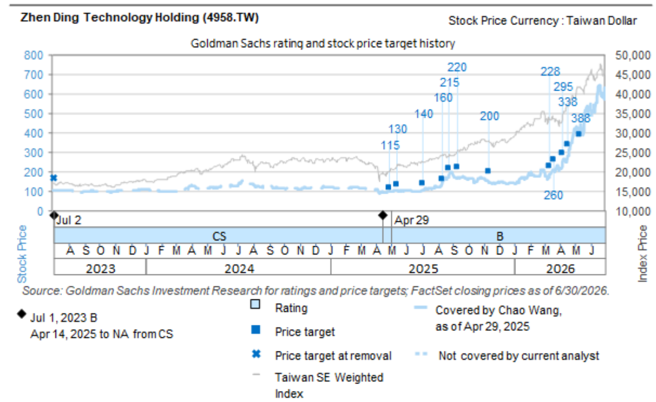


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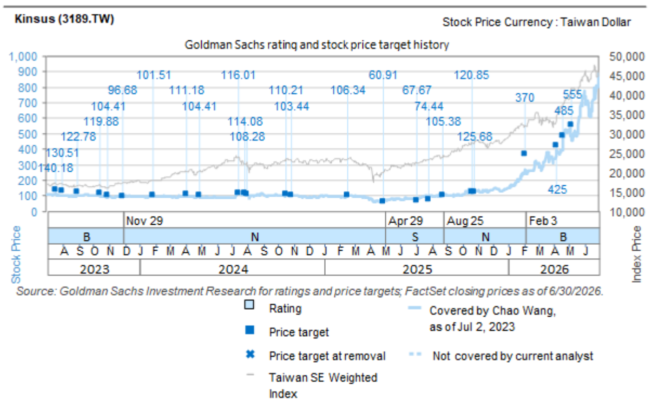


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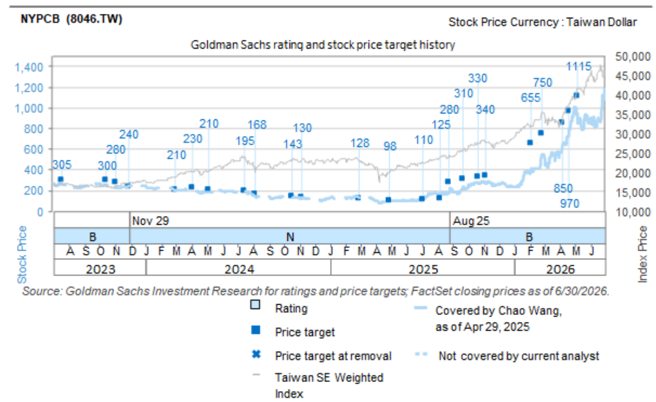


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## Target price history table(s)

### Zhen Ding Technology Holding (4958.TW)

| Date of report | Target price (NT$) | Closing price (NT$) |
|---|---|---|
| 12-May-26 | 388.00 | 407.00 |
| 17-Apr-26 | 338.00 | 282.00 |
| 08-Apr-26 | 295.00 | 247.50 |
| 20-Mar-26 | 260.00 | 209.50 |
| 13-Mar-26 | 228.00 | 188.50 |
| 12-Nov-25 | 200.00 | 144.50 |
| 10-Sep-25 | 220.00 | 168.50 |
| 25-Aug-25 | 215.00 | 180.50 |
| 12-Aug-25 | 160.00 | 147.00 |
| 04-Jul-25 | 140.00 | 103.00 |
| 13-May-25 | 130.00 | 104.50 |
| 29-Apr-25 | 115.00 | 97.10 |

### Kinsus (3189.TW)

| Date of report | Target price (NT$) | Closing price (NT$) |
|---|---|---|
| 08-May-26 | 555.00 | 458.00 |
| 21-Apr-26 | 485.00 | 473.50 |
| 08-Apr-26 | 425.00 | 394.00 |
| 03-Feb-26 | 370.00 | 246.00 |
| 27-Oct-25 | 130.00 | 143.57 |
| 21-Oct-25 | 125.00 | 145.02 |
| 25-Aug-25 | 109.00 | 103.93 |
| 29-Jul-25 | 77.00 | 102.48 |
| 04-Jul-25 | 70.00 | 85.27 |
| 29-Apr-25 | 63.00 | 73.57 |
| 17-Feb-25 | 110.00 | 96.68 |
| 28-Oct-24 | 107.00 | 108.76 |
| 18-Oct-24 | 114.00 | 101.51 |
| 01-Aug-24 | 112.00 | 107.31 |
| 29-Jul-24 | 118.00 | 115.05 |
| 16-Jul-24 | 120.00 | 116.01 |
| 29-Apr-24 | 108.00 | 94.65 |
| 03-Apr-24 | 115.00 | 98.61 |
| 29-Jan-24 | 105.00 | 98.13 |

**Zhen Ding Technology Holding (4958.TW)**

| Date of report | Target price (NT$) | Closing price (NT$) |
|---|---|---|

**Kinsus (3189.TW)**

| Date of report | Target price (NT$) | Closing price (NT$) |
|---|---|---|
| 29-Nov-23 | 100.00 | 96.00 |
| 31-Oct-23 | 108.00 | 91.65 |
| 16-Oct-23 | 124.00 | 98.13 |
| 01-Sep-23 | 127.00 | 103.44 |
| 01-Aug-23 | 135.00 | 103.44 |
| 18-Jul-23 | 145.00 | 116.50 |

**Unimicron Technology (3037.TW)**

| Date of report | Target price (NT$) | Closing price (NT$) |
|---|---|---|
| 28-Apr-26 | 630.00 | 825.00 |
| 21-Apr-26 | 555.00 | 710.00 |
| 08-Apr-26 | 485.00 | 620.00 |
| 25-Feb-26 | 425.00 | 458.50 |
| 03-Feb-26 | 370.00 | 385.00 |
| 04-Dec-25 | 170.00 | 198.50 |
| 21-Oct-25 | 150.00 | 158.76 |
| 22-Sep-25 | 144.00 | 157.28 |
| 25-Aug-25 | 130.00 | 138.92 |
| 07-Aug-25 | 116.00 | 134.95 |
| 30-Jul-25 | 110.00 | 140.90 |
| 04-Jul-25 | 97.00 | 117.09 |
| 29-Apr-25 | 90.00 | 95.26 |
| 26-Feb-25 | 170.00 | 124.53 |
| 30-Oct-24 | 198.00 | 160.25 |
| 18-Oct-24 | 215.00 | 143.38 |
| 31-Jul-24 | 240.00 | 178.11 |
| 16-Jul-24 | 250.00 | 196.47 |
| 24-Apr-24 | 255.00 | 185.56 |
| 03-Apr-24 | 260.00 | 190.52 |
| 24-Oct-23 | 230.00 | 155.79 |
| 26-Jul-23 | 240.00 | 195.97 |
| 18-Jul-23 | 245.00 | 198.46 |

**NYPCB (8046.TW)**

| Date of report | Target price (NT$) | Closing price (NT$) |
|---|---|---|
| 07-May-26 | 1,115.00 | 947.00 |
| 21-Apr-26 | 970.00 | 789.00 |
| 08-Apr-26 | 850.00 | 637.00 |
| 25-Feb-26 | 750.00 | 553.00 |
| 03-Feb-26 | 655.00 | 394.50 |
| 05-Nov-25 | 340.00 | 272.00 |
| 21-Oct-25 | 330.00 | 273.50 |
| 22-Sep-25 | 310.00 | 235.50 |
| 25-Aug-25 | 280.00 | 186.00 |
| 07-Aug-25 | 125.00 | 172.50 |
| 04-Jul-25 | 110.00 | 126.00 |
| 29-Apr-25 | 98.00 | 101.00 |
| 28-Feb-25 | 128.00 | 136.00 |
| 06-Nov-24 | 130.00 | 124.50 |
| 18-Oct-24 | 143.00 | 133.50 |
| 07-Aug-24 | 168.00 | 143.00 |
| 16-Jul-24 | 195.00 | 183.50 |
| 06-May-24 | 210.00 | 185.00 |
| 03-Apr-24 | 230.00 | 209.00 |
| 01-Mar-24 | 210.00 | 210.50 |
| 29-Nov-23 | 240.00 | 251.00 |
| 03-Nov-23 | 280.00 | 232.50 |
| 16-Oct-23 | 300.00 | 253.00 |
| 18-Jul-23 | 305.00 | 275.50 |

Price targets shown in table(s) are unadjusted for corporate actions.

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