Regional Industry Focus

Technology

Refer to important disclosures at the end of this report

DBS Group Research . Equity

17 Oct 2025

Recovery broadens beyond AI

- Structural tailwinds supporting high front-end valuations; upside remains, but momentum is moderating
- Back-end and downstream recovery the next driver, fuelled by inventory tailwinds, soft global macro backdrop, rebounding demand from late-cycle segments – automotive and industrial
- Premium hardware is leading, even as volumes lag; top picks: Lenovo, Sunny Optical, BYDE
- Asia tech and SMCs outperformed in 2H25, we favour UMS and Frencken; Infineon as a late-cycle recovery play, and TSMC benefits from advanced packaging upswing

Front-end not yet peaked; back-end catching up as semiconductor recovery broadens. The front-end of the semiconductor value chain - comprising foundries and equipment makers exposed to AI and high-performance computing (HPC) demand, has led the recovery but has not yet peaked. Beyond the front-end and AI boom, the next wave of growth is emerging downstream, spanning back-end equipment, outsourced semiconductor assembly and test (OSAT) companies, and consumer electronics. This broader recovery is supported by inventory normalisation, a soft global macroeconomic backdrop, improving automotive and industrial demand, and a gradual rebound in back-end activity.

Premium hardware leads as volumes lag. With smartphone shipments still subdued, consumer electronics earnings are increasingly mix-driven, fuelled by premiumisation (in optics, thermals, and materials) and foldables as a niche catalyst. AI-PC and Windows 11 refresh cycles are driving replacement demand, with spec-driven average selling price (ASP) gains lifting supplier margins toward pre-pandemic highs. We favour Lenovo (AI-PC replacement), Sunny Optical (margin recovery) and BYDE (titanium and foldable exposure).

Asia tech and small/mid-caps (SMCs) outperformed in 2H25. Preferred picks UMS and Frencken are well positioned for the semiconductor upcycle; valuations, though elevated, still offer upside from improving cycle dynamics and supportive market initiatives. For late-cycle recovery, we favour Infineon (a global leader in power semiconductors) and TSMC (stands to gain from structural shift toward advanced packaging due to its scale and integrated capabilities).

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STOCKS

	Price LCY	Mkt Cap USDmn	12-mth Target Price LCY	Performance (%) 3 mth	12 mth	Rating
HK-listed						
BYD Elec	41.08	11,909	57.00	23.5	27.4	BUY
Lenovo	11.51	18,370	15.00	15.1	4.6	BUY
Sunny Optical	80.35	11,318	110,000	6.1	62.7	BUY
SGX-listed						
UMS Integration Ltd	1.36	746	1.84	(3.5)	29.5	BUY
Frencken Group	1.42	468	2.03	2.9	15.4	BUY
Global						
Infineon	32.92	50,305	39.00	(13.5)	7.0	BUY
TSMC (US)*	299.84	1,555,134	276.00	22.1	45.7	BUY
TSMC	1,460	1,234811	1,620	29.2	41.1	BUY

Source: DBS, Bloomberg
Closing price as of 16 Oct 2025

Semiconductor recovery broadens – Front-end not peaked yet, back-end catching up

Front-end leads the recovery, underpinned by AI-driven, structural demand, not purely cyclical. The front-end of the semiconductor value chain, encompassing foundries and front-end equipment makers involved in processes such as deposition, etching, and lithography, is typically the first to recover and outperform during the early phase of a semiconductor upcycle. This segment's greater exposure to AI and high-performance computing (HPC) drives a faster recovery, as demand is structural rather than purely cyclical. Within the foundry segment, those with greater exposure to advanced nodes (5nm and below) often experience faster earnings acceleration than those focused on mature nodes. This is driven by AI, HPC, and premium mobile chips, which continue to drive incremental wafer demand and pricing resilience.

Front-end segments not peaked yet. Although this group has already performed strongly, we believe the front-end segment has yet to reach its cyclical peak. Gartner industry data suggests global semiconductor revenue is expected to grow by 17.8% y/y in both 2025 and 2026, followed by another 9.3% in 2027. This growth is primarily supported by the sustained proliferation of AI-related demand, spanning from data centres and inference accelerators to edge devices requiring higher logic and memory content.

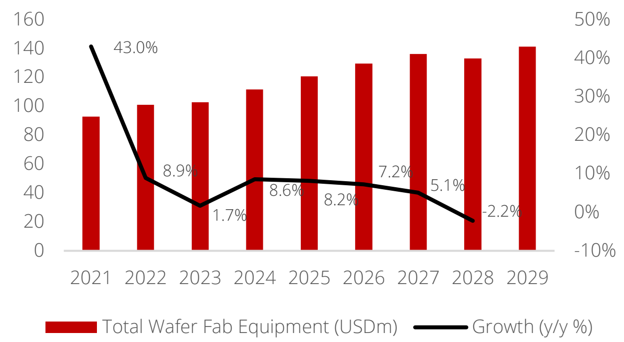
Front-end semiconductor leaders are among the biggest beneficiaries of the ongoing reshoring. Two key factors are driving the reshoring wave:

1) Supply-chain security. The drive by major economies, led by the US, Europe, and Japan, to secure domestic chip production capacity has unleashed a multiyear capital expenditure boom that directly benefits foundries and front-end equipment makers. Global giants such as TSMC, Samsung, Intel, and GlobalFoundries are ramping up investments in the US and Europe to localise advanced-node production, supported by incentive programmes like the US CHIPS and Science Act and the EU Chips Act. This localisation push has lifted order books for front-end tool suppliers such as ASML, Applied Materials, Lam Research, and Tokyo Electron, which provide the lithography, deposition, and etch tools critical to new fab buildouts.

2) Technology sovereignty. Technology sovereignty has emerged as a national priority amid intensifying geopolitical and technological competition. Countries are seeking to retain control over advanced manufacturing, design, and R&D capabilities that are critical to economic security and strategic autonomy. The US, which accounts for around 47% of the global semiconductor equipment market, has taken a leading role through the CHIPS and Science Act, a landmark initiative that allocates more than USD50bn in federal funding to revitalise domestic semiconductor manufacturing, research, and talent development. The objective is not only to reduce dependence on foreign supply chains, but also to secure US leadership in advanced logic, memory, and packaging technologies that underpin AI, defence, and HPC. The US is also deepening strategic partnerships with global front-end leaders such as TSMC, Samsung, and Intel, ensuring that critical chip-making capacity and knowhow are anchored closer to home.

Structural earnings tailwind for global front-end, with healthy fab investments. The combination of regional diversification, policy support, technology sovereignty, and AI infrastructure buildout is transforming the current reshoring cycle into a structural earnings tailwind for the global front-end. The wafer fab equipment (WFE) market is expected to register 7%-8% y/y growth in 2025/26, and additional 5% growth in 2027. Reshoring has created a sustained demand floor for front-end equipment spending, even amid cyclical fluctuations in chip demand.

Total wafer fab equipment (USDmn)



Source: Gartner, DBS

Front-end valuations: Expensive for a reason – structural tailwinds keep them elevated. The sector's structural tailwinds, driven by AI-related wafer demand, global fab buildouts, and reshoring incentives, have propelled front-end equipment valuations well above historical norms. Leading tool suppliers such as ASML, Applied Materials, Lam Research, and Tokyo Electron now trade at forward P/E multiples in the mid-20s to low-30s, compared with their 10-year averages, which typically fell in the mid-teens. Price-to-book ratios have likewise expanded to around 6-10x for top-tier names, versus long-term averages of 3-5x, suggesting that much of the anticipated growth from AI, memory recovery, and CHIPS Act-driven capex is already reflected in current valuations.

Expect further upside for front-end, but at a moderated pace. Nevertheless, we foresee further upside potential, supported by strong barriers to entry, particularly at the advanced-node level, and a structural uplift in global semiconductor demand. That said, the easy gains have likely been realised. Future performance will hinge on continued positive earnings revisions or a stronger-than-expected acceleration in capex momentum. In short, front-end equipment valuations remain structurally rich, supported by robust fundamentals but leaving limited room for disappointment. These companies remain long-term structural winners, anchored by strong technological moats and enduring demand visibility; however, upside potential may moderate as current valuations increasingly reflect the strong earnings momentum and capital intensity already priced into the cycle.

Global semiconductor coverage – performance and valuations

Stock	Segment	Next 12-mth growth		5-yr Avg	YTD Price	Fwd PE	5-yr Avg
		Earnings	Sales	Sales y/y	%	(x)	PE (x)
Micron	Memory	102.9%	44.2%	20.2%	115.8	11.2	N.A.
Lam Research	Equipment	8.4%	10.0%	14.8%	81.9	29.2	22.8
Intel	Consumer	N.M.	-1.8%	-5.6%	81.4	N.M.	N.A.
AMD	AI/DC	43.3%	22.9%	33.4%	77.9	42.6	108.2
KLA Corp	Equipment	4.1%	6.3%	16.7%	56.0	28.0	23.6
Broadcom	AI/DC	35.0%	30.1%	18.7%	40.0	38.7	37.1
Nvidia	AI/DC	52.7%	49.7%	70.9%	36.4	32.3	59.9
TSMC	Foundries	14.3%	18.0%	20.6%	31.6	22.6	21.4
Applied Mat	Equipment	-7.5%	-1.9%	13.8%	29.1	23.2	17.1
SOX Index	Index	19.7%	1.8%	15.5%	28.7	28.0	25.9
Tokyo Electron	Equipment	-7.9%	0.8%	11.7%	21.1	26.5	27.2
ASML	Equipment	0.0%	6.0%	18.1%	19.9	35.1	40.2
STMicro	MCU	37.1%	6.4%	8.4%	8.6	27.5	N.A.
Analog Devices	Analog	25.3%	17.2%	13.5%	6.1	24.7	23.3
Teradyne	Equipment	17.4%	13.2%	6.0%	4.9	34.5	35.5
Infineon	MCU	49.3%	12.0%	14.3%	2.0	18.5	36.6
Qualcomm	Consumer	-1.1%	2.1%	17.6%	0.0	13.0	19.7
Texas Instrum	Analog	9.7%	11.4%	2.7%	-8.4	27.5	26.3
Renesas	MCU	N.M.	6.5%	7.1%	-12.2	9.0	20.3
Marvell	AI/DC	31.1%	20.2%	18.1%	-22.5	27.9	N.A.
GlobalFoundries	Foundries	5.1%	0.8%	5.0%	-23.2	20.1	N.A.
ONSEMI	MCU	-20.2%	-4.6%	6.4%	-27.5	18.2	22.7

Source: DBS, Bloomberg, VisibleAlpha.
Data as of 10 October

What's next beyond the front-end and AI boom?

Recovery of downstream the next driver, after AI. Beyond the front-end and AI, a broader recovery across downstream segments, including back-end equipment makers, OSATs, and consumer electronics-related components, is emerging as a key driver of growth. Few factors underpin this rebound:

1) Inventory headwinds turn to tailwinds

Inventory digestion has largely run its course, with most consumer, industrial, and memory supply chains normalising after the prolonged destocking phase of 2023-2024. Over the past 18 months, producers and distributors across the technology value chain have aggressively cleared excess stock that accumulated during the pandemic-era shortages. Smartphone and PC shipments are improving, though not yet back to the pre-pandemic levels.

Major late-cycle players - automotive and industrial, are showing improving demand momentum. On the industrial and automotive side, distributors report that order cancellations and deferred deliveries have eased, signalling that channel inventories are now lean. Texas Instruments (TXN) mentioned in its 1Q25 results that the group continued to see recovery across its end markets, with industrial showing broad recovery. TXN also believed that customer inventories were at low levels across all end markets. Meanwhile, STMicroelectronics called 1Q25 the "bottom", citing early upcycle signs consistent with cancellations and push-outs easing rather than worsening.

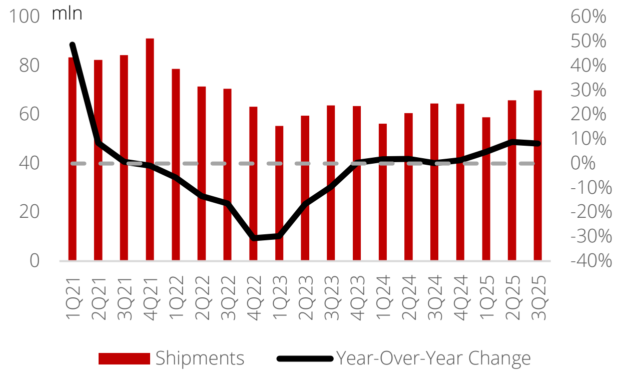
Inventory normalisation restores balance across the supply chain. In the memory segment, industry leaders such as Samsung and SK Hynix have cut wafer starts and delayed capacity additions, accelerating inventory drawdowns and stabilising pricing. Similarly, foundries and OSATs have seen improving utilisation rates as clients resume normal order patterns, reflecting the conclusion of the excess-stock cycle. This broader restocking discipline, coupled with AI-related demand absorbing capacity at the leading edge, has restored balance across the ecosystem.

Overall, supply-demand dynamics are healthier today than a year ago: inventory-to-sales ratios across semiconductors and electronics have reverted to long-term averages, pricing pressure is easing, and visibility into customer demand is improving. These indicators collectively suggest that the inventory correction phase is effectively complete, setting the stage for a broad-based recovery in production and earnings through 2025.

2) Soft landing for global economies sets the stage for demand recovery

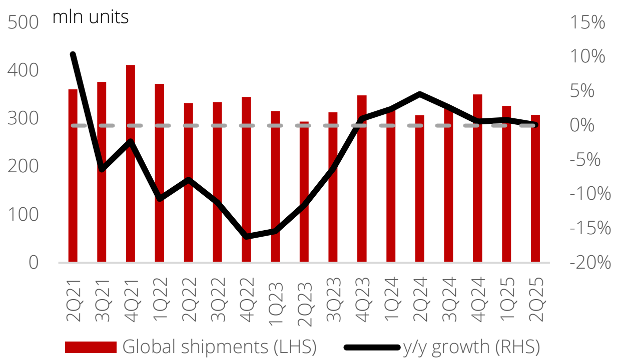
Soft landing fuels broad-based semiconductor recovery. A soft-landing global macroeconomic backdrop, characterised by easing financial conditions with the moderation in interest rates, stabilising inflation, and resilient consumer spending, is reinforcing confidence across supply chains. This supports a gradual pickup in end-market demand, particularly in PCs and smartphones. These trends are translating into a broad-based resumption of orders across the semiconductor ecosystem, signalling a shift from contraction to recovery.

Gradual recovery of PC shipments



Source: Gartner, DBS

Mobile phone shipments subdued but have turned positive y/y



Source: Gartner, DBS

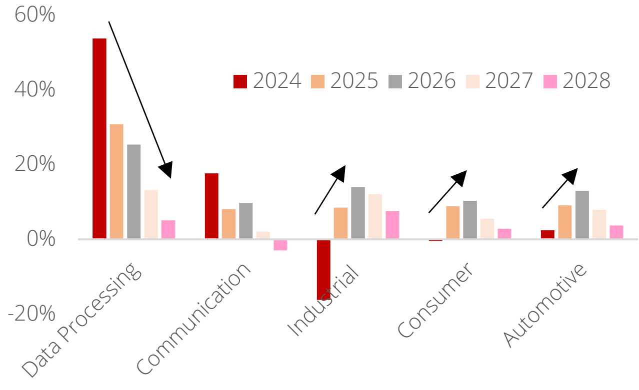
3) Recovery in automotive and industrial end markets – historically the late-cycle laggards

Auto and industrial recovery underway. The automotive and industrial segments, which typically trail the broader semiconductor upcycle, are now showing clearer signs of recovery. These markets tend to lag communication and data-centric demand because of lesser exposure to AI and the longer time it takes for inventory digestion across suppliers and distributors to unwind.

Major late-cycle players - automotive and industrial, are showing improving demand momentum. Among the global semiconductor plays with exposure to the automotive and industrial segments, STMicroelectronics mentioned in its 1Q25 results that the group believes the auto/industrial chip sector is at the early stages of a cyclical recovery from a deep trough. In 2Q25, its industrial segment saw strong sequential growth, and its book-to-bill ratio remained above 1, suggesting improving demand trends. Texas Instruments reported strong sequential growth for its industrial segment in 2Q25, which led management to believe that the worst was behind them. Similarly, in its August 2025 update, Infineon cited automotive demand revival and raised its margin guidance.

Recovery underpinned by structural growth drivers. As supply chains normalise with inventory issues out of the way, the recovery is further supported by secular trends such as vehicle electrification (electric vehicles [EVs], advanced driver-assistance systems [ADAS]), power-management integrated circuit (IC) upgrades, and smart factory investments. This recovery is further underpinned by resilient capital spending in energy transition, robotics, and infrastructure modernisation, which continue to drive incremental semiconductor content per system.

Auto and industrial catching up in semiconductor upcycle



Source: Gartner, DBS

4) Gradual recovery in the back-end space

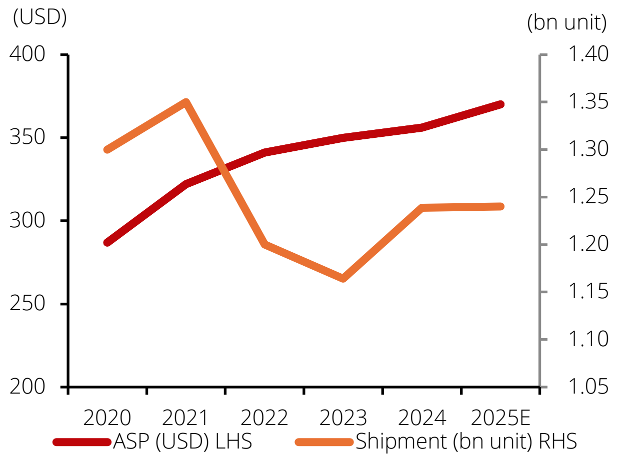
Opportunities in back-end space. The back-end semiconductor segment, which typically includes OSATs (assembly, packaging, and testing) and back-end equipment makers involved in dicing, wire bonding, etc., tends to lag in recovery. With the semiconductor uptrend already underway for more than a year, we see opportunities shifting towards the back-end segment – specifically, segments that bridge the AI-hardware buildout with downstream volume recovery. Advanced packaging and test players positioned for AI and high-bandwidth-memory (HBM) integration could see outsized earnings growth as heterogeneous integration becomes critical to performance scaling. Back-end equipment suppliers that enable 2.5D/3D packaging, chiplet interconnect, or HBM stacking are likely to capture a growing share of the value chain.

Consumer electronics — Premium hardware leads as volumes lag

Earnings driven by mix, not volume. Although shipment volumes are experiencing a gradual recovery, they are not robust, indicating that product mix continues to do be the primary driver of earnings along the consumer electronics supply chain. After two down years, global smartphone shipments returned to growth in 2024 (c.1.22bn units, +7.1% y/y) and then slowed to low single digits into 1H25 (+1.0% y/y in 2Q25). That keeps the unit base below pre-COVID peaks and reinforces our view that near-term earnings momentum will remain spec/mix-led rather than volume-led.

Premiumisation deepens, even amidst modest unit growth. Premiumisation remains a prominent and expanding trend. Counterpoint's 1H25 analysis reveals that the >USD600 segment captured a record 60% share of global smartphone revenue, despite only modest growth in unit volumes. 2024 established a new all-time high for global ASP at USD356, projections indicating a further rise to USD370 in 2025. The demand skew aligns with survey findings that consistently identify camera quality, battery life, chassis complexity, chips performance, etc., as key upgrade drivers. Consumers are clearly prioritising devices that offer visibly better imaging and endurance over those with merely incremental features. A secondary, less overt driver of premiumisation stems from original equipment manufacturer (OEM) budget re-allocation within the bill of materials. Omdia's 2Q25 model tracker found *a decline in the average number of cameras per phone to 3.19* (from 3.37 a year prior), indicating that vendors are trimming low-value auxiliary sensors to fund enhancements such as larger main sensors, better telephoto capabilities, improved microphones, and larger vapor chambers.

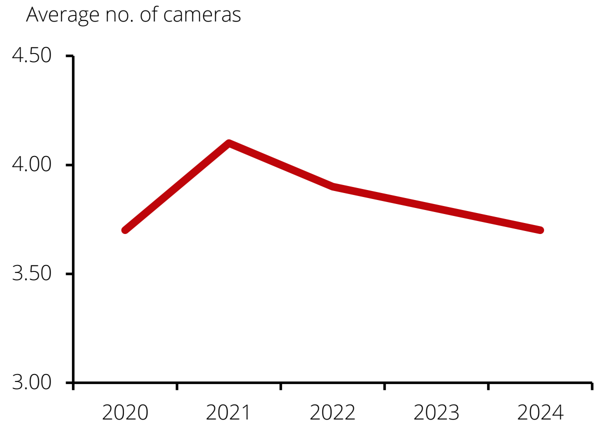
Global smartphone ASP trend



Source: Counterpoint, IDC and DBS

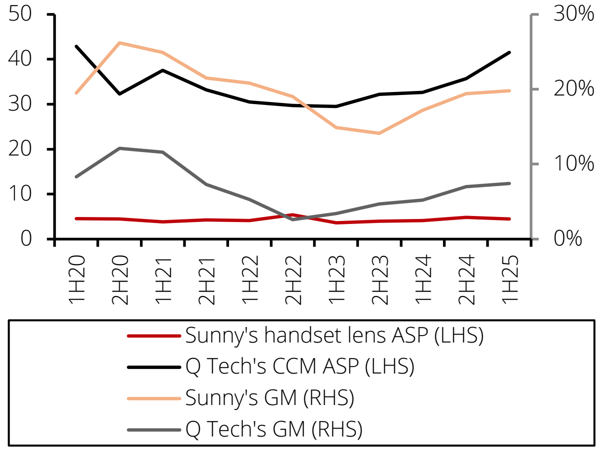
Optics up-cycle with sustained momentum into 2026. This trend holds significant implications for the optic market, and we anticipate this up-cycle will exhibit sustained momentum into 2026. Primarily, the premium tier is standardising "flagship optics", charactrised by larger main sensors and higher-end telephoto capabilities. With the iPhone 17 Pro/Pro Max, Apple has established a new elevated benchmark for flagship optics: incorporating three 48MP rear cameras and a next-gen tetraprism telephoto lens that utilises a 56% larger sensor, delivering 4× optical zoom at 100 mm plus 8× optical-quality reach at 200 mm. This combination materially increases periscope-module content (due to more lens elements/prisms and tighter AF/OIS actuation tolerances) across both Pro models, thereby reinforcing the industry's ongoing mix shift toward complex, high-ASP camera stacks.

No. of cameras per smartphone



Source: Company data, DBS

Optics ASP and margin trends



Source: Company data, DBS

Margins recovery among leading players. We are observing a tangible margin recovery among leading Chinese module manufacturers, driven by an improved product mix and rationalised competition. Sunny Optical's 1H25 gross margin, for instance, rose 2.6ppt y/y to 19.8%, with the company attributing this to higher ASPs and margins in handset lens sets and camera modules. Furthermore, revenue from large-image-size and periscope modules increased by over 20% y/y. Similarly, Q Tech's 1H25 revenue grew 15.1% y/y, with gross margin up 2.2ppt to 7.4%, signalling healthier utilisation and pricing discipline at the tier-2 level. We anticipate that these dynamics—comprising a premium SKU mix, increasing periscope module diffusion, and supplier consolidation—will collectively support further ASP and gross margin improvement through 2026, potentially surpassing pre-pandemic levels even without a sharp rebound in unit volumes.

Thermals and acoustics are the other near-term beneficiaries of advancements in on-device AI and richer media capture capabilities. Android flagships have already demonstrated a decisive shift towards larger vapor chambers (VCs). For instance, Samsung's S24 series increased the VC area by ~1.5-1.9× versus the S23 generation, and teardown analyses suggest a further increase in the S25 Ultra. With Apple's iPhone 17 Pro adopting VC cooling, we believe VC adoption is now an industry-wide standard across the premium tier. This enhanced thermal headroom, in turn, facilitates sustained AI inference, 4K/8K video recording, and long-session gaming without throttling.

Regarding input technologies, multi-mic MEMS arrays are proliferating, as they enable beamforming and superior far-field voice pickup for AI assistants, as well as enhanced spatial audio experience. Suppliers such as like AAC Tech project >50% growth in MEMS mic revenues in 2025.

Post-interim results guidance comparison

	AAC Tech'	Sunny Optical
Group GM (FY25)	≥22.1%; H2 GM ↑ h/h	NA
2H25 trajectory	H2 revenue ≥+18.4% y/y; GM ↑ h/h	H2 up, led by handset lens GM
Handset lens (optics) GM	Plastic lens >30% in H2; overall optics GM 10–15%	25–30% for FY25, to increase H/H in 2H25 vs. c20-25% in FY24
Handset camera modules	GM 4–6% FY25	~8–10% GM in 2H25, stable vs 1H25
Handset-related revenue Auto / ADAS	Lens rev. +20% y/y FY25 2H25 PSS/Auto similar growth as 1H25 (+14.2% y/y)	Total revnue +5–10% y/y FY25; H2 up >+20% y/y FY25

Source: Company data, DBS

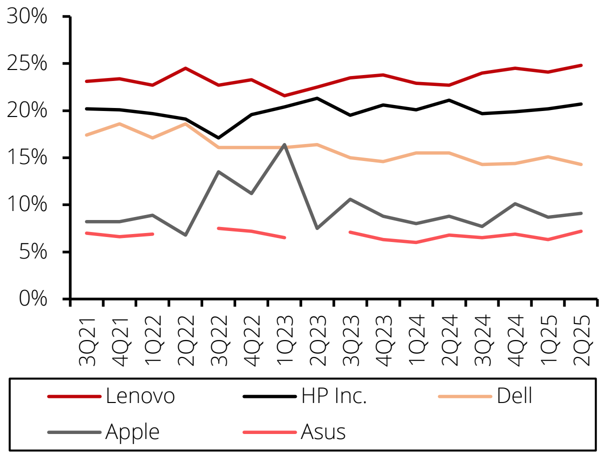
Chassis upgrade cycle: Titanium and thinner stacks. Materials are aligning with the same premiumisation logic. Titanium has emerged as a visible differentiator for premium "slab" phones. The titanium component commands a higher ASP (exceeding 40% in the case of the iPhone 16 Pro) and also yields a higher gross margin compared to those made of aluminum alloy; and the titanium chassis itself will contribute to a higher margin. Following Apple's iPhone 15 Pro/16 Pro families, the new premium model iPhone 17 Air has also adopted titanium frames, primarily for strength-to-weight benefits. Furthermore, the first foldable iPhone, anticipated in Sep 2026, is expected to incorporate titanium alloys and other lightweight metals into its hinge assemblies to reduce overall mass and thickness.

Android players such as Samsung have similarly embraced titanium across their 2025 flagships. The Galaxy S25 Ultra, for instance, features an ultra-strong titanium frame, while the ultra-slim Galaxy S25 Edge utilises a titanium frame to achieve a c.5.8 mm, ~163g chassis. As foldable devices continue to become thinner, we anticipate a concurrent upgrade of the chassis stack (titanium, thinner covers, larger VCs), which is expected to be positive for casing and thermal suppliers.

Foldables: Small base, big spec pull. Foldable devices are finally experiencing accelerated growth, albeit from a relatively small base. Following a period of slower growth, global foldable shipments rebounded by ~45% y/y in 2Q25. TrendForce still pegs 2025 shipments near c.19.8mn units (~1.6% share). While this may seem small, we anticipate that the introduction of the first foldable iPhone will significantly contribute to mainstream adoption, with a projected penetration of 10% within the next three years. We expect the foldable segment to grow large enough to influence the specification roadmap for ultra-thin cover stacks, lightweight frames, and hinges. Given this momentum, we expect foldables to remain an outsized catalyst for spec upgrades across the casing, hinge, and thermal component complex through 2026.

PCs are the bright spot with AI accelerating unit demand. On the consumer side, PCs are the bright spot with AI accelerating unit demand. Lenovo recently disclosed that AI PCs represented "more than 30%" of its total PC shipments in the June quarter and that the company holds ~31% of the Windows AI PC segment. IDC's latest tracker shows that global PC shipments increased by 9.4% y/y in 3Q25, with the Windows 10 end-of-support on 14 Oct 2025 providing a clear impetus for replacement. We anticipate this replacement cycle will sustain demand for PC-adjacent components (thermal modules, cameras, mics) into 2026, with Lenovo expected to continue gaining market share at the premium end.

PC vendors' market share trend



Source: Company data, DBS

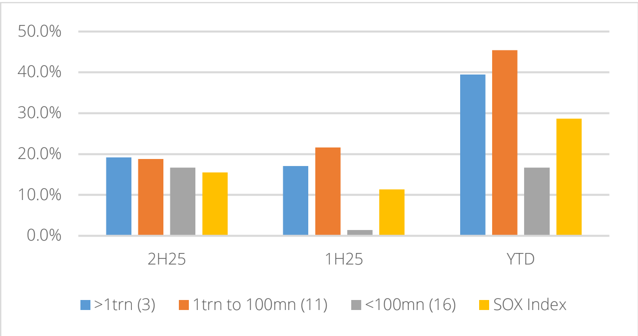
Conclusion

Beyond AI: Recovery broadens and leadership rotates downstream. While the recovery in consumer electronics and late-cycle segments such as automotive and industrial remains gradual, the broadening of demand beyond AI signals a healthier and more sustainable phase of the semiconductor upcycle heading into 2026. Front-end leaders are expected to continue benefiting from capex momentum and AI-driven wafer demand, but investor focus may increasingly rotate toward select downstream names, particularly back-end equipment makers, and firms with exposure to advanced packaging and premium consumer electronics. Although smartphone shipments remain subdued, manufacturers are capitalising on the premiumisation trend, shifting toward higher-end products to defend margins. This evolution underscores a maturing semiconductor cycle where leadership broadens and new opportunities emerge beyond early-cycle beneficiaries.

Asia tech and SMCs in focus

Are we witnessing a reversal of the fortunes? After years of the large-cap and US dominance, 2H25 has witnessed a shift in market leadership on two distinct fronts. Firstly, there is a growing interest in compelling value and opportunities within the SMC space. SMC semiconductor stocks are narrowing their underperformance and demonstrating resilience comparable to that of megacaps. Secondly, the strong tech rally – which originated in the US since 2023 – now appears to be gaining traction in Aisa. the outperformance of the Asia ex-Japan (AxJ) tech sector has widened vis-à-vis its US counterpart since 2H25.

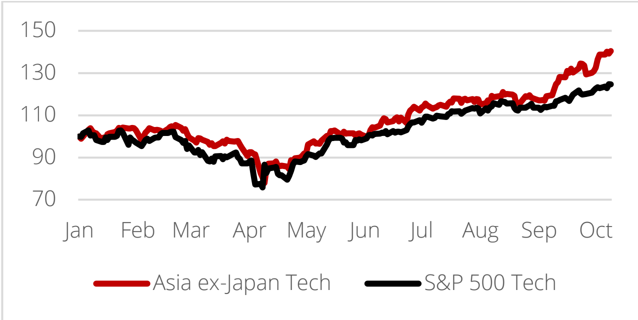
SOX Index – breakdown of YTD performance by market cap (in USD)



Source: DBS, Bloomberg. Based on 10 October closing prices. Number of stocks denoted in brackets

AxJ Tech: Too significant to overlook. The global semiconductor value chain is incomplete without the AxJ region. Taiwan's TSMC dominates leading-edge foundries and Korea's Samsung Electronics and SK Hynix lead in memory. Meanwhile, China spans the full value chain, from hardware and components to platforms and software. Technology not only forms the second-largest sector in the MSCI Asia ex-Japan Index (c.22% of total market capitalisation, vs. 26% in MSCI World) but also offers diverse tech expressions – from foundry (TSMC) and memory (Samsung, SK Hynix) to China leading OEMs (Xiaomi).

Outperformance of AxJ tech has further widened in 2H25 (Jan 25 = 100)



Source: DBS, Bloomberg

SMC renaissance? The outperformance of the SMC stocks is not idiosyncratic to the tech sector but is observed across the wider market and in key markets like Singapore and Hong Kong. Several factors support this outperformance: the disproportionate benefit from lower interest costs amid the Fed's easing cycle, more targeted business and geographical exposures, and relatively attractive valuations.

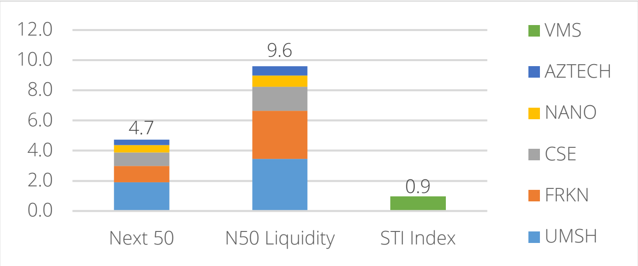
Small-mid caps lead in 2H25 performance

Country	Indices	2H25	1H25	YTD
US	S&P 500	5.6%	5.5%	11.4%
	Russell 2000	10.1%	-2.5%	7.4%
Singapore	STI Index	11.7%	4.7%	16.9%
	FTSE ST Small-Mid Cap	15.8%	-0.9%	14.7%
Hong Kong	Hang Seng Comp	13.3%	20.2%	36.1%
	HSCI Small-Mid Cap	17.2%	19.8%	40.5%

Source: DBS, Bloomberg. Data as of 10 October Outperformance denoted in green

A second wind from policy tailwinds. The SMC market in Singapore is underpinned by policy tailwinds. Targeted policies by the Monetary Authority of Singapore (MAS) and Singapore Exchange (SGX), such as the SGD5bn Equity Market Development Programme (EQDP), enhanced Growth Enterprise Market Scheme (GEMS), and iEdge Singapore Next 50 Indices, clearly signal to markets that SMCs are no longer considered an afterthought. Technology stocks in Singapore are well positioned to benefit from this, as the opportunity set lies within the SMC space and they have higher representation in the Next 50 Indices versus the Straits Times Index (STI).

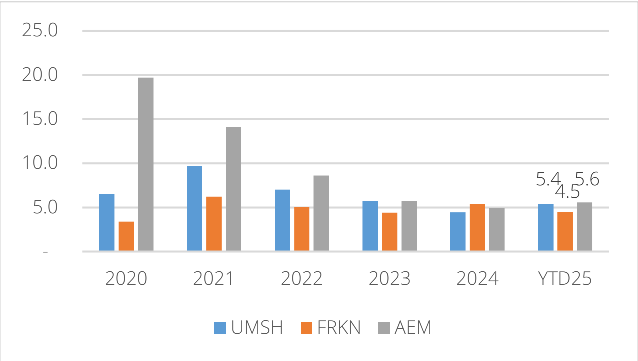
Technology sees better representation in SMC indices



Source: DBS, Bloomberg. Based on 10th October closing prices.

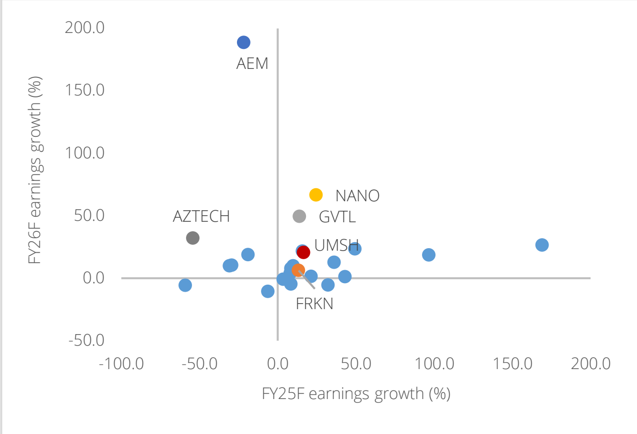
Tech offers a unique proposition. Technology stocks in Singapore present a unique proposition to the markets. Firstly, they offer one of the few avenues for investors to gain meaningful exposure to the AI and semiconductor value chain. Secondly, unlike its non-tech peers in the SMC space, key tech stocks – such as UMS Integration, Frencken, and AEM Holdings – exhibit adequate trading interest and liquidity, with an average daily trading value close to SGD5mn over the past five years (or since 2020). Thirdly, notwithstanding their inherent volatility and cyclicality, investors typically gravitate towards the tech sector for its robust earnings growth potential, particularly during a semiconductor uptrend.

Average daily trading value for key Singapore tech stocks (SGDmn)



Source: DBS, Bloomberg. Annual average of daily value traded – volume x prices

DBS coverage – FY25F/26F earnings growth forecast (%)



Source: DBS. Based on stocks under coverage, excluding REITs and STI constituents

Stock Picks

In the SGX-listed SMC tech space, our preferred picks are UMS and Frencken. Both stocks have seen valuations rise in recent months, now trading at around +1SD above their five-year average P/E multiples. This re-rating has been partly driven by government initiatives aimed at revitalising Singapore's equity market and renewed interest in the local tech sector. Despite the near-term valuation uplift, we believe there remains further room for upside, supported by improving semiconductor cycle dynamics, earnings recovery, and sustained interest in Singapore's key manufacturing names, given the various measures to support the equity market.

For a late-cycle recovery play, we like Infineon. We highlighted Teradyne in June 2025 as a proxy to the back-end equipment makers, supported by a recovery in consumer-driven end markets such as smartphones and PCs. Teradyne's share price has performed well, surging 42% since our report.

We continue to prefer TSMC in the advanced packaging space, given its scale, technological depth, and integrated front-to-back-end capabilities, which provide a clear competitive edge as this trend accelerates.

UMS (BUY, TP: SGD1.84)
UMS's outlook is positive, driven by several key factors: 1) a significant production ramp-up and new product introductions (NPIs) for a new customer; 2) stable performance from key existing customers, including contributions from its new Tampines plant; 3) positive guidance from its two largest global semiconductor customers, fuelled by strong AI-driven demand; 4) a robust semiconductor market, projected to grow by 17.8% y/y in both 2025 and 2026, according to Gartner; and 5) its position as a second-order AI beneficiary through exposure to key semiconductor customers.

Frencken (BUY, TP: SGD2.03)
The semiconductor segment, which contributed 50% of total revenue as of 2Q25, remains the core growth engine for the group. As previously noted, the global semiconductor market is projected by Gartner to grow 17.8% y/y in both 2025 and 2026, with SEMI expecting the rebound to extend through 2026. The front-end segment has yet to peak, while the back-end remains in the early recovery phase. As a second-order AI beneficiary through its semiconductor customers, Frencken is well positioned to capitalise on the technology sector recovery, supported by a sound balance sheet and diversified business portfolio. Beyond semiconductors, its other segments are expected to deliver steady performance, reinforcing earnings stability. The group is also executing strategic investments and capacity expansion initiatives, including production upgrades in Singapore and a new facility in the US, to enhance efficiency, enable product transfers from Europe to Asia, and support customers' growth roadmaps in both regions.

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Infineon (BUY, EUR39.00)
Infineon remains the global leader in power semiconductors, commanding a market share of just over 20%. Power semiconductors account for approximately 55% of Infineon's FY2024 revenue, forming the core of its business portfolio. This segment is poised to sustain a strong growth trajectory, underpinned by global trends in vehicle electrification, high-efficiency power conversion, and rising data centre and AI infrastructure demand. The group also holds the No. 1 positions in automotive semiconductors and automotive microcontrollers, underscoring its technological leadership and scale advantage. After a prolonged correction phase, 4QFY2025 is expected to mark Infineon's first y/y revenue growth in two years, signalling that demand across key end-markets is turning the corner.

TSMC (2330 TT: BUY; TP: TWD1,620)
TSM ADR (TSM US: BUY, TP: USD276)
Besides being the leader in leading-edge chips, with >50% of total revenue coming from 5nm and below nodes, TSMC is also developing advanced packaging and 3D chip stacking technologies, including CoWoS®, InFO, TSMCSoIC® (System on Integrated Chips), and silicon photonics. These technologies enable both homogeneous and heterogeneous chip integration, which is key to meeting customer requirements for high performance, high compute density and high energy efficiency, low latency, and high integration. We believe advanced packaging is the next key growth driver for TSMC, potentially outpacing the projected 2024-2030 global market CAGR of 5%-9%. TSMC's unmatched scale and fully integrated solutions give it a clear lead vs. peers.

Stock picks: Consumer-electronics complex

In the HK-listed consumer electronics space, our preferred picks are Lenovo, Sunny Optical, and BYDE. All three have re-rated alongside a broader recovery in downstream tech and renewed interest in Apple-adjacent supply chains, yet we still see room for upside as earnings repair is mix-led rather than unit-led. The core of our thesis is unchanged from the main text: premiumisation is lifting optics, thermals, and casings; foldables are becoming a genuine spec catalyst; and the Windows 11/AI PC refresh is sustaining demand for microphones, cameras, and thermal assemblies. We also see improving pricing discipline in handset optics and a healthier competitive landscape after the 2022-2023 shakeout. Against that backdrop, we maintain BUY on all three names, with target prices and details as below.

Sunny Optical (BUY; TP: HKD110.0)
Sunny is already printing the margin recovery we expect for handset optics. In 1H25, the group delivered a 19.8% gross margin (up 2.6ppt y/y) and flagged higher ASPs and margins in both handset lens sets and camera modules as the product mix shifted toward larger sensors and periscope telephoto. With Apple's folded-telephoto now standard across both Pro models and Android vendors pushing 6P/7P lenses and bigger sensors, we see Sunny's scale, process knowhow, and share leadership translating into further ASP/GM repair through 2026. Our BUY call and TP of HKD110.0 are supported by a sustained premium mix, a stabilising unit backdrop, and optionality from vehicle optics.

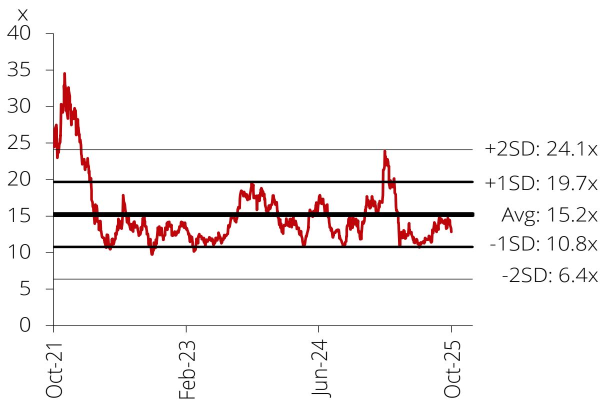
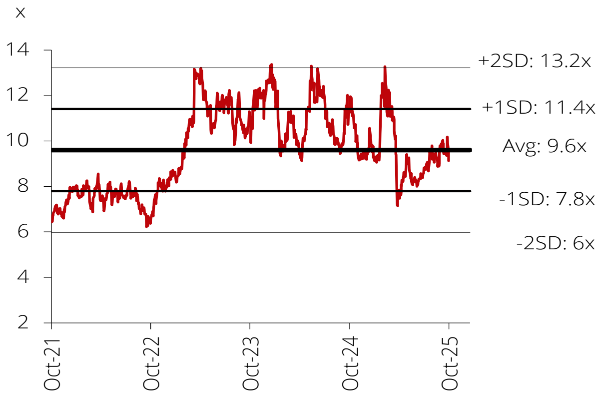
BYDE (BUY; TP: HKD57.0)
BYDE remains our preferred pick for exposure to premium casings/frames and Apple content. The integration of Jabil's China mobility assets has expanded its machining capabilities and customer reach. Concurrently, the industry's shift towards titanium and other lightweight alloys, coupled with the mechanical demands of foldable devices, significantly raises the value of precision metalwork. In the near term, we expect seasonal Apple ramp ups and product-mix upgrades to support utilisation. Over the medium term, automation and an expanded role in high-spec frames (including as a supplier of titanium parts for Apple's first foldable iPhone) are expected to drive margin improvement. We maintain BUY with TP at HKD57.0, underpinned by an improving mix in smartphones and growing contributions from adjacent verticals.

Lenovo (BUY, TP: HKD15.0)
Lenovo's outlook is positive, driven by several key factors: 1) its clear leadership in AI PCs, with AI-capable models already constituting 30% of shipments (vs. HP's 25% in 3QFY25), positioning the group to capture the Windows 10 to 11 enterprise refresh through FY26; 2) favourable premium mix trends (on-device NPUs, OLED/ultraslim designs, higher-spec webcams/mics/thermals) are expected to support ASP and margin resilience; 3) accelerating AI server momentum within the Infrastructure Solutions Group (ISG), where high-density GPU platforms and Neptune liquid-cooling solutions are ramping up, and the conversion of a robust backlog is poised to turn ISG operationally profitable in the mid-term; and 4) operating leverage stemming from a normalising component cost environment and continued growth in the higher margin Services & Solutions Group (SSG), which adds recurring revenue and stabilises group margins.

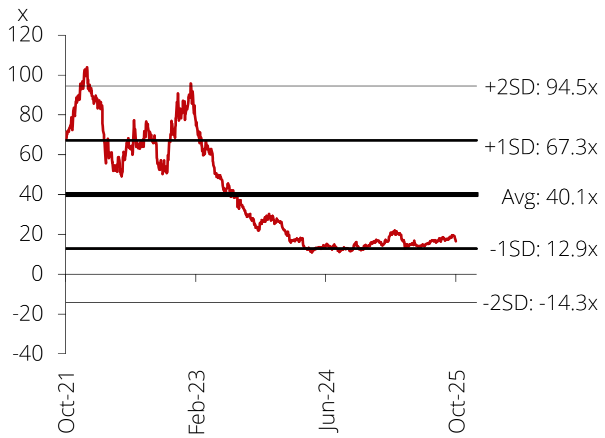
We maintain BUY with TP HKD15.0 (unchanged), anchored by (i) Lenovo's AI PC leadership and the Windows-driven replacement cycle, and (ii) operating leverage as ISG transitions from loss-making to profitable, primarily on the back of AI servers and an improved ESMB (small and medium business) mix.

PE Valuation Chart

Frencken	UMS
	

BYDE	Lenovo
	

Sunny Optical



Source: DBS

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BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return, i.e., > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

**Share price appreciation + dividends*

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