

# Regional Industry Focus

## Technology

Refer to important disclosures at the end of this report

DBS Group Research . Equity

6 Jan 2025

### 2025 outlook: Transitioning to slower growth

- Slower-but-steadier growth for semiconductor, powered by AI and broader market recovery
- Five themes to watch in 2025: 1) AI still in centre stage, 2) sustained memory growth, albeit with slower momentum, 3) equipment makers walking on tightrope, 4) L-shaped recovery for automotive and industrials, and 5) downstream consumer electronics as a compelling investment
- Favour AI-driven growth stocks – [TSMC](#), [AMD](#); downstream consumer electronics – [Xiaomi](#), [BYDE](#), [Lenovo](#); and SGX plays – [AEM](#), [GVT](#)

**A more tapered growth outlook.** We maintain our positive view on the semiconductor industry. The uptrend is expected to remain intact, however growth momentum could be slower, as pickings are likely to be harder after the low-hanging fruits dwindle. Recent market sentiment has been cautious, reflecting downward revisions to industry and company forecasts. Despite the slower growth momentum, recovery should be more stable, standing on two legs – AI and broader market recovery.

**Winners and losers in 2025.** We anticipate multiple winners in the thriving AI market ecosystem as companies continue to monetise AI. While the memory segment's growth will decelerate, high bandwidth memory remains a key driver due to ongoing supply constraints. Conventional memory should see gradual recovery, fuelled by AI-enhanced smartphones and PCs. **Equipment makers** face a year of increased capital spending alongside rising US-China trade tensions. We prefer those with AI-focused advanced technologies. The **industrial** and **automotive** sectors, lagging in the 2024 semiconductor recovery, may experience an extended period of slow growth. Despite market scepticism, the burgeoning wealth of emerging markets and on-device AI makes the **consumer electronics** sector a compelling investment opportunity.

**Our picks: AI plays and downstream consumer electronics.** Companies that straddle both the ongoing themes of AI and recovery should also be in a favourable spot. We pick [TSMC](#) and [AMD](#) in this space. Our references in the downstream consumer electronic space are [Xiaomi](#) and [BYDE](#), capitalising on the emerging market growth, and [Lenovo](#), riding on PC replacements. For SGX listed plays, we like [AEM](#) and [GVT](#).

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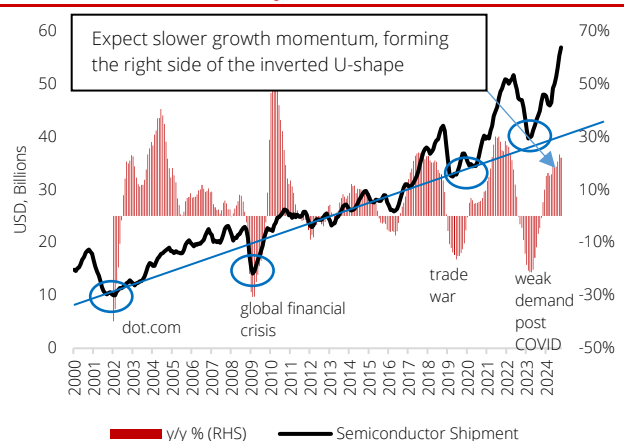
### STOCKS

	Price LCY	Mkt Cap USDmn	12-mth Target Price LCY	Performance (%)		Rating
				3-mth	12-mth	
<b>HK/China</b>						
<a href="#">BYD</a>	42.05	12,180	48.00	30.6	19.1	BUY
<a href="#">Electronic</a>						
<a href="#">Lenovo</a>	9.93	15,851	12.70	-8.2	-5.8	BUY
<a href="#">Group</a>						
<a href="#">Xiaomi Corp^</a>	35.95	115,981	36.00	49.5	140.0	BUY
<b>Singapore</b>						
<a href="#">AEM Holdings</a>	1.47	336	1.72	3.5	-56.3	BUY
<a href="#">Ltd</a>						
<a href="#">Grand Venture</a>	0.82	203	1.04	49.1	53.3	BUY
<a href="#">Technology</a>						
<b>Global</b>						
<a href="#">AMD</a>	120.63	195,759	200	-25.9	-10.9	BUY
<a href="#">TSMC</a>	201.58	1,045,504	223	12.3	101.2	BUY

Source: DBS, DBS HK, Bloomberg

Closing price as of 2 Jan 2025 ^TP under review

### Global semiconductor shipment data



Source: DBS, SIA, CEIC

## The outcome of our 2024 predictions

2024 played out as we predicted. We highlighted four key focus areas:

### 1) Worst being over for memory

The memory segment recovered nicely in 2024. Revenue surged c.77.3% y/y in 2024, vs. c.6.6% for the non-memory segment. The growth momentum was underpinned by the recovery in conventional DRAM and NAND segments, and higher demand for memory employed for AI-related work such as High-Bandwidth Memory.

### 2) Equipment makers to surprise and lead this upcycle

In FY24, equipment makers' financial performance ranked second only to AI and data centre plays, despite the rising trade risks between the US and China. Capex spending gradually increased, driven by the strong demand for AI chips, coupled with the continued inventory destocking trend. Front-end equipment makers fared better than backend plays.

### 3) Analog's resilience losing shine, for now

The analog/MCU segment underperformed in FY24, owing to subdued demand and the consistently high inventory level in the automotive and industrial sectors. This segment has traditionally been laggard during semiconductor upcycles. This can be attributed to the generally low advance chips requirement.

### 4) AI to scale new heights

AI-related stocks showed robust earnings growths and strong share price performances. Strong demand for AI chips continued to outstrip supply. This trend is expected to last at least for another year.

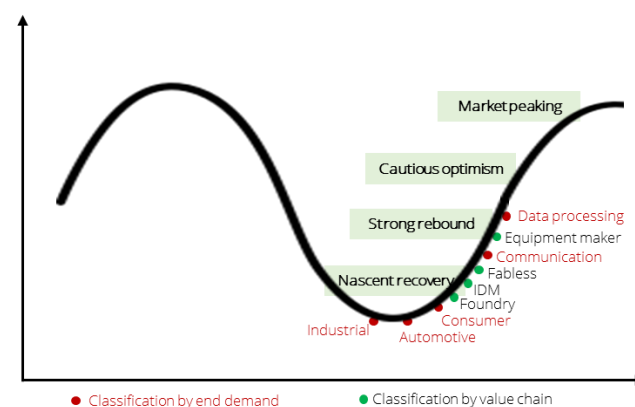
## What can we expect in 2025?

### Semiconductor uptrend intact but slower; stable growth.

We maintain our positive view on the semiconductor industry. The uptrend is expected to remain intact, however growth momentum could be slower, as pickings are likely to be harder after the low-hanging fruits dwindle. Recent market sentiment has been cautious, reflecting downward revisions to industry and company forecasts. On the back of this more muted backdrop, this should form the second half of the inverted U-shaped y/y return for the global semi shipment. Despite slower growth

momentum, recovery should be more stable, standing on two legs – AI and broader market recovery.

## Semiconductor recovery cycle



Note: Classification based on the average fundamental performance of players in each segment

Source: DBS

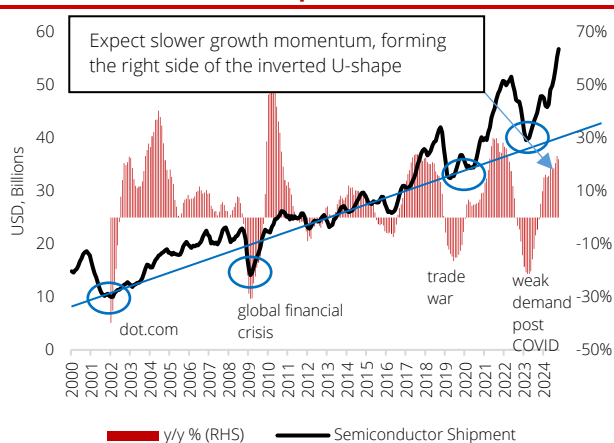
In terms of classification by end demand, the data processing and communication segments should continue to do well, mainly driven by AI. For the broader segments, we are positive on the consumer division while the automotive and industrial segments should see an L-shaped recovery.

On thematic investing, **AI-led plays** are still expected to be in demand. Besides the market leader Nvidia, we see potential for multiple winners in a flourishing AI market and ecosystem, as companies such as Marvell and Broadcom continue their AI-monetisation efforts. The **memory segment** should continue to do well, albeit with a slower momentum. Exposure to HBM would still be the key growth driver given the lingering under-supply situation. The conventional memory segment could see a gradual recovery, driven by AI-smartphones and PCs. **Equipment makers** are to straddle a year of rising capital spending and an anticipated growth of the US-China trade tension. Our preference is for players with exposure to advanced technologies, riding on the AI wave. The laggards in 2024 semiconductor recovery – **industrial and automotive** segments – could see an L-shaped recovery. We see the **downstream consumer electronics** segment as a compelling investment, driven by AI-on-device and the wealth effect from emerging markets.

## 2025 outlook positive, albeit with nuances

**AI and recovery still panning out ...** We maintain our constructive outlook for the wider semiconductor industry in 2025, with legs to the ongoing AI-adoption and wider industry recovery. Nvidia continues to see robust demand/pipeline for its data centre AI-chips, marking the 7th consecutive quarter of >USD4bn increase to revenue guidance. [Semiconductor Industry Association \(SIA\)](#) expects positive momentum for global semiconductor sales to continue into 2025, with new highs at USD697.2bn (+11.2% y/y), even after a strong showing in 2024.

### Global semiconductor shipment data



Source: DBS, SIA, CEIC

**... with pickings likely harder after low-hanging fruits dwindle.** While we expect an upward and rising trajectory in 2025, the days of the easy pickings have likely passed us. Using bellweather Nvidia as a proxy for AI, the 1.5 years from its first blowout earnings/guidance since [May 2023](#) have seen triple-digit y/y revenue growth, and more than threefold rise in share prices – a scenario unlikely to repeat in 2025.

### Nvidia's quarterly results and guidance

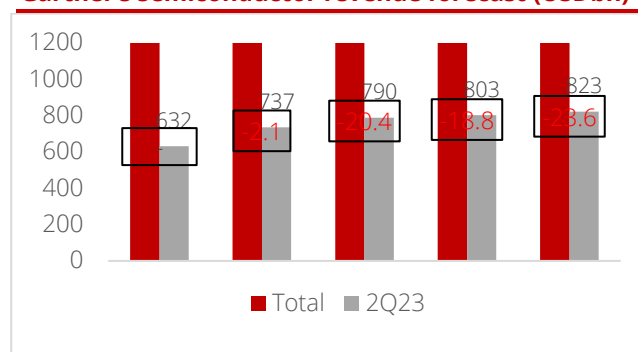
Period	Revenue (USDbn)	% y/y chg	Guidance (USDbn)	q/q chg	Price chg*
1Q24	7.2	n.m.	6.5	n.m.	+47%
2Q24	13.5	101.5	11	4.5	+54%
3Q24	18.1	205.5	16	5	+6%
4Q24	22.1	265.3	20	4	+35%
1Q25	26.0	262.1	24	4	+41%
2Q25	30.0	122.4	28	4	+32%
3Q25	35.1	93.9	32.5	4.5	+16%
4Q25	-	-	37.5	5	-

\*Change in share prices between two quarterly result releases.

Source: DBS, Bloomberg

**Taking a closer read on headline growth figures.** Recent downward revisions to projections offer a cautionary tale as to the extent of the wider semiconductor recovery. Gartner's still robust +13.8% y/y growth to global semiconductor revenue (at USD716.bn) in 2025 has been revised downwards, considering a slower pace of recovery for certain segments (e.g., industrials, automotive).

### Gartner's semiconductor revenue forecast (USDbn)



Note: Actual revisions to projections denoted in boxes above.

Source: DBS, Gartner

The memory segment is also another case in point. While considered a lynchpin of recovery and expected to register above-market growth rates in 2025/26, it nevertheless saw the sharpest revision to revenues forecast in the last two years. This necessitates us looking beyond the headline growth figure and serves as an important reminder to revisit current assumptions.

### Changes to Gartner's projections by segment (USDbn)

Segments	2024	2025	2026	2027	2028
Memory	2.0	-17.6	-14.8	-15.3	-16.8
Application-Specific	-1.2	-1.0	-1.2	-3.9	-5.2
Discrete	-1.5	-1.6	-1.7	-1.9	-1.7
Microcomponents	-0.4	0.8	-0.3	-1.5	-1.3
Analog	-0.7	-0.6	-0.3	-0.3	-0.1
Others	-0.3	-0.5	-0.5	-0.7	-0.8
<b>Total</b>	<b>-2.1</b>	<b>-20.4</b>	<b>-18.8</b>	<b>-23.6</b>	<b>-25.9</b>

Note: Revisions to projections between 3Q24 and 2Q24

Source: DBS, Gartner

**Consensus also turning more cautious in forecasts.** A similar trend of downward revisions to forward earnings and revenue has been apparent over the past two months, with 3QCY24 results and 4QCY24 guidance as additional datapoints for consideration. While outlooks have ostensibly turned more sombre over the quarter, we still see five themes that bear watching in 2025:

**Global semiconductor stocks: Consensus NTM forecast**

Stocks	Segment	Changes to NTM forecast		NTM growth	
		Revenue	Net profit	Revenue	Net profit
Marvell	AI/DC	9.1%	11.0%	44.0%	80.3%
TSMC	Foundry	2.6%	8.0%	27.4%	37.1%
Nvidia	AI/DC	7.4%	7.1%	57.2%	50.5%
Broadcom	AI/DC	1.2%	2.4%	19.2%	31.2%
Qualcomm	Consumer	1.0%	0.8%	8.4%	7.9%
ASML	Equipment	-1.7%	-0.1%	16.9%	25.0%
KLA Corp	Equipment	0.1%	-1.0%	14.6%	18.3%
Lam Research	Equipment	-1.0%	-2.4%	13.9%	12.4%
Intel	Consumer	-0.1%	-2.4%	0.9%	n.m.
GlobalFoundries	Foundry	-2.8%	-3.3%	5.2%	-6.9%
Applied Materials	Equipment	-2.6%	-3.8%	7.6%	6.0%
Analog Devices	Analog	-2.3%	-5.9%	7.5%	10.4%
Tokyo Electron	Equipment	-2.8%	-6.8%	13.8%	7.6%
Texas Instruments	Analog	-4.3%	-7.8%	5.6%	5.1%
AMD	AI/DC	-1.4%	-8.2%	26.7%	52.1%
ON Semi	MCU	-2.8%	-8.2%	-2.3%	-5.9%
Teradyne	Equipment	-3.3%	-11.0%	15.8%	26.2%
Micron	Memory	-6.2%	-13.4%	50.9%	n.m.
Infineon	MCU	-10.4%	-23.8%	-6.2%	-6.3%
Renesas	MCU	-10.5%	-25.0%	-10.4%	-38.3%
STMicro	MCU	-8.7%	-32.9%	-12.9%	-53.9%
<b>Overall*</b>		<b>0.9%</b>	<b>2.2%</b>	<b>23.3%</b>	<b>37.6%</b>

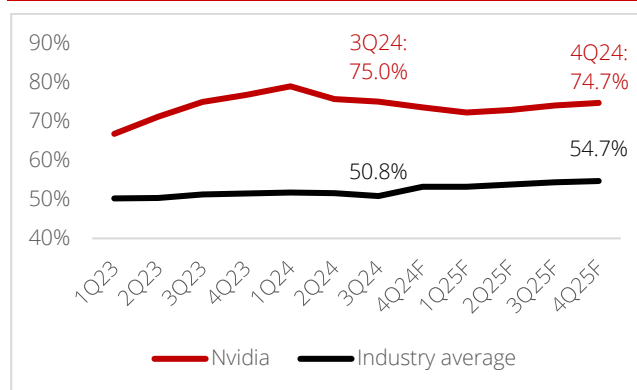
Note: Next 12 months (NTM) from 4QCY24 to 3QCY25  
 \*Overall refers to the total of the 21 stocks under coverage  
 Source: DBS, Visible Alpha. Data as of 16 Dec '24

**#1) AI still centre stage**

Markets will still be focusing on Nvidia ... Bellwether Nvidia would still be keenly watched as a barometer of AI momentum and the health of the overall semiconductor industry. Referring to the previous table, overall positive revisions and double-digit NTM growth are driven by its outsized contributions, whose revenue and earnings make up 25% and 39% of the total bases, respectively.

Fundamentals continue to surprise positively each quarter, with incremental gains from its Blackwell chips' ramp up as a key datapoint in the coming quarter(s). Unless a convincing alternative comes along, Nvidia's stellar streak of straight >USD4bn increases in quarterly guidance and gross margins of >70% are unlikely to abate any time soon.

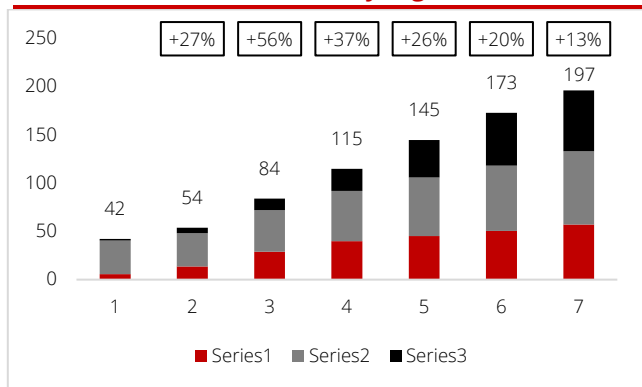
**Nvidia's gross margins are higher than industry average**



Note: Industry average of the remaining 20 stocks under coverage  
 Source: DBS, Visible Alpha

... while searching for an alternative. We believe that the ongoing AI momentum still has legs, with Gartner projecting sustained growth in AI semiconductor revenues. Robust double-digit growth is still expected in the coming year(s) after the segment delivered an impressive USD84bn in revenue (+56% y/y) in 2024.

**AI semiconductor revenues by segments (USDbn)**

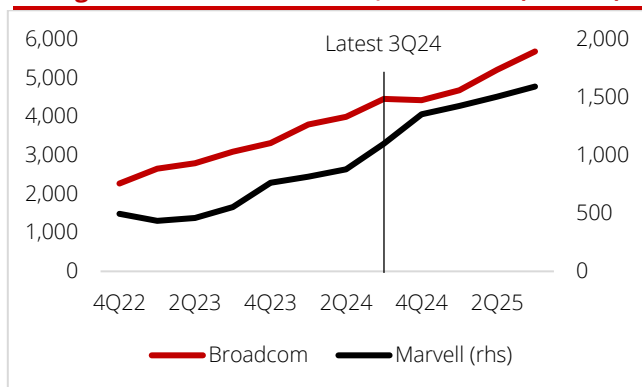


Note: % y/y growth in total revenues denoted in boxes

Source: DBS, Gartner

We see potential for multiple winners in a flourishing AI market and ecosystem. Apart from the GPU segment which Nvidia dominates, custom AI chips (e.g., Google Tensor, Amazon Inferentia; classified under application processor by Gartner) also looks to be a promising segment, with key players in **Marvell** and **Broadcom**. AI monetisation efforts were evident in their financials over the past year, with robust double-digit growth potential in 2025. Positive surprises in [Marvell's latest 4QFY25 guidance](#) and [Broadcom's 65% y/y growth in AI-revenues for Q1FY25](#) are further datapoints supporting our thesis.

**Rising AI-revenues for Marvell, Broadcom (USDmn)**



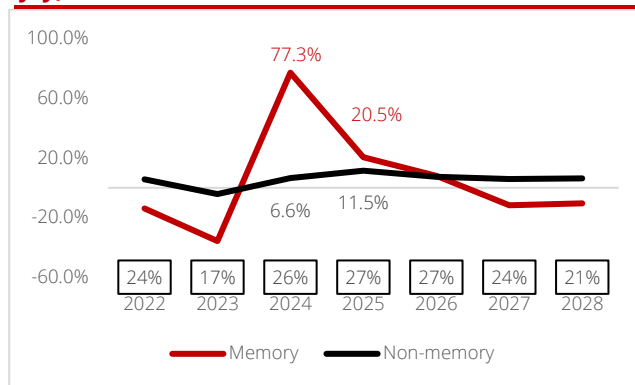
Note: Based on Broadcom's networking, Marvell's data centre segments

Source: DBS, Visible Alpha

**#2) Memory growth sustained, albeit with slower momentum**

**Recalibrating expectations for memory.** 2025 is likely to be a positive year for the memory sector and stocks such as **Micron**, but with nuances. Even with downward revisions to Gartner's forecast as well as consensus' revenue/earnings projections, they are nevertheless expected to register peer-beating growth in 2025.

**Memory double-digit revenue growth in 2025 (% y/y)**



Note: Memory contribution to total revenues denoted in boxes

Source: DBS, Gartner

The differing paces of recovery within the memory sector is expected to play out well into 2025. Owing to the ongoing AI-boom, high bandwidth memory (HBM) sees the healthiest supply-demand dynamics, as memory vendors raise production and utilisation to meet the strong demand from their hyperscale customers. Conversely, the softer-than-expected recovery in the consumer segment (e.g., PC and smartphones) could continue to weigh on the conventional memory segment, though higher DRAM content fuelled by AI-smartphones and PCs may be a silver lining come 2025.

**Big 3 memory players - excerpts from latest earnings call**

Company	Remarks
Micron (19 Dec)	<ul style="list-style-type: none"> <li>• Demand from data centre customers continues to be strong and customer inventory levels are healthy. Industry server unit shipments are expected to grow in the low teens in CY2024, with continued growth in 2025, driven by strong growth for AI servers.</li> <li>• Despite the near-term slower growth, we expect growth momentum to pick up for PC unit in 2025 as the PC replacement cycle gathers momentum with the rollout of next-</li> </ul>

	gen AI PCs, end of support for Windows 10 and the launch of Windows 12.
SK Hynix (24 Oct)	<ul style="list-style-type: none"> <li>While the recovery of demand in conventional applications such as PCs and smartphones was somewhat delayed, the <b>demand for AI memory products for data centres remained strong</b></li> <li>However, from next year, <b>enhanced AI futures are expected to provide growing momentum for memory demand</b></li> </ul>
Samsung (31 Oct)	<ul style="list-style-type: none"> <li>Growth in <b>AI and the data it creates should keep memory demand robust</b>, while we expect to encounter softness in mobile and PC</li> <li>Although demand in 2025 is focused to be robust overall, we expect the <b>demand increase to be driven primarily by high-density and high-end products based on cutting-edge nodes rather than legacy products</b></li> </ul>

Source: DBS, Refinitiv, Companies' earnings transcript

### #3) Equipment makers walking on a tightrope

A balancing act for equipment makers, between a year of rising capital spending (CAPEX) as well as US-China trade tensions. CAPEX is projected to rise to USD187bn (+7.9%) in 2025, led by the memory segment. Wafer fab equipment (WFE) spending, a subset of CAPEX, is also projected to rise from USD105bn (+2.1%) in 2024 to +6.3% and another 6.7% in years 2025 and 2026, respectively. Amongst our coverage, key equipment makers like **Tokyo Electron** and **Lam Research** see a better outlook in 2025.

#### Capital spending forecast by devices (USDbn)

Segment	2024	2025	2026
Logic	113.0	118.9	122.8
y/y chg	-5.7%	5.2%	3.3%
Memory	48.8	56.1	65.0
y/y chg	19.8%	14.8%	16.0%
Others	11.8	12.3	13.0
y/y chg	-0.6%	4.2%	6.1%
<b>Total</b>	<b>173.6</b>	<b>187.2</b>	<b>200.9</b>
<b>y/y chg</b>	<b>0.7%</b>	<b>7.9%</b>	<b>7.3%</b>

Source: DBS, Gartner

Yet, the outlook may be fraught with risk of more trade tensions under Trump 2.0. Possible expansion of export ban to more equipment and normalisation of demand from Chinese customers are headwinds for this segment. Latest guidance from the world's most advanced equipment maker **ASML** offers a cautionary tale here, where it sees a proportion of sales from China to normalise to 20% in FY25, down from c.50% by 3Q24 latest.

### #4) L-shaped recovery for automotive and industrials

**Investors' patience wearing thin.** The trend of 'buying winners, selling losers,' which has led to the bifurcation in YTD share prices, should continue into 2025. Failure to capitalise fast on the ongoing AI-boom and/or the wider industry recovery would likely result in YTD share price underperformance, as seen in the case of **Intel** – and to some extent **AMD**. Headwinds taking longer-than-expected to clear for the automotive and industrials segment continue to weigh on the MCU segment and stocks.

#### YTD share price performances (%)

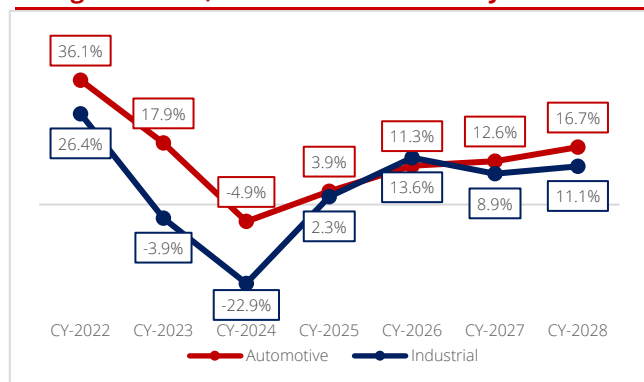
Stock	Segment	YTD	12m Fwd PE
Nvidia	AI/DC	166.5%	33.8
Broadcom	AI/DC	124.0%	39.5
Marvell	AI/DC	106.9%	48.7
TSMC	Foundry	94.4%	23.4
Micron	Memory	26.9%	12.3
<b>SOX Index</b>	<b>Index</b>	<b>25.9%</b>	<b>29.0</b>
Teradyne	Equipment	19.3%	33.4
KLA Corp	Equipment	12.9%	21.3
Texas Instruments	Analog	11.1%	33.8
Qualcomm	Consumer	9.2%	14.1
Analog Devices	Analog	8.9%	30.2
Applied Materials	Equipment	4.5%	18.0
ASML	Equipment	0.9%	29.4
Lam Research	Equipment	-0.6%	21.3
Tokyo Electron	Equipment	-6.3%	19.8
Infineon	MCU	-13.1%	22.0
AMD	AI/DC	-14.1%	28.0
ON Semi	MCU	-20.5%	16.3
Renesas	MCU	-21.3%	12.3
GlobalFoundries	Foundry	-27.5%	27.2
STMicro	MCU	-46.1%	23.2
Intel	Consumer	-58.5%	30.6

Source: DBS, Bloomberg. Based on 16 Dec '24 data and closing prices

**Muted automotive outlook.** Average growth in automotive semiconductor revenue for CY25 is c.3.9% (vs. -4.9% in CY24) based on consensus estimates of a basket of seven stocks. It is expected to be driven by a (i) stable automotive production environment that should translate to a modest low-single-digit percentage growth in vehicle sales at c.2%, and (ii) trends towards electrification, which requires higher semiconductor BOM (Bill of material) of USD1.3k/BEV vs. USD750/ICE. Despite the anticipated recovery in the automotive semiconductor market in CY25, we see some risks in the still elevated inventory levels at US OEMs, which may necessitate further scale downs in production to

manage inventory levels. The change in end market demand from full battery electric to hybrid, a deceleration in EV sell through rates, and downtrading from premium to economy vehicles add on to risks of a weaker-than-expected automotive semiconductor market.

**Automotive and industrial revenues reached troughs in CY24; muted road to recovery**



Source: DBS, Visible Alpha. Note: Computed based on consensus estimates of a basket of 7 stocks including On Semi, NXP, STMicro, Texas Instruments, Infineon, Analog Devices, and Renesas

**Cyclical headwinds linger in industrial markets, with recovery slow to gain momentum.** In industrial semiconductors, we see an L-shaped recovery rather than a V-shaped one, implying stabilisation as opposed to a sharp rebound. Of note, industrial revenue across a basket of seven stocks is forecast to plunge 22.9% in CY24, followed by a much more measured recovery at 2.3% in CY25. Commentary from On Semi’s 3Q24 results point to an absence of broad-based recovery – apart from areas such as utility scale solar, aerospace, and defence – and growth in Industrial semiconductor revenue of companies under our coverage will return to c.13.6% only in CY26.

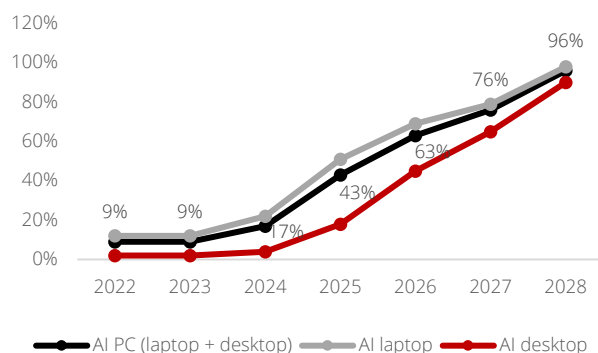
**#5) Downstream consumer electronics a compelling investment**

**AI-on-device driving next wave of growth.** The adoption of AI-enabled devices such as smartphones and PC/tablets is emerging as a key driver of growth. We anticipate a substantial increase in the installed base of AI PCs and GenAI smartphones, driven by increasing consumer demand for AI capabilities. Shipments of AI PCs are projected to exceed 100% y/y growth in both 2024 and 2025, fuelled by Windows transition from 10 to 11 version. Transitioning to Windows 11 requires newer hardware, prompting more upgrades. The growth is expected to be even more pronounced in the GenAI smartphone market,

with the progressive rollout of AI features such as Apple Intelligence.

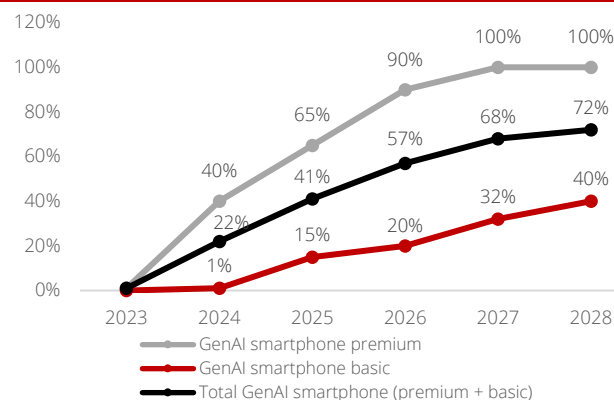
**Wealth effect, especially from emerging market as another driver.** Strong stock market performance (Dow Jones Southeast Asia Index +20% YTD in 2024 vs. -4.1% average in 2021-23) and rising disposable incomes in emerging markets like India and Southeast Asia are set to boost consumption and accelerate the shift from feature phones to smartphones.

**AI PC/laptop share of total market**



Source: DBS, Gartner

**GenAI smartphone share of total market**



Source: DBS, Gartner

**Valuation & stock picks**

**Share price performance in 2024: US > HK/China > SG listed plays. Consumer electronics a preferred segment.** The US’s tech stocks have done well in 2024, with the Philadelphia Semiconductor (SOX) Index registering a 24% YTD gain. Other US Tech indices such as Nasdaq 100 Index, Nasdaq Index, S&P 500 Information Technology Index and Dow Jones US Technology Index saw gains ranging from 31% to 43%. In contrast, SGX-listed stocks in our coverage

list mostly registered negative return for 2024, mainly affected by the still high inventory level and the weaker-than-expected demand. Hong Kong semiconductor stocks – such as SMIC, Huahong, and ASMPT – and downstream plays fared better. Smartphone upgrades fuelled significant gains for companies like Xiaomi and AAC Technologies, with their stock prices surging over 50% in 2024. Overall, the market is still sceptical on the sustainability of growth for the consumer electronics segment and expects a sluggish growth rate for smartphone in 2025. We expect a moderate growth rate, mainly from higher contributions of emerging Asia while market expects more from recovery of developed markets.

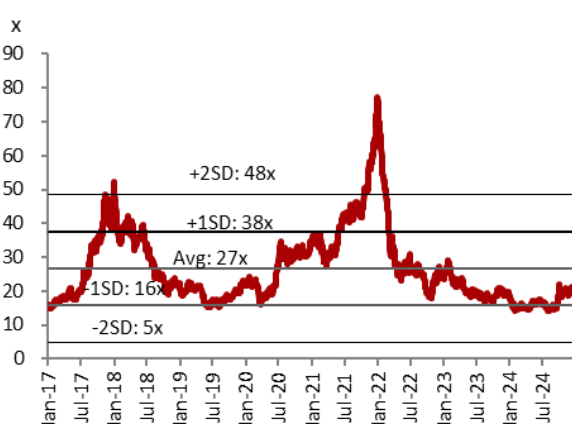
In terms of valuations, US stocks such as the SOX index trades at a premium to their Asia peers.

### SOX Index – 12-mth forward PE valuations



Source: DBS, Bloomberg

### Hong Kong/China – 12-mth forward PE valuations



Source: DBS, Bloomberg

### Singapore – 12-mth forward PE valuations



Source: DBS, Bloomberg

\*computation based on basket of stocks in our coverage – Venture, UMS, AEM, Frencken, Aztech, GVT

### Singapore – 12-mth forward PE valuations – ex Venture



Source: DBS, Bloomberg

Companies that straddle both the ongoing themes of AI and recovery should also be in a favourable spot, like **TSMC**, the world's leading semiconductor manufacturer, and **AMD**, the often-touted strongest competitor to Nvidia. AMD could be seen as a value play, should its data centre segment come online.

In the downstream space, our preferences remain Xiaomi, BYDE and Lenovo. The expected rise of AI-enabled devices and a wealth-driven shift in emerging markets in 2025 create distinct opportunities for the companies positioned to capitalise on these dynamics.

### Xiaomi (BUY, TP: HKD36.0 under review)

Its growing exposure to emerging markets, particularly India and Southeast Asia, highlights its potential to benefit from the feature phone-to-smartphone transition. In 2Q24, its exposure to these regions rose to 13%, compared to 10% in 2Q24. This growth underscores Xiaomi's alignment with rising disposable incomes and the increasing demand



for higher-tier devices. Xiaomi's diverse product portfolio – from the affordable Redmi series to the mid-tier POCO and premium Mix/Fold models – positions it to cater to a wide range of consumer preferences. With faster-than-expected shipment growth and an upward trajectory in ASPs, the company's earnings are anticipated to increase 47.4% and 20.7% in FY25F and FY26F. We maintain BUY on Xiaomi. Our TP of HKD36.0, based on a 28x FY25F PE, is under review.

#### **BYDE (BUY, TP: HKD48.0)**

The company stands out as a critical enabler of AI-driven smartphone adoption, playing a pivotal role in the supply chain for Apple's AI-optimised iPhones. As Apple continues to upgrade iPhone's hardware to enhance the AI edge computing, BYDE is poised to benefit from the increased order volume, and improvements in ASP. Additionally, its participation in Xiaomi's supply chain further aligns it with the growth momentum in emerging markets. With FY25F earnings projected to grow by 48%, we maintain BUY on the stock with a TP of HKD48.0, reflecting a compelling valuation at 14x FY25F PE.

#### **Lenovo (BUY, TP: HKD12.7)**

The company's leadership in the commercial PC segment makes it exceptionally well-positioned to capitalise on the upcoming replacement cycle driven by Microsoft's discontinuation of Windows 10 support. With the largest global market share in commercial PCs at 23%, Lenovo's exposure to business customers places it at the forefront of this opportunity. Its robust AI PC pipeline in 2025, featuring models such as the ThinkPad, Yoga, and IdeaPad, aligns with rising demand for AI-enabled devices. Forecasted AI PC shipment growth of 125.9% y/y in FY25 underscores Lenovo's potential for accelerated earnings growth, with FY25/26F earnings projected to rise by 46.6%/45.0%, respectively. These dynamics solidify Lenovo's position as a key beneficiary of the AI PC boom. We maintain BUY with a TP of HKD12.7, based on a 13x FY25F PE.

For SGX-listed plays, we favour **AEM** and **Grand Venture**, riding on the ongoing semiconductor industry recovery and increasing contribution from their new customers.

#### **AEM (BUY, TP: SGD1.72)**

AEM is a pioneer in providing SLT (system-level test) solutions and is around one generation ahead of its competitors. Given its technological superiority, we believe AEM is well positioned to ride on the growing SLT market that has benefitted from the increased complexity of chips and higher test coverage requirements, alongside the need for advanced heterogeneous packaging. The group is at the cusp of a multi-year rollout for new customers. We foresee its customer diversification strategy yielding more significant returns starting from 1Q25. Current valuations are still undemanding at 15.8x PE on FY25F earnings, below -0.5SD of the historical mean, with further improvement to c.11x on FY26F earnings.

#### **Grand Venture (BUY; TP: SGD1.04)**

Grand Venture is a high-growth company with a strong blue-chip customer base. In the semiconductor back-end space, it serves four of the top six; in the analytical life sciences segment, it serves three of the top 10. The products that GVT supplies are made according to certain product specifications, thus its customer base tends to be sticky in nature. We believe that FY24 is a turning point for the group with momentum to continue through FY25 as the semiconductor equipment market recovers and new front-end contributions come in more meaningfully. We have pencilled a 41% y/y increase in earnings, after a projected 73% y/y gain.

## Stocks under our coverage

## Asia

Company	Price 3 Jan	12-mth Target Price	12-mth Target Return	Mkt Cap (US\$m)	Rcmd	PER 23 (x)	PE 24F (x)	PE 25F (x)	EPS Gth 24F (%)	EPS Gth 25F (%)	Div Yld 24F (%)	P/BV 23 (x)	ROE 23 (%)
<b>Singapore</b>													
AEM Holdings	1.54	1.72	12%	317	BUY	n.m.	88.3	15.8	n.m.	147.6	0.0	0.9	-0.2
Aztech	0.71	0.63	-11%	400	FV	5.4	7.9	11.0	-31.6	-28.8	6.4	1.6	31.8
Frencken	1.18	1.47	24%	372	BUY	15.4	13.6	12.0	13.1	13.9	2.2	1.2	8.1
Grand Venture	0.82	1.04	27%	142	BUY	34.3	19.8	14.1	72.7	40.8	0.5	1.6	4.7
UMS Holdings	1.05	1.08	3%	535	HOLD	11.3	17.9	15.0	-37.0	19.4	5.0	1.9	17.1
Venture Corp	13.11	15.10	15%	2,791	BUY	13.9	15.5	14.5	-10.1	6.5	5.8	1.3	9.5
Nanofilm	0.79	0.75	-5%	379	HOLD	158.2	38.9	18.7	306.9	107.4	0.5	1.4	0.8
<b>Average</b>						<b>39.7</b>	<b>28.8</b>	<b>14.5</b>	<b>52.3</b>	<b>43.8</b>	<b>2.9</b>	<b>1.4</b>	<b>10.3</b>
<b>Hong Kong / China</b>													
AAC Tech	37.75	43.00	14%	4,643	BUY	44.9	15.9	12.8	185.2	23.6	1.9	1.5	3.4
ASM Pacific	73.30	100.00	36%	5,403	HOLD	34.7	21.3	15.7	61.8	34.8	1.8	2.6	7.6
BYD Electronics	41.15	48.00	17%	8,744	BUY	15.7	13.3	9.0	15.7	45.8	2.2	2.2	14.7
Hua Hong	19.98	27.00	35%	3,925	BUY	18.5	43.4	29.9	-57.3	45.1	0.0	0.7	6.0
Lenovo	9.83	12.70	29%	14,569	BUY	9.5	15.1	10.3	-37.1	46.6	4.1	2.5	30.4
Luxshare	39.23	57.00	45%	36,462	BUY	24.2	17.7	15.0	29.8	17.2	0.5	4.7	21.5
Q Tech	6.52	7.20	10%	504	BUY	23.8	8.7	5.6	175.0	53.8	0.7	0.7	3.2
SMIC	29.55	37.00	25%	21,613	BUY	31.8	52.8	30.4	-39.8	74.0	0.0	1.4	4.6
Sunny Optical	67.45	80.00	19%	6,373	BUY	42.0	15.7	11.6	147.5	33.0	0.5	2.1	5.0
Xiaomi <sup>^</sup>	36.25	36.00	-1%	74,243	BUY	37.6	33.7	22.9	39.5	47.4	0.0	4.0	11.4
						<b>28.3</b>	<b>23.8</b>	<b>16.3</b>	<b>52.0</b>	<b>42.1</b>	<b>1.2</b>	<b>2.3</b>	<b>10.8</b>

Source: DBS, Bloomberg

<sup>^</sup> target price under review

## Global

Company	Price (LCY)	Mkt Cap (US\$)	EPS (US\$)		Earnings Gth (%)		EBITDA Margin (%)		P/E (x)		P/BV (x)		Net Debt/ Equity (x)
			FY1	FY2	FY1	FY2	FY1	FY2	FY1	FY2	FY1	FY2	
<b>Foundry</b>													
GLOBALFOUNDRIES	44.64	24,670.5	1.53	1.73	-16.7	13.2	36.1	35.6	29.2	25.9	2.0	1.9	-0.1
TSMC	1085.00	3,607,309.7	5.79	7.47	38.4	29.9	67.9	69.9	24.0	18.6	6.4	5.2	-0.2
<b>IDM</b>													
ANALOG DEVICES	218.09	108,237.4	7.11	8.90	114.6	25.1	51.7	54.2	30.7	24.5	3.1	3.1	0.1
INFINEON TECH	31.54	43,817.8	1.61	2.24	49.6	39.7	29.0	33.7	20.8	15.0	2.2	2.0	0.2
INTEL CORP	20.40	87,985.2	(0.15)	0.98	n.m.	n.m.	18.3	29.4	-	20.9	0.8	0.8	0.2
MICRON TECH	89.28	99,473.3	6.91	10.79	n.m.	53.8	51.1	52.4	12.9	8.3	1.9	1.6	0.1
ON SEMICONDUCTOR	67.90	28,911.6	4.00	4.30	-21.6	6.4	37.1	37.6	17.0	15.8	3.3	2.9	0.1
RENESAS ELECTRONICS	2026.00	25,555.4	1.27	1.31	-0.7	7.6	36.0	36.8	10.7	10.4	1.6	1.4	0.1
SAMSUNG ELECTRON	53600.00	266,071.6	3.74	4.09	128.4	7.7	25.4	26.6	10.7	9.8	0.9	0.9	-0.2
STMICROELECTRONICS	25.67	22,884.5	1.66	1.38	-62.9	-15.9	25.8	26.6	15.5	18.7	1.3	1.2	-0.2
TEXAS INSTRUMENT	192.44	175,547.0	5.10	5.86	-28.0	15.0	44.4	49.6	37.8	32.8	10.3	9.8	0.2
<b>Fabless</b>													
ADV MICRO DEVICE	126.29	204,944.3	3.32	5.06	527.8	52.7	35.9	35.9	38.1	24.9	3.5	3.2	-0.1
BROADCOM INC	239.68	1,123,465.5	6.27	7.47	418.6	19.4	64.4	65.2	38.2	32.1	12.8	14.5	0.9
MARVELL TECHNOLO	115.95	100,331.5	1.56	2.75	n.m.	78.1	29.8	35.1	74.4	42.2	7.3	7.1	0.2
NVIDIA CORP	140.22	3,433,987.8	2.95	4.42	145.2	49.5	67.4	68.4	47.5	31.7	37.6	19.6	-0.4
QUALCOMM INC	159.36	177,049.0	11.18	12.13	22.7	8.5	37.4	37.5	14.3	13.1	5.9	5.4	0.1
<b>Equipment Makers</b>													
APPLIED MATERIAL	168.37	137,000.1	9.43	10.56	7.6	10.2	31.6	32.0	17.8	15.9	6.4	6.3	-0.2
ASML HLDG (EUR)	688.50	292,674.5	20.31	25.50	-7.3	24.7	34.8	36.4	36.1	28.7	16.3	14.6	-0.1
ASML HLDG(USD)	719.71	286,034.9	20.34	26.04	-3.8	28.1	34.7	36.9	35.8	28.0	16.0	14.8	-0.2
KLA CORP	650.53	87,014.7	30.45	32.69	46.7	6.2	44.3	44.7	21.4	19.9	19.9	17.6	0.6
LAM RESEARCH	73.83	94,996.0	3.59	4.23	20.7	17.7	32.4	33.7	20.6	17.5	10.0	8.2	-0.1
TERADYNE INC	129.96	21,165.5	3.17	4.27	16.0	33.0	25.9	27.9	40.9	30.4	7.7	6.7	-0.3
TOKYO ELECTRON	23830.00	75,785.6	7.56	8.31	42.6	10.4	30.9	31.7	21.2	19.3	5.8	5.1	-0.3

Source: DBS, Refinitiv

Update: 24 December 2024

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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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