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GLOBAL IDEA

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Global Technology

Analog Recap: Margins Overshadow Data Center Commentary

Although cycle recovery is more evident and data center updates offered bright spots the market needed to see, margins were in focus across our global analog coverage. We remain constructive and prefer IFX and STM in Europe, NXP, ADI and ALGM in the US and Renesas, Yangjie and SICC in Asia.

Key Takeaways

- Cycle broadening: Industrial recovery is gaining breadth, while automotive demand is beginning to inflect across the group.
- Margin expectations reset: Q4 margin guides disappointed vs a demanding buy-side bar, particularly at STM and Infineon; the issue is pace of recovery, not demand direction.
- Channel correction largely complete: Distributor inventories are normalising or below target, reducing the risk that current growth is driven by restocking alone.
- Visibility improving: Book-to-bill ratios above 1, firmer pricing and backlog extending through 2026 support a demand-led up-cycle into 2027.
- AI data center remains the structural growth engine: Power semiconductor exposure is scaling rapidly, with raised outlooks and multi-year customer commitments across STM, Texas Instruments, ON Semiconductor and Infineon.

The Q2 2026 reporting season confirms that the analog semiconductor up-cycle is broadening. Across all names, key cycle indicators – channel inventory, pricing, and backlog – are inflecting positively. Drivers for both the autos and industrials end markets are improving and we see strength reported into H2 as near uniform, but with variance in the pace, mix, and impact of each recovery. STM called out c.40% industrials growth yy (Q4), while TI, ON and NXP all pointed to better autos momentum. Generally, however, analog stocks still faced a steep sell-off post earnings as the *bogey trade* prevailed, mainly on margin disappointments. **While we acknowledge weaker margins (Q4 guides primarily), relative to heightened expectations, we think stock reactions this quarter fail to tell the story of improving end-market dynamics and ongoing momentum in the datacenter.**

Margins: Steady but not enough? ... as mentioned, the market had its eye on margins this quarter. While the direction of travel remained positive, the pace of improvement was not always enough to clear a bar that had moved higher through the quarter. **STMicro** was the clearest disappointment. Despite an improving Q2/Q3 gross margin profile (Q3e: c.37% up >200bps qq), the Q4 guide underwhelmed. A

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mix of proforma charges and ramp-up costs mean the hoped-for 40%+ margin looks unachievable, despite a sales guide reaching the landmark $4bn+/Q level. **Infineon** echoed similar margin disappointment, with c.23% Q4 segment-margin guidance falling short of the mid-20s% buy-side expectation, as mix and FX offset the benefits of stronger AI and cyclical volumes. Conversely, **Renesas** stands out as a margin winner this Q, driven primarily by surging AI datacenter demand, higher utilisation and better industrials. **Overall, we think margin expectations had overrun the attainable for Q4, especially with some of our European names, but that end market drivers remain strong.**

...but cycle fundamentals are robust into 2H26. Largely as expected, commentary this quarter pointed to a demand-led up-cycle rather than a short-lived inventory spike, with industrial strength broadening and automotive beginning to join the recovery. **ON**, **Infineon** and **Allegro** all noted improving industrial demand alongside steady-to-strengthening automotive, while **TI** saw automotive inflect sharply and **NXP** expects every end market and region to grow sequentially. Channel signals are also constructive: **STM's** distributor inventory has fallen below its normal target, **Allegro's** final pocket of excess distribution inventory has cleared and **NXP**'s Western Tier 1s are still ordering hand-to-mouth, suggesting current growth is not simply being pulled forward by aggressive restocking. Pricing is becoming supportive, with sequential increases across several of our global coverage, although the benefit remains selective and, for now, secondary to volume. Visibility is also improving materially, with book-to-bills above 1 and backlog extending through 2026. **Taken together, cleaner channels, firmer pricing and longer-dated order visibility give us greater confidence that the recovery is broadening beyond data center and can carry into 2027.**

2026-27 AI datacenter guidance firms in power semis. Datacenter sales remain the structural overlay, with **ON**, **TXN** and **Infineon** raising their 2026 outlooks and **STM** lifting its 2027 ambition to well above $2bn. **TI's** AI DC business has been a standout growth driver, with revenue doubling yy in 2Q26 and management guiding to outgrow the market into 2027 as ASSP design-ins ramp. Subsequently, AI DC sales guidance for FY26 and FY27 was raised c.10% and group GM% lifted (2-3pps), partly reflecting rising datacenter exposure and better factory loading. **ON Semi** sales are also guided to more than double in 2026 (2025: >$250m), driven by power content wins, with customers ordering into 2027-2028 to lock up supply, supporting greater forward visibility. Elsewhere, **Infineon's** AI datacenter revenue is on track to exceed €1.6bn in FY26 and is poised for a material upgrade to its €2.5bn FY27 target, driven by broad power content wins across the rack, supply-constrained demand, and multi-year customer reservation agreements (CRAs) underpinning strong forward visibility. All told, **power semis sales in the AI DC have gone materially higher of late on volume uptake (regardless of 800v delays or otherwise).** And yet, we guard against runaway assumptions, especially into FY28, given the lack of visibility currently.

What next? For data center power updates we now look to the **AI Infra Summit** in September and the **OCP Global Summit** in October as opportunities for incremental commentary on the timeline for 800v rack deployments and adoption of power semi components. For networking, we think the **Silicon Photonics Global Summit**

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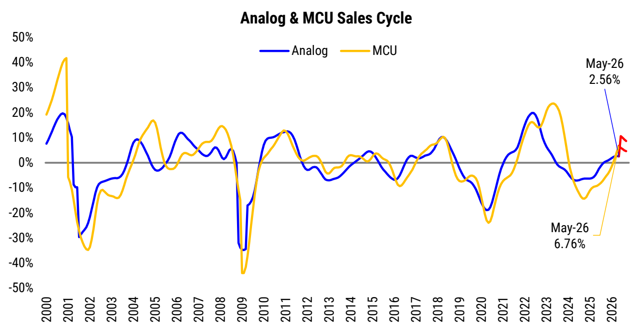
TECHNOLOGY - EUROPEAN SEMICONDUCTORS	
Europe	
Industry View	**In-Line**
GREATER CHINA TECHNOLOGY SEMICONDUCTORS	
Asia Pacific	
Industry View	**Attractive**
JAPAN SEMICONDUCTORS	
Japan	
Industry View	**In-Line**
SEMICONDUCTORS	
North America	
Industry View	**Attractive**

next week and the **PIC Summit Europe** in November may provide updates on CPO/NPO timelines and optical technology. At the company level, aside from 3Q results in November, we think **ON's Financial Analyst Day** in September could provide broader analog data points on inventory, pricing and end-markets.

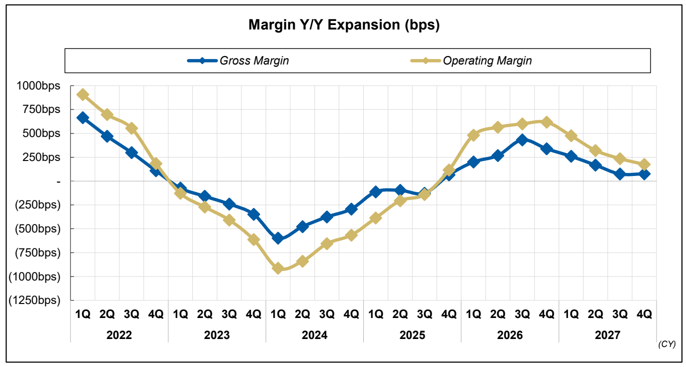
2Q26 in Charts

Exhibit 1: Cycle recovery tracking in line with our expectations...



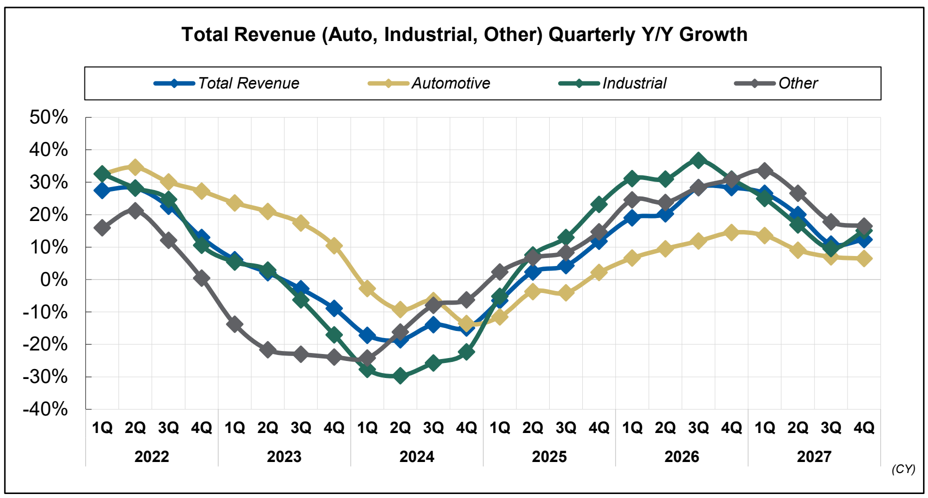
Source: AlphaWise, SIA, Morgan Stanley Research.

Exhibit 2: ...as margins tick sequentially up...



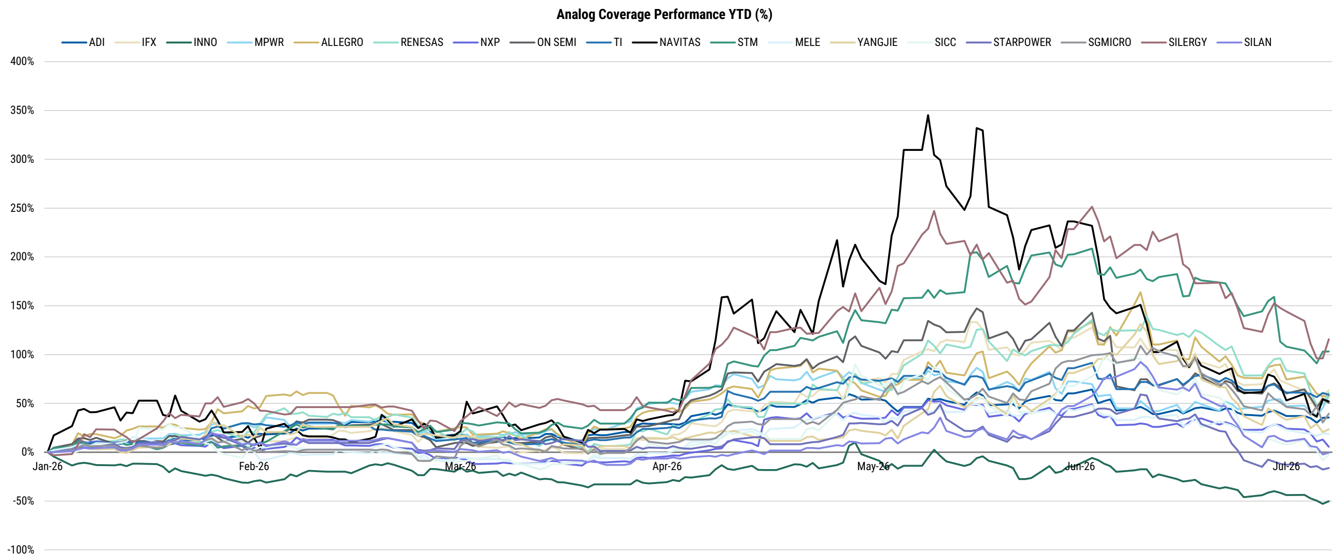
Note: Represents total of defined Core 8 companies (TXN, ADI, IFX, MPWR, STM, NXPI, Renesas, MCHP, ON) Source: VisibleAlpha, Morgan Stanley Research estimates.

Exhibit 3:
...and end-market dynamics accelerate.



Note: Represents total of defined Core 8 companies (TXN, ADI, IFX, MPWR, STM, NXPI, Renesas, MCHP, ON) Source: VisibleAlpha, Morgan Stanley Research estimates.

Exhibit 4: Our Analog covered companies have traded down from May/June peaks



Source: Factset, Morgan Stanley Research estimates

Exhibit 5: Our global analog coverage OW rated stocks

Stock	Rating	Thesis
Infineon	OW, PT €81 Covered by Lee Simpson	We view Infineon as best placed amongst European analog names for a cyclical recovery in automotive/industrial, demonstrating a superior ability to weather the headwinds facing these markets in the meantime. We expect new wins in autos to validate IFX's strategy (design focus, capacity build, proprietary IP). A strong IP library augurs well for GaN longer term too including use in EVs, data centres and energy storage.
ST life.augmented	OW, PT €65 Covered by Lee Simpson	STM has a portfolio positioned for growth areas (BiCMOS imaging sensors, GP MCUs). We see opportunity for recovery into FY26/27. We expect drivers of FY27 growth to come from data centres, with a material ramp in optical revenues driven by pluggables and NPOs (2027+), as well as LEOs in the CECP end market. We allow for a modest industrial recovery cycle starting 2H26. We see some signs of automotive recovery as ASIL-grade microcontroller (MCUs) design wins start to convert to sales (2027+).
ANALOG DEVICES AHEAD OF WHAT'S POSSIBLE™	OW, PT $458 Covered by Joe Moore	We are OW ADI on the back of 3 reasons: 1) ADI has managed the downcycle well, only seeing 1 quarter of OPM% below 40%, 2) the company's revenue outlook looks strong with high industrial exposure, and 3) the company has relatively higher ASP products which should limit direct competition with emerging Chinese capacity. ADI is a core holding in the analog space long term as the company has exposure to the right end markets as well as superior margins and FCF generation, a result of developing a comprehensive analog portfolio via successful integration of Linear Tech and Maxim.
NXP	OW, PT $338 Covered by Joe Moore	We remain OW NXP on the back of: 1) NXP should outperform Auto semis in 2026 as auto joins other end markets in a recovery. 2) Structural improvements to the business: NXP has multiple levers to improve gross margin from here (channel shipments, internal utilization, and overall revenue growth); and 3) Favorable MCU set up into 2026 as momentum acceleration appears likely to inflect.
INNOVATION WITH PURPOSE ALLEGRO microsystems	OW, PT $52 Covered by Joe Moore	We see scope for Allegro to outperform over the next several years as the recovery remains in an upcycle, with earnings power increasingly supported by incremental secular growth vectors in auto electrification and industrial. 35x is in-line with the company's average PE multiple since 2022, but is a premium to auto semi peers and in-line with higher gross margin analog/MCU companies.
RENESAS	OW, PT 6,000 JPY Covered by Kazuo Yosikawa	After years of stagnation, we expect growth of memory interface and digital power for datacenters, MCU for E/E architecture, R-Car for ADAS to drive revenue growth from CY26. Product mix improvement should drive continued gross margin improvement. Data center revenue growth and sustained gross margin improvement outlook, as well as improved prospect of shareholder returns, could trigger re-rating.
扬杰科技 YANGJIE TECHNOLOGY	OW, PT 136 CNY Covered by Daisy Dai	Yangjie is a quality company that we expect to outperform relative to its power semi peers. Overseas packaging and foundry capacity expansion is ongoing. We expect its fab in Vietnam to add growth and gain orders from overseas customers. We expect Yangjie's GM to continue to improve as its product selling prices are stabilizing, auto business is increasing in the mix, and operational efficiency continues to improve. We view valuation as attractive.
SICC®	OW, PT 127 CNY Covered by Daisy Dai	We expect SICC to gain share over its global and local competitors due to its technology leadership, especially in 8-inch. Substrate pricing is stabilizing this year, and we think SICC's technology breakthrough could lead to lower costs, thus offering some protection in case pricing starts to decline again in 2027. We expect SiC penetration in EV and data centers to continue to rise. We expect SICC to trade up to 8.5x 2026e BVPS, above the historical average level of 5.5x, owing to of global market share gain and long-term secular drivers (EV, AI data centers, AR glass).

Source: Morgan Stanley Research

Exhibit 6: Our global analog coverage EW rated stocks

Stock	Rating	Thesis
Melexis	**EW, PT €65** **Covered by Nigel van Putten**	Melexis enters 2H26 with higher revenue expectations, but growth still trails peers despite a weaker first-half base. Margin conversion remains muted as management prioritises volume over pricing and wage inflation absorbs gross margin gains, while robotics remains too small to affect the near-term earnings path. We remain EW pending clearer evidence of sustained catch-up growth and stronger operating leverage.
Microchip	**EW, PT $103** **Covered by Joe Moore**	There's opportunity here as we think certain concerns surrounding the company are overblown (GM%, BS), but the biggest variable is revenue growth as a cyclical recovery would be an undeniable lever to EPS as well as dispel BS worries. There are considerable headwinds the company will have to get past including increased MCU competition, macro uncertainty, and regaining customer trust from overly extending PSP, If macro uncertainty subsides and we get indication that the MCU upcycle is strengthening, we would be quick to revisit our EW rating, but for now we remain EW.
Innoscience	**EW, PT 69 HKD** **Covered by Daisy Dai**	We believe Innoscience is well positioned to benefit from secular growth drivers for the GaN market, such as NVIDIA's 800V AI data centers, EVs and humanoid robotics. Despite these secular growth drivers, we expect competition to remain fierce and excessive capacity may persist industry-wide in the next five years on the back of aggressive capacity additions. We expect Innoscience's gross margin to improve at a moderate pace in 2026/27e, partly because of rising depreciation costs, and the company to incur losses until 2026e. Our EW relative to our coverage reflects balanced risk-reward on high revenue growth potential, amid lofty market expectations.
SGMICRO	**EW, PT 82 CNY** **Covered by Charlie Chan**	The analog cycle has bottomed, but the rebound seems soft in sectors other than auto and AI. SG Micro should still enjoy top-line growth, backed by its comprehensive product portfolio (>6,800 SKUs). The long-term gross margin outlook should be stable, ranging from 48% to 52%, due to improvement in product mix and aggressive market share gains. SG Micro is actively engaging into optical networking business with ability to supply 800G/1.6T optical module. The stock is trading at 65x 2026e P/E, which is less compelling to us as it stands around its historical average.
starpower	**EW, PT 120 CNY** **Covered by Daisy Dai**	IGBT is in cyclical recovery, but weaker EV sales this year create headwinds. StarPower can drive revenue growth through IPM and SiC MOS, although the auto MCU development cycle is long, so we expect limited near-term contribution. Margins may remain structurally lower due to the depreciation burden. Our price target implies 45x 2027e P/E (vs. a historical range of 27–100x), which we consider fair.

Source: Morgan Stanley Research

Exhibit 7: Our global analog coverage UW rated stocks

Stock	Rating	Thesis
Texas Instruments	UW, PT $255 Covered by Joe Moore	TI is looking to ramp capex over the next few years to help bring more manufacturing in-house, but this will act as a near-term headwind to earnings and FCF growth. The company has also seen pricing and market share pressure in personal electronics and enterprise, as customers move to multisource components, and face competition with local Chinese supply. The company trades at a premium valuation for its solid governance track record, and we admire the company's long-term direction, but we see this dynamic as limiting upside in the near-term as margin should come under pressure from the capex ramp.
Navitas	UW, PT $12.6 Covered by Joe Moore	The GaN market is increasingly looking more competitive, with STMicro, Infineon, and Renesas all making inroads into GaN via acquisitions and partnerships. While these larger players may expedite the adoption of GaN in markets outside smartphone chargers and expand the TAM, we expect these opportunities to be captured by more established power semi providers rather than Navitas given their supply assurance and automotive qualification experience. NVDA's 800V AI server racks are an enticing opportunity, but given competition and timeline, we think it is too early to fully price in this opportunity.
SILERGY	UW, PT 388 TWD Covered by Charlie Chan	We have downgraded Silergy in view of its margin miss from foundry cost hikes and weak consumer demand. Its server and optical PMIC exposure remains relatively small. Our price target implies 23x 2027e P/E. We view valuation as more than full, especially after a strong stock rally.
Silan 士兰微电子	UW, PT 26.9 CNY Covered by Daisy Dai	We view Silan as a key beneficiary of China's power semi localization trend, but interest expense and depreciation costs weigh on earnings. We expect operating margin of around 10% for 2026, with limited operating leverage benefit despite full utilization. On our estimates, valuation looks demanding at 4.8x 2026 BVPS, vs. the past three year historical average of 3.3x.

Source: Morgan Stanley Research

Exhibit 8: Catalyst Calendar - What's Next?

August	
28.08.26	Innoscience 1H26 Earnings
28.08.26	SG Micro 2Q26 Earnings
31.08.26 - 01.09.26	Silicon Photonics Global Summit
September	
02.09.26-04.09.26	SEMICON Taiwan
04.09.26	Silergy 2Q26 Earnings
15.09.26-17.09.26	AI Infra Summit 2026
16.09.26	ON Financial Analyst Day
October	
12.10.26-15.10.26	OCP Global Summit
13.10.26-15.10.26	SEMICON West
20.10.26-22.10.26	GTC Berlin
19.10.26	Texas Instruments 3Q26 Earnings
27.10.26	NXP 3Q26 Earnings
28.10.26	Melexis 3Q26 Earnings
28.10.26	SICC 3Q26 Earnings
29.10.26	STMicroelectronics 3Q26 Earnings
29.10.26	Renesas 3Q26 Earnings
29.10.26	Allegro Microsystems 2Q27 Earnings
November	
02.11.26	ON 3Q26 Earnings
02.11.26	Navitas 3Q26 Earnings
03.11.26-04.11.26	PIC Summit Europe
05.11.26	Microchip 2Q27 Earnings
10.11.26	Infineon 4Q26 Earnings
24.11.26	Analog Devices 4Q26 Earnings

Source: Morgan Stanley Research

Where are we in the cycle

Broadening Upcycle

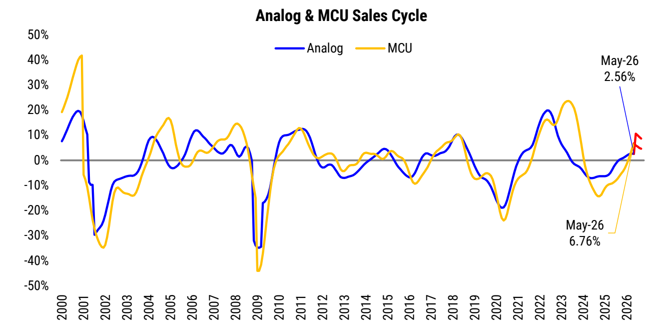
Commentary this quarter aligned with our expectations: **improving end market dynamics supported by stabilising prices and lean channel inventories.** Commentary supports signs of an upcycle with the backlog presenting the strongest signal as book to bills exceed one. While pricing is not yet broad-based, there is uniform dialogue across our coverage of at least near-neutral prices. ON Semi, Infineon and STMicro are all implementing selective price increases to offset costs and address tight supply. This confirms our thesis that prices have troughed and sequential price increases will likely continue for the rest of the year.

Channel conditions are uniformly healthier: distributor and customer inventories are at, below or near normal levels. However, the absence of broad restocking argues that current growth is demand-led rather than an inventory pull-forward. IFX is furthest into replenishment; TXN and MPWR report particularly lean positions, while ON, NXPI and ALGM still see cautious ordering. Hand-to-mouth ordering behaviour was observed at Western Tier 1 auto OEMs, which we think is the clearest signal that the destocking cycle has ended and a replenishment wave is building.

End-market dynamics picking up. Most of our coverage guided to above seasonal end-market growth reaffirming positive indicators from our Distributor Survey (here). Looking at autos, drivers were mixed across our coverage with commentary of restocking, China EV tailwinds and SDV content gains. Industrial dynamics were also signalled as improving. STMicroelectronics lifted industrial guidance to 40% yy improvement, vs prior guide of 30% yy for Q4, with management speaking to a broader recovery benefitting sales of GP MCUs.

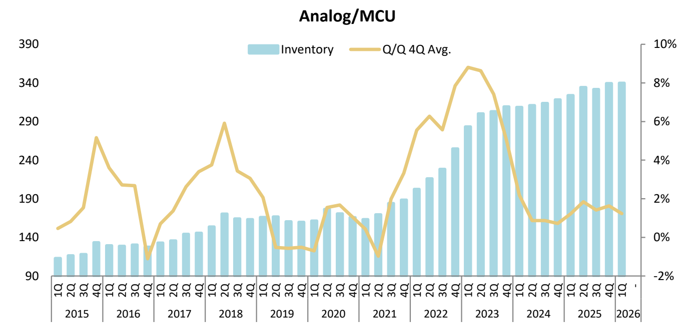
What does this mean for 2H26? In our view, this quarter has demonstrated strong signals of the start of an up-cycle. We expect this to continue for at least the latter half of this year, with likely continued pricing improvements, steps towards inventory replenishment and constructive book-to-bills. We expect sequential selective price increases for at least the rest of this year, with this likely becoming more broad-based into 2H26. We also expect more of our global coverage to start talking to book-to-bills exceeding one as channel inventories remain relatively lean and end-market activity continues to pick up.

Exhibit 9: Analog + MCU are now shipping to end demand/ slightly above as of May



Source: AlphaWise, SIA, Morgan Stanley Research.

Exhibit 10: Inventories remain historically elevated vs history, but momentum has stabilized



Source: Factset, Morgan Stanley Research.

Stocks

Europe Semiconductors (Lee Simpson, Nigel van Putten, Amelia Scicluna)

There was a lot to like this quarter for **Infineon** (IFX, OW, PT €81): data center guidance was raised and automotive and industrial growth dynamics were reaffirmed. Yet the stock reaction on the day of the print only tells the tale of the segment margin miss. Although the company beat our preview of a 22% Q4 segment margin guide, the 23% guide was insufficient to appease the bulls hoping for closer to 24/25%. We think the sell-off misses the bigger picture. While we see IFX's Q4 segment margin as unlikely to hit 25%, we think growing utilisation, improving pricing and a changing product mix will allow segment margins to hit 25% in FY27. We remain OW Infineon applying a SOTP valuation framework to reflect the differing growth trajectories of the data center and cycle segments. We view the recent sell-off as overdone and think the structural breakout story remains underappreciated.

For **STMicroelectronics** (STM, OW, PT €65), management communication once again weighed on its share price this quarter. Like with Infineon, data center guidance was raised, however margin missteps sent the stock down c.18% on earnings day. The company previously guided to attaining a 40% GM% once $4bn sales were hit; however, on the conference call management walked back from this, citing two key headwinds: elevated unloading charges from China and ongoing costs from technology transfer to facilitate the manufacturing reshaping programme. Now the dust has settled on the print, we think the LEO and data center segments remain underappreciated growth drivers for the stock. We remain OW STMicroelectronics and value the stock on a SOTP basis to reflect the different growth profiles of the LEO, Data Center and cyclical segments.

We raised estimates for **Melexis** (MELE, EW, PT €65) post print reflecting a 2Q beat, a higher second-half guidance and a better gross margin path. However, the revisions also reflect a catch-up to a broader sector recovery that became clearer during the quarter. However, the second-half revenue guide still underwhelms as it implies c.8% growth versus the first half, below c.10% for peers and from a weaker first-half base. Margin conversion remains underwhelming, with EBIT margin guided to around 18% and the gross margin, although improving, may not return to the levels previously seen (>43%) given increased competition from China.

North America Semiconductors (Joe Moore, Nicole Kozhukhov)

Analog: Recovery broadening beyond AI into industrial and auto. **TXN** beat across the board - Industrial up ~30% y/y, Auto at +mid-teens y/y, and DC doubling - with Q3 guided well above Street; customers remain early in the recovery and not yet building inventory, a constructive 2H setup, though we stay UW on valuation. **Allegro** reinforced the theme, with DC reaching a record 17% of sales and FY27 DC guided to more than double y/y, while Auto grew ahead of its >10% model target. **ADI** reinforced the recovery and saw another meaningful beat and raise - with the OctQ guide implying the 10th consecutive above-seasonal quarter, B/B remaining >1 across DC, Industrial, and Consumer with no inventory build, and DC growing >100% y/y in both power and optical. What stood out the most is that mgmt also effectively raised the LT growth framework from +MSD% toward double digits for the next several years. We reiterate OW, viewing recent underperformance as a significant buying opportunity.

Power Semi: Demand recovery remains intact, with lead times extending and customers ordering into 2027-2028 to secure supply. Strengthening demand has created some near-term constraints in certain power products, with **ON** prioritizing AI data center shipments over automotive and industrial in 2Q while manufacturing catches up to demand over the coming quarters. In auto, ON now expects China SiC revenue to grow 60-70% y/y in 2026, supported by continued share gains and ramps across existing and new vehicle programs, while ON also expects ESS revenue to grow ~40% y/y, driven by North American microgrid customers.

MCU: Strong results across the group, with DC the standout driver. **MCHP** had a very strong quarter – inventory correction firmly behind it, DC revenue up ~98% y/y in JunQ and total DC exposure guided to ~$1bn in CY26 (~69% y/y), with PCIe Gen6 switch design wins doubling to 12 programs (in addition to 2 Gen6 retimer and parts now in early production. **NXP** was in line, though auto was up +17% y/y, driven entirely by content gains from SDV architecture transitions with no restocking tailwind, and the Kinara Physical AI pipeline growing to $1.5bn+ (from $1bn+ last quarter) across 200+ unique customers, though revenue conversion remains a 2027+ event. DC emerging as a third growth engine, with revenue expected to exceed $500mn in 2026 vs. ~$200mn in 2025.

Greater China Semiconductors (Charlie Chan, Daisy Dai, Henry Zhao, Lucas Wang)

Power semi: improving demand, but uneven earnings conversion across companies. Yangjie showed the strongest momentum, supported by robust automotive demand, and healthy demand across AI, energy storage and industrial applications, suggesting the broader demand recovery remains intact. In contrast, StarPower and Silan Micro both saw earnings disappoint despite improving industry pricing: StarPower continued to face higher input costs and a lag in passing through price increases, while Silan's earlier price hikes had yet to translate into meaningful margin improvement.

SIC/GaN: SICC benefiting from volume, Innoscience awaiting data center inflection: We expect China SiC device companies to continue to gain market share in the global SiC market, for instance UNT (688469.SS, NC) guided 2026 SiC device revenue to grow

~100% and to reach Rmb3.0bn, ~70-80% from volume growth and the rest from ASP hikes, outgrowing global peers. Also they will expand SiC 8-inch capacity from 7k wpm now to 15k wpm by end of 2026, so SICC will be the beneficiary as one of SiC substrate suppliers. As for GaN, the inflection for GaN in data center seems to be in 2028 at the earliest, which bodes ill for InnoScience, although we are still confident regarding 65% revenue growth in 2026, mainly driven by industrial applications.

MCU: chip inflation to sustain in 2H26. The Greater China MCU market remains in a supply-driven up-cycle, with tight mature-node capacity and rising foundry costs supporting continued chip price increases into 2H26. Demand is mixed – strong in data-center applications, stable in industrial and weak in consumer – while declining inventory supports a healthier supply-demand balance.

China Analog: Recovery broadening, but remains structurally bifurcated. We are turning incrementally more constructive on China analog. Demand recovery appears to be broadening beyond consumer, with industrial/energy and AI-related networking showing stronger growth, while inventory and lead times remain at 8-10 weeks. More importantly, pricing pressure could be easing as global analog vendors become more disciplined on pricing, although we do not see evidence of an industry-wide price upcycle for China analog yet. We believe AI infrastructure, particularly optical modules and servers, is emerging as an incremental growth driver, while continued consolidation among domestic vendors could benefit leading platform players over time.

SG Micro (300671.SZ, EW): We see increasing upside optionality from AI-related optical modules. Company's networking/computing is among its fastest-growing end markets, with optical module revenue growing strongly. We see rising analog content as the industry transitions from 800G to 1.6T, driven by additional channels and higher-value signal-chain products, which could support both revenue growth and mix improvement. That said, we remain EW as broader China analog demand recovery remains uneven and valuation needs to be balanced against still-elevated R&D investment.

Silergy (6415.TW, UW): We believe Silergy will also benefit from the recent cyclical tailwind. China industrial and automotive customers have started to replenish inventory after a muted 12-month period, while AI and memory also saw rush orders over the past quarter. However, with rising production cost, we expect Silergy to pass through only part of the increase to customers, and migration to 12-inch will take time. We therefore see near-term margin pressure, as more than 80% of revenue still comes from 8-inch, with most of the impact likely in 2Q26–3Q26 as wafer prices rise.

Japan Semiconductors (Kazuo Yoshikawa, Hidetaka Suzuki)

Renesas Electronics (6758.T, OW): AI Strength Spilling Over into Adjacent Markets: Renesas delivered a positive earnings surprise in 2Q (Jun-Q). In Automotive, the R-Car Gen 4 ramp progressed smoothly with Japanese customers. In Industrial, factory automation and China supported growth during the quarter. to grow, led by digital power products for ASICs, while memory inte maintained solid momentum. We also viewed Renesas' selective pric as a positive, although management said that this is an extension of strategy and is not expected to drive an immediate increase in gross

We had thought that, in addition to secular AI/datacenter growth, cy semiconductor market would start in a wider range of end markets. However, CEO Shibata's comment that industrial strength is being driven by datacenter demand suggests a different dynamic: Secular growth of AI/datacenter is now spilling over into adjacent industries such as factory automation and semi cap equipment.

2Q26 Surprises

Incremental Data Center Updates

Broad-based data center guidance upside, but stocks only selectively rewarded. Into this quarter's prints, eyes were on 800v data center commentary after Jensen Huang said that Nvidia was replacing the Kyber rack architecture with a new solution. Despite some bears expecting this to lower power semi content, those in our coverage exposed to the power semi theme all either reiterated or raised their data center guidance for FY26 and FY27. ON, NVTS, TI and IFX all reiterated that the transition to 800v still presents a step-up in power semi content from the existing architecture. Importantly, while IFX clarified that the $/kW doesn't change materially in the transition to 800v, the $/rack is incrementally larger. On networking, STM confirmed optic strength citing broadening customer partnerships, with management expecting PIC/EIC sales to pick up materially next year. Despite this incrementally positive commentary, share prices weren't rewarded on the earnings day, with most trading off on margin concerns.

Powering the Data Center

Infineon (OW, PT €81) Data center guidance raised and CRAs announced. Like many bulls were hoping for, Infineon raised its data center guidance marginally for FY26 to €1.6bn (prior €1.5bn) and hinted at meaningful upside to the €2.5bn guide for FY27. Focus now shifts to 4Q26, when many will look for this to be quantified. Interestingly, Infineon spoke to introducing Customer Reservation Agreements (CRAs). These were confirmed to be of $HSDbn value with a 3-4 year time horizon. Management didn't explicitly confirm the use of prepayments, but these were signalled as being negotiated. We view this as confirmation of our structural breakout story thesis of Infineon as the preferred partner for power semi deployment to the data center. For instance, we note that this scale of customer partnerships hasn't been spoken to by other analog companies.

ON Semiconductor: Data center guidance raised for CY26 and new design win. Data center guidance was raised for CY26, with ON now expecting AIDC to more than double y/y versus doubling previously. While mgmt did not provide detailed 2Q AIDC growth detail, the segment drove the majority of "Other" growth (+34% q/q), with "Other" guided to high-teens q/q growth in 3Q, again led by AIDC. Design-win momentum also broadened in 2Q, including AWS BBU & PSU support, expanded Nvidia MGX ecosystem support, and continued engagements across all leading hyperscalers. ON expects SiC revenue in AIDC to grow ~60% y/y in 2026. Longer-term, ON raised its AIDC SAM to ~$50bn by 2030 from ~$12bn previously and sees high-voltage content per rack increasing ~10x, and it expects the transition to 800V DC to begin ramping in late 2027/early 2028.

ADI: Empower opportunity in early stages, but high long-term potential. Following the July close of its $1.5bn Empower acquisition, ADI provided incremental color on its contribution to DC growth, with Empower expected to add several points in FY27, primarily in power, and a larger IVR opportunity beginning in 2028+. ADI also noted that its 2030 data center and energy SAM has more than doubled versus what it envisioned a year ago, with mgmt framing the analog opportunity at ~$1-1.5bn per GW of data center infrastructure.

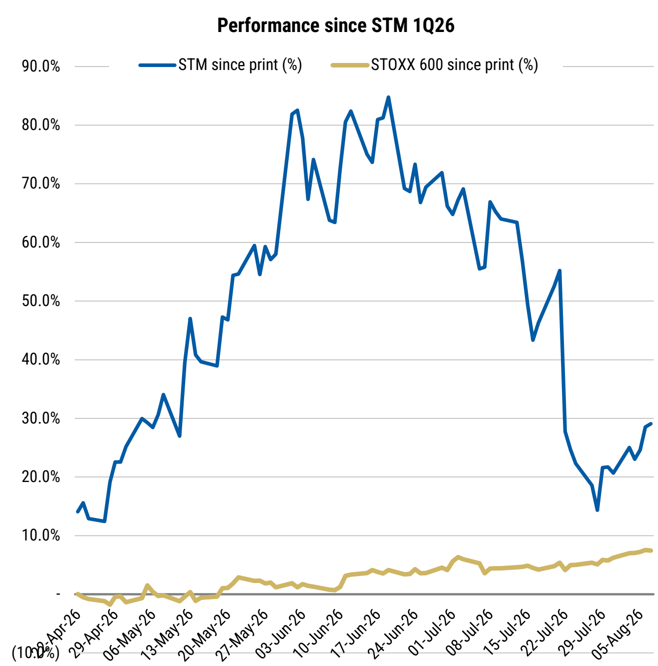
Optical Networking

STMicroelectronics (OW, PT €65) Building capacity to meet rising demand. While STMicro traded down on the day of results, there was a lot to like from its data center commentary. Management raised data center guidance for the 3rd time this year to more than $1bn in 2026 and well above $2bn in 2027, citing strong demand for optical connectivity. Currently our understanding is that the majority of optic sales are from microcontrollers, while next year we expect the main drivers to be from PIC and EIC sales as adoption of 800Gbps and 1.6Tbps pluggable optics accelerates. In our view, STMicro's capacity expansion is strategically positioned to support this rising demand. Namely, the Crolles facility, which management expects to ramp over the next 12 to 18 months. While we appreciate margins missed market expectations, we don't think the share price reflects this material data center opportunity.

Notable Mover: STMicroelectronics

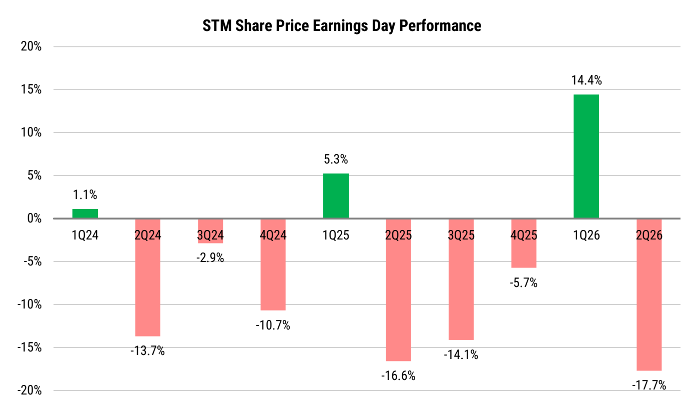
Despite the recent knock to STMicro's share price, the stock still outperforms the STOXX 600 and we expect this to continue given clearly improving end-market dynamics, better communication from the management team on the NDR and the data center guidance uptick. We remain Overweight STMicro but took stock of disappointment in margin leverage by trimming SOTP multiples to 30x for the data center and LEO segments and 15x for the cyclical segment, setting our PT at €65 (see Margin Leverage in Question).

Exhibit 11: STM daily moves vs STOXX 600 Europe since the Q1 print



Source: FactSet, Morgan Stanley Research

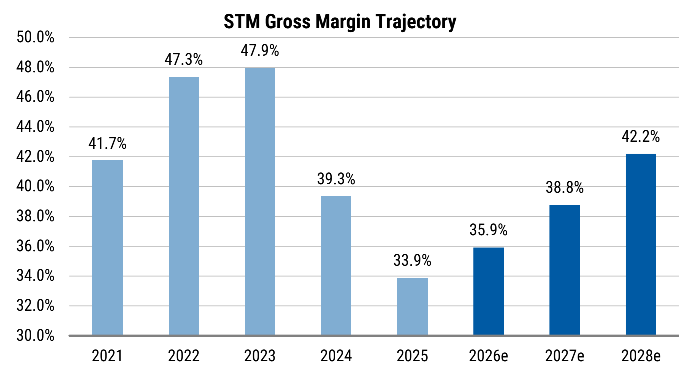
Exhibit 12: STMPA Earnings Day Performance since 1Q24



Source: FactSet, Morgan Stanley Research

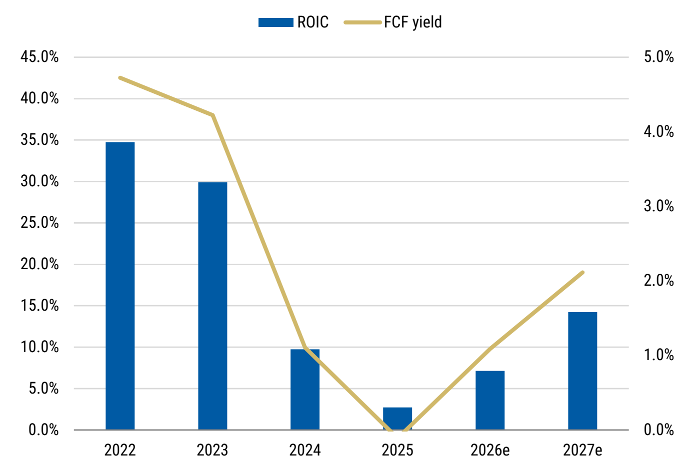
Margin disappointment. Much of investor disappointment at the print came from management highlighting that gross margins won't reach 40% in Q4. Management detailed the moving parts behind this, calling out technology transfer costs as a 50-60bps headwind and persistent underloading charges (due notably to China) representing a 70bps headwind. However, key for longer-term margins is the development of the restructuring programme as capacity increases and transition to larger wafer diameters supports margins. There's also the chance that pricing dynamics are improving and the company has signalled possible ongoing sequential price improvements through the rest of this year. However, this isn't uniform across all segments and customers, for instance pricing difficulties persist in the China automotive segment.

Exhibit 13: We expect 200bps yy GM% improvement FY25 to FY26 before expanding by 290bps to FY27



Source: Company data, Morgan Stanley Research estimates

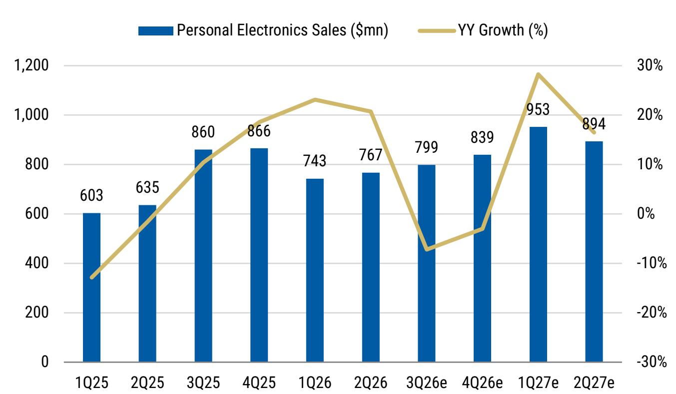
Exhibit 14: Valuation metrics signal 2025 as the trough



Source: Company data, Morgan Stanley Research estimates

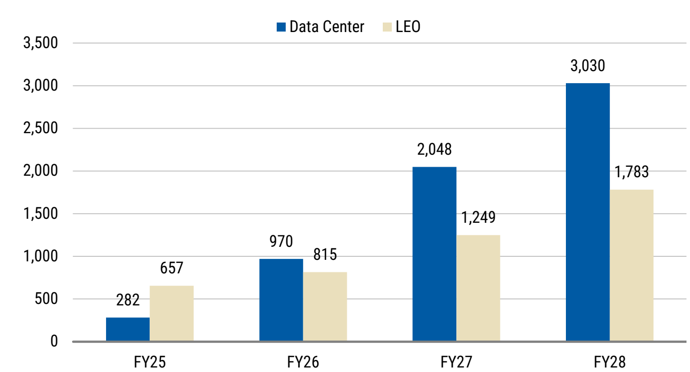
A transition year for personal electronics. Management circled in on the personal electronics (PE) segment as the weakest revenue driver this year, expecting a low- to mid-single-digit increase yy (but with a YY decline in H2). The changing demand profile is unsurprising given memory headwinds for handset builds and the change in product pipeline from their main customer, Apple. However, a bright spot in this area is that management called out continued increase in content in the medium term, improving visibility suggesting this is a temporary headwind, not a structural issue. As a reminder, we currently model for PE sales declining 6-7% yy in Q3.

Exhibit 15: We see Personal Electronics sales troughing in 2H26 before recovering in early 27.



Source: Company data, Morgan Stanley Research estimates

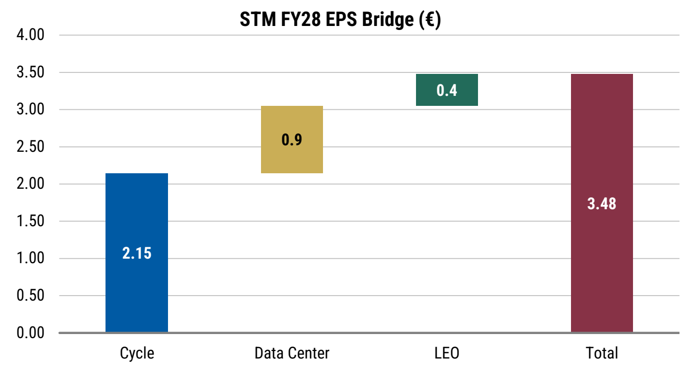
Exhibit 16: DC and LEO annual sales



Source: Company data, Morgan Stanley Research estimates

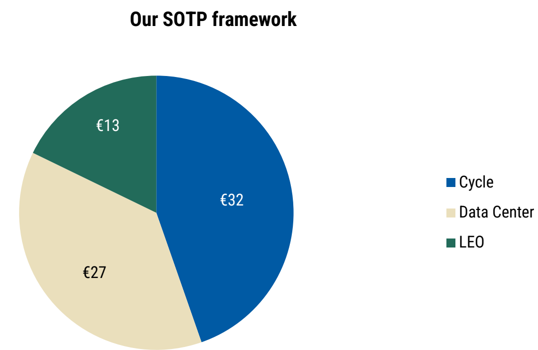
Data center guidance uptick. At the print management raised data centre guidance to 'well above $2bn' for FY27. Our understanding is that this is largely from silicon photonics and optical strength, with management speaking in more detail about significant STM32 content in 800G and above optical applications. Management reaffirmed the diversified customer base but stressed also the very strong growth expected into year-end with Q4 sales for CECP seen up 80-90% yy.

Exhibit 17: We see STMicro's FY28 EPS driven by the cycle, data center and LEO sales...



Source: Morgan Stanley Research estimates

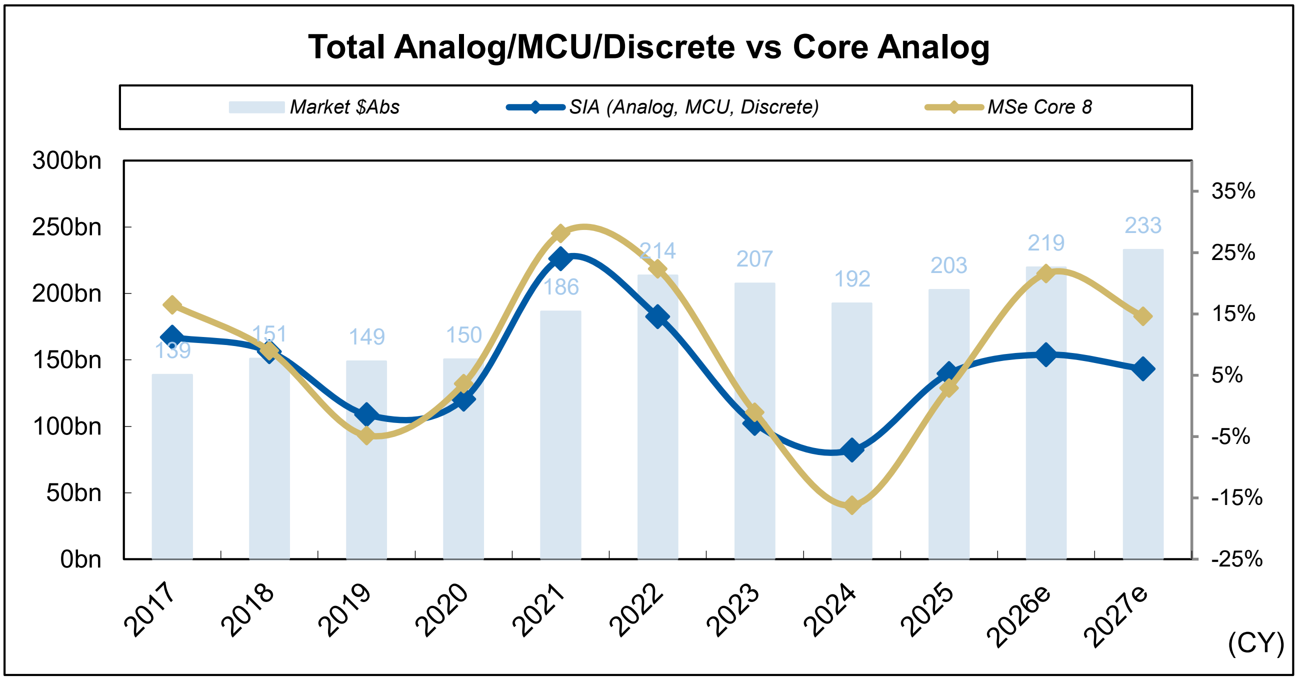
Exhibit 18: ...we use this to derive our SOTP valuation framework.



Source: Morgan Stanley Research estimates

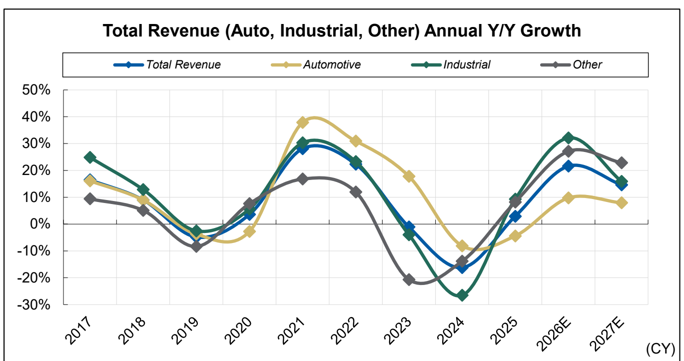
Global Analog Model

Exhibit 19: We model for 8%/6% y/y growth in 2026/2027, while the Core 8 outgrow the market at 22%/15%...



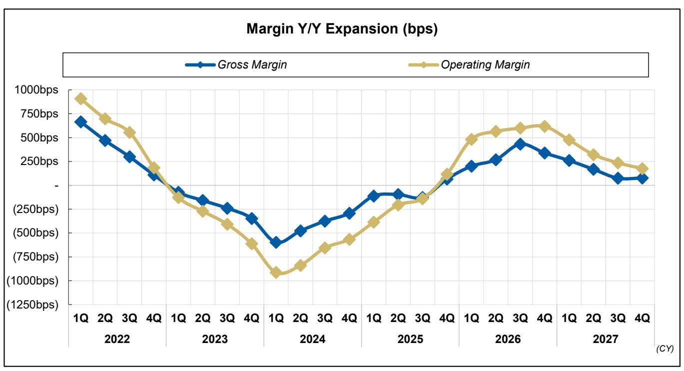
Note: Represents total of defined Core 8 companies (TXN, ADI, IFX, MPWR, STM, NXPI, Renesas, MCHP, ON) Source: VisibleAlpha, SIA, Morgan Stanley Research estimates.

Exhibit 20: ...with all end markets expected to grow in 2026 and 2027...



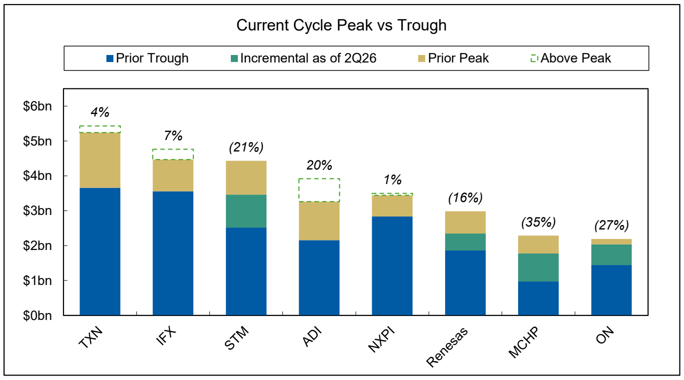
Note: Represents total of defined Core 8 companies (TXN, ADI, IFX, MPWR, STM, NXPI, Renesas, MCHP, ON) Source: VisibleAlpha, Morgan Stanley Research estimates.

Exhibit 21: ...along with continued margin expansion through 2027...



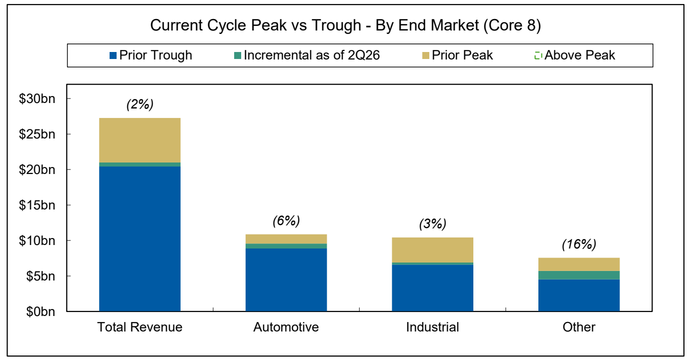
Note: Represents total of defined Core 8 companies (TXN, ADI, IFX, MPWR, STM, NXPI, Renesas, MCHP, ON) Source: VisibleAlpha, Morgan Stanley Research estimates.

Exhibit 22: ...with several companies already above prior-cycle peaks...



Source: VisibleAlpha, Morgan Stanley Research estimates.

Exhibit 23: ...even as aggregate end markets remain below prior-cycle peaks



Source: VisibleAlpha, Morgan Stanley Research estimates.

Exhibit 24:

Global Analog Tracker Revenue Dynamics by Stock

	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024	CY2025	CY2026e	CY2027e	CY2028e
Revenue													
Infineon (€mn)	6,563	7,193	7,794	7,976	9,281	11,588	15,010	16,059	14,677	14,900	16,986	19,422	
STMicroelectronics ($mn)	6,972	8,346	9,665	9,556	10,219	12,761	16,128	17,286	13,269	11,799	14,489	17,866	19,483
Melexis (€mn)	456	512	569	487	508	644	836	964	933	840	872	933	997
NXP Semiconductor ($mn)	9,498	9,256	9,407	8,877	8,612	11,063	13,205	13,276	12,614	12,269	14,255	15,767	16,611
Analog Devices ($mn)	3,636	5,642	6,223	5,754	5,858	8,444	12,579	11,569	9,338	11,757	16,281	18,513	20,577
Texas Instruments ($mn)	13,370	14,961	15,784	14,383	14,461	18,344	20,028	17,519	15,641	17,682	22,018	23,832	25,137
Microchip ($mn)	3,063	3,881	5,022	5,278	5,298	6,444	8,050	8,541	4,757	4,372	6,024	7,095	7,800
Navitas Semiconductor ($mn)	-	-	-	-	12	24	38	79	83	46	48	68	98
ON Semiconductor ($mn)	3,907	5,543	5,878	5,518	5,255	6,740	8,326	8,253	7,082	5,995	6,566	7,551	8,654
SG Micro (RMB mn)	452	532	572	792	1,197	2,238	3,188	2,616	3,347	3,898	4,961	5,852	6,744
Silergy (NT$ mn)	7,139	8,599	9,414	10,778	13,876	21,506	23,511	15,427	18,455	18,812	23,695	28,515	33,920
Renesas (¥bn)	639	779	757	718	716	994	1,503	1,469	1,348	1,318	1,638	1,875	2,093
Innoscience (RMB mn)						68	136	593	828	1,213	2,001	3,641	6,176
Yangjie Technology (RMB mn)	1,190	1,470	1,852	2,007	2,617	4,397	5,403	5,410	6,033	7,130	9,433	11,517	14,182
SICC (RMB mn)			136	269	425	494	417	1,251	1,768	1,465	2,231	2,817	3,123
StarPower (RMB mn)	300	437	671	779	963	1,707	2,705	3,663	3,391	4,012	4,850	5,799	7,318
Allegro MicroSystems ($mn)					591	743	905	1,078	773	840	1,060	1,264	1,535
Silan Microelectronics (RMB mn)	2,375	2,742	3,026	3,111	4,281	7,194	8,282	9,340	11,221	13,052	15,805	18,063	20,443
YY(%)													
Infineon		9.6%	8.4%	2.3%	16.4%	24.9%	29.5%	7.0%	-8.6%	1.5%	14.0%	14.3%	
STMicroelectronics		19.7%	15.8%	-1.1%	6.9%	24.9%	26.4%	7.2%	-23.2%	-11.1%	22.8%	23.3%	9.1%
Melexis		12.1%	11.3%	-14.5%	4.3%	26.8%	29.9%	15.3%	-3.3%	-10.0%	3.9%	6.9%	6.9%
NXP Semiconductor		-2.5%	1.6%	-5.6%	-3.0%	28.5%	19.4%	0.5%	-5.0%	-2.7%	16.2%	10.6%	5.4%
Analog Devices		55.1%	10.3%	-7.6%	1.8%	44.1%	49.0%	-8.0%	-19.3%	25.9%	38.5%	13.7%	11.1%
Texas Instruments		11.9%	5.5%	-8.9%	0.5%	26.9%	9.2%	-12.5%	-10.7%	13.0%	24.5%	8.2%	5.5%
Microchip		26.7%	29.4%	5.1%	0.4%	21.6%	24.9%	6.1%	-44.3%	-8.1%	37.8%	17.8%	9.9%
Navitas Semiconductor						100.3%	59.9%	109.4%	4.8%	-44.9%	3.7%	43.3%	43.4%
ON Semiconductor		41.9%	6.0%	-6.1%	-4.8%	28.3%	23.5%	-0.9%	-14.2%	-15.3%	9.5%	15.0%	14.6%
SG Micro		17.6%	7.7%	38.5%	51.0%	87.1%	42.4%	-17.9%	28.0%	16.5%	27.3%	18.0%	15.2%
Silergy		20.5%	9.5%	14.5%	28.8%	55.0%	9.3%	-34.4%	19.6%	1.9%	26.0%	20.3%	19.0%
Renesas		22.0%	-2.9%	-5.1%	-0.4%	38.9%	51.1%	-2.2%	-8.2%	-2.2%	24.3%	14.4%	11.6%
Innoscience							99.6%	335.3%	39.8%	46.4%	64.9%	81.9%	69.6%
Yangjie Technology		23.5%	26.0%	8.4%	30.4%	68.0%	22.9%	0.1%	11.5%	18.2%	32.3%	22.1%	23.1%
SICC				97.3%	58.2%	16.3%	-15.6%	199.9%	41.4%	-17.2%	52.3%	26.3%	10.8%
StarPower		45.6%	53.7%	16.1%	23.6%	77.2%	58.5%	35.4%	-7.4%	18.3%	20.9%	19.6%	26.2%
Allegro MicroSystems						25.9%	21.7%	19.2%	-28.3%	8.7%	26.2%	19.2%	21.5%
Silan Microelectronics		15.4%	10.4%	2.8%	37.6%	68.1%	15.1%	12.8%	20.1%	16.3%	21.1%	14.3%	13.2%
Automotive Segment Revenue													
Infineon (€mn)					3,847	5,081	6,998	8,296	7,559	7,470	7,886	8,678	
STMicroelectronics ($mn)	-	-	-	-	-	-	-	7,944	6,064	4,594	5,106	5,237	5,383
Melexis (€mn)	406	455	518	448	447	573	753	868	840	741	785	840	897
NXP Semiconductor ($mn)	3,688	4,263	4,507	4,212	3,825	5,493	6,879	7,484	7,151	7,116	7,874	8,896	9,582
Analog Devices ($mn)	1,048	1,471	1,541	1,484	1,453	1,989	2,598	2,975	2,847	3,380	3,946	4,298	4,670
Texas Instruments ($mn)	2,372	2,846	3,237	3,081	2,896	3,919	4,976	5,919	5,503	5,780	6,406	6,479	6,955
ON Semiconductor ($mn)	1,321	1,665	1,846	1,819	1,686	2,289	3,361	4,320	3,901	3,081	3,212	3,321	3,505
Silergy (NT$ mn)						121	962	1,186	1,899	2,280	3,460	4,133	4,916
Renesas (¥bn)	350	413	390	371	341	462	645	660	703	638	740	793	838
Innoscience (RMB mn)								4	42	61	123	246	369
Allegro MicroSystems ($mn)					385	509	618	773	580	604	680	756	807
YY(%)													
Infineon						32.1%	37.7%	18.5%	-8.9%	-1.2%	5.6%	10.0%	
STMicroelectronics									-23.7%	-24.2%	11.2%	2.6%	2.8%
Melexis		12.1%	13.8%	-13.5%	-0.3%	28.3%	31.4%	15.3%	-3.3%	-11.7%	5.9%	6.9%	6.9%
NXP Semiconductor		15.6%	5.7%	-6.5%	-9.2%	43.6%	25.2%	8.8%	-4.4%	-0.5%	10.6%	13.0%	7.7%
Analog Devices		40.4%	4.7%	-3.7%	-2.1%	36.9%	30.6%	14.5%	-4.3%	18.7%	16.8%	8.9%	8.6%
Texas Instruments													
ON Semiconductor		26.1%	10.9%	-1.5%	-7.3%	35.8%	46.8%	28.5%	-9.7%	-21.0%			
Silergy							697.1%	23.3%	60.1%	20.1%	51.7%	19.5%	19.0%
Renesas		17.8%	-5.6%	-4.8%	-8.1%	35.6%	39.5%	2.4%	6.4%	-9.2%	15.9%	7.2%	5.6%
Innoscience									986.6%	45.1%	100.0%	100.0%	50.0%
Allegro MicroSystems						32.1%	21.5%	25.0%	-25.0%	4.2%	12.5%	11.2%	6.7%
Industrial Segment Revenue													
Infineon (€mn)					1,435	1,562	1,908	2,192	1,787	1,640	1,803	2,142	
STMicroelectronics ($mn)	-	-	-	-	-	-	-	3,972	2,657	2,471	3,240	3,891	3,888
NXP Semiconductor ($mn)	1,471	1,718	1,813	1,599	1,836	2,410	2,713	2,351	2,269	2,273	3,003	3,332	3,516
Analog Devices ($mn)	2,347	3,582	3,827	3,587	3,884	4,945	6,526	6,015	4,181	5,363	8,048	9,411	10,711
ON Semiconductor ($mn)	953	1,417	1,594	1,428	1,354	1,800	2,291	2,278	1,801	1,675	1,689	1,833	2,005
Silergy (NT$ mn)	2,806	3,432	3,646	4,088	4,782	7,288	7,890	5,316	5,875	5,781	7,470	8,924	10,615
Renesas (¥bn)	270	353	347	330	364	516	846	799	637	642	889	1,074	1,248
Innoscience (RMB mn)								228	219	521	893	1,713	2,084
Allegro MicroSystems ($mn)					205	235	286	305	193	236	380	508	728
YY(%)													
Infineon						8.9%	22.2%	14.9%	-18.5%	-8.2%	10.0%	18.8%	
STMicroelectronics									-33.1%	-7.0%	31.1%	20.1%	-0.1%
NXP Semiconductor		16.8%	5.5%	-11.8%	14.8%	31.3%	12.6%	-13.3%	-3.5%	0.2%	32.1%	10.9%	5.5%
Analog Devices		52.6%	6.8%	-6.3%	8.3%	27.3%	32.0%	-7.8%	-30.5%	28.3%	50.1%	16.9%	13.8%
ON Semiconductor		48.8%	12.5%	-10.4%	-5.2%	32.9%	27.3%	-0.5%	-21.0%	-7.0%	0.9%	8.5%	9.4%
Silergy		22.3%	6.2%	12.1%	17.0%	52.4%	8.3%	-32.6%	10.5%	-1.6%	29.2%	19.5%	19.0%
Renesas		30.8%	-1.9%	-4.9%	10.3%	41.8%	64.1%	-5.5%	-20.3%	0.9%	38.4%	20.8%	16.1%
Innoscience									-4.2%	137.9%	71.6%	91.7%	21.7%
Allegro MicroSystems						14.2%	22.0%	6.8%	-36.8%	22.1%	61.4%	33.6%	43.4%

Source: Company Data, Morgan Stanley Research estimates (e)

Exhibit 25: Global Analog Tracker GM%, FCF, Inventory, ROIC, ROCE by Stock

	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024	CY2025	CY2026e	CY2027e	CY2028e
Gross margin (reported)													
Infineon	36.0%	37.2%	38.7%	36.7%	32.9%	39.6%	44.5%	44.8%	39.9%	39.4%	42.1%	45.6%	
STMicroelectronics	35.2%	39.2%	39.9%	38.7%	37.1%	41.7%	47.3%	47.9%	39.3%	33.9%	35.9%	38.8%	42.2%
Melexis	45.7%	46.0%	45.9%	40.3%	39.0%	42.5%	44.8%	45.6%	43.0%	38.6%	40.8%	42.0%	42.9%
NXP Semiconductor	42.8%	49.9%	51.6%	52.0%	49.2%	54.8%	56.9%	56.9%	56.4%	54.7%	57.5%	58.6%	60.0%
Analog Devices	66.0%	61.1%	68.1%	66.4%	66.4%	57.8%	65.6%	62.5%	57.2%	62.8%	68.1%	68.9%	69.1%
Texas Instruments	61.6%	64.3%	65.1%	63.7%	64.1%	67.5%	68.8%	62.9%	58.1%	57.0%	60.9%	62.7%	63.6%
Microchip	49.9%	60.3%	54.3%	61.6%	61.7%	64.5%	67.1%	67.0%	58.0%	55.4%	64.2%	65.0%	64.3%
Navitas Semiconductor					31.4%	45.0%	31.5%	39.1%	34.0%	31.0%	39.3%	40.4%	41.2%
ON Semiconductor	33.2%	36.7%	38.1%	35.8%	32.7%	40.3%	49.0%	47.1%	45.4%	33.1%	40.1%	43.8%	46.2%
SG Micro	40.2%	43.4%	45.9%	46.9%	48.7%	55.5%	59.0%	49.6%	51.5%	50.8%	51.5%	51.4%	51.4%
Silergy	47.6%	47.7%	46.7%	47.5%	48.1%	53.3%	52.6%	42.7%	53.8%	51.6%	51.8%	53.3%	53.6%
Renesas	43.6%	46.8%	44.2%	42.9%	47.3%	53.2%	57.4%	57.0%	56.1%	57.6%	58.3%	57.9%	58.1%
Innoscience						-266.1%	-289.4%	-61.1%	-19.5%	7.3%	17.7%	33.1%	41.5%
Yangjie Technology	35.4%	35.6%	31.4%	29.8%	34.3%	35.1%	36.3%	30.3%	33.1%	34.3%	35.4%	35.7%	36.7%
SICC			25.6%	37.7%	35.3%	28.4%	-5.8%	15.8%	25.9%	13.1%	23.2%	23.1%	22.1%
StarPower	28.0%	30.6%	29.4%	30.6%	31.6%	36.7%	40.3%	37.5%	31.6%	26.1%	22.8%	25.0%	27.1%
Allegro MicroSystems					44.6%	51.8%	55.6%	56.1%	47.2%	45.0%	48.7%	51.2%	52.4%
Silan Microelectronics	24.7%	26.7%	25.5%	19.5%	22.5%	33.2%	29.4%	22.2%	19.1%	18.8%	21.5%	24.1%	24.7%
YY bps change													
Infineon		120bps	150bps	-200bps	-380bps	670bps	490bps	30bps	-490bps	-50bps	266bps	358bps	-
STMicroelectronics		397bps	76bps	-127bps	-160bps	466bps	560bps	60bps	-859bps	-546bps	203bps	285bps	345bps
Melexis		30bps	-14bps	-557bps	-129bps	350bps	231bps	83bps	-261bps	-444bps	217bps	120bps	99bps
NXP Semiconductor		706bps	167bps	45bps	-284bps	566bps	209bps	-4bps	-45bps	-170bps	272bps	117bps	141bps
Analog Devices		-483bps	697bps	-166bps	-6bps	-856bps	781bps	-315bps	-531bps	568bps	528bps	76bps	19bps
Texas Instruments		263bps	85bps	-140bps	39bps	337bps	129bps	-586bps	-476bps	-112bps	391bps	181bps	87bps
Microchip		1039bps	-597bps	728bps	9bps	285bps	257bps	-4bps	-908bps	-254bps	874bps	87bps	-72bps
Navitas Semiconductor		0bps	0bps	0bps	3135bps	1367bps	-1353bps	761bps	-508bps	-299bps	822bps	118bps	77bps
ON Semiconductor		349bps	139bps	-231bps	-312bps	762bps	870bps	-191bps	-165bps	-1232bps	697bps	372bps	241bps
SG Micro		319bps	251bps	94bps	185bps	677bps	348bps	-938bps	193bps	-72bps	67bps	-5bps	-1bps
Silergy		10bps	-101bps	74bps	62bps	519bps	-70bps	-992bps	1119bps	-222bps	16bps	153bps	28bps
Renesas		316bps	-261bps	-130bps	444bps	585bps	426bps	-45bps	-91bps	155bps	67bps	-41bps	24bps
Innoscience		0bps	0bps	0bps	0bps	-26612bps	-2329bps	22832bps	4161bps	2680bps	1038bps	1537bps	840bps
Yangjie Technology		22bps	-421bps	-156bps	447bps	83bps	119bps	-603bps	282bps	119bps	111bps	29bps	101bps
SICC				1211bps	-240bps	-685bps	-3419bps	2157bps	1008bps	-1284bps	1011bps	-2bps	-107bps
StarPower		263bps	-119bps	120bps	95bps	516bps	358bps	-280bps	-595bps	-547bps	-325bps	217bps	214bps
Allegro MicroSystems		0bps	0bps	0bps	4463bps	713bps	380bps	49bps	-883bps	-226bps	370bps	251bps	122bps
Silan Microelectronics		204bps	-125bps	-598bps	303bps	1069bps	-374bps	-723bps	-312bps	-26bps	262bps	265bps	56bps
FCF													
Infineon (€mn, reported)	490	603	619	39	(6,727)	1,573	1,647	1,158	23	(1,051)	1,978	3,665	
NXP Semiconductor ($mn)	1,914	1,895	3,758	1,847	2,090	2,310	2,832	2,686	2,055	2,423	3,715	4,749	5,126
Analog Devices ($mn)	1,243	948	2,143	1,992	1,909	2,776	4,261	3,242	3,184	4,560	5,753	7,825	8,688
Texas Instruments ($mn)	4,083	4,668	6,058	5,802	5,490	6,294	5,923	1,349	1,498	2,603	7,923	9,506	12,540
Microchip ($mn)	982	1,334	1,834	1,958	2,126	2,552	3,254	3,406	1,309	1,062	2,225	2,700	2,939
Navitas Semiconductor ($mn)					(21)	(44)	(49)	(45)	(66)	(44)	(79)	(40)	(54)
ON Semiconductor ($mn)	371	707	759	160	501	1,337	1,628	402	1,212	1,419	1,245	1,578	2,127
SG Micro (RMB mn)	78	124	84	145	324	763	948	(63)	309	466	687	893	1,192
Silergy (NT$ mn)	1,375	1,765	2,033	2,270	3,651	5,883	6,410	2,873	402	244	3,395	5,272	6,894
Renesas (¥bn)	57	(268)	91	(540)	184	(356)	382	229	(944)	328	579	436	
Innoscience (RMB mn)						(562)	(936)	(594)	(336)	(1,017)	1,586	(1,326)	(225)
Yangjie Technology (RMB mn)	27	(84)	(321)	116	178	(457)	(39)	443	528	685	121	1,140	1,415
SICC (RMB mn)			(35)	(559)	(689)	248	(947)	(1,277)	(445)	479	(949)	(381)	(369)
StarPower (RMB mn)	(25)	(24)	68	39	(215)	(20)	(634)	(1,820)	(1,040)	(94)	212	563	601
Allegro MicroSystems ($mn)					60	105	120	76	5	121	115	195	325
Silan Microelectronics (RMB mn)	(440)	(807)	(769)	(625)	(495)	12	(1,362)	(803)	(1,239)	(134)	58	729	1,068
Inventory Days													
Infineon	109	104	122	128	115	121	142	178	181	181	162	140	140
STMicroelectronics	97	89	90	100	99	92	97	106	123	137	128	121	127
Melexis			143	161	146	142	142	177	181	213	202	203	203
NXP Semiconductor	75	97	102	102	86	87	114	136	156	169	155	145	140
Analog Devices	108	93	109	111	115	100	129	131	135	148	134	126	119
Texas Instruments	126	132	145	138	136	115	159	221	249	228	188	171	157
Microchip	100	115	112	128	120	123	160	170	248	198	182	183	175
Navitas Semiconductor					153	335	268	175	103	153	332	283	275
ON Semiconductor	146	110	121	126	127	124	138	174	209	194	198	196	179
StarPower	128	138	111	133	141	134	159	201	201	205	205	205	205
Allegro MicroSystems					103	79	107	126	170	139	128	125	117
Silan Microelectronics	137	128	163	192	155	125	156	171	153	134	134	134	134
ROIC													
Infineon	17.1%	19.8%	18.6%	13.7%	8.2%	12.8%	15.8%	16.8%	11.6%	9.6%	12.1%	16.6%	19.0%
STMicroelectronics	6.7%	17.7%	23.3%	15.9%	15.4%	24.1%	34.7%	29.9%	9.7%	2.7%	7.1%	14.2%	17.9%
Melexis		57.3%	38.2%	20.7%	24.1%	39.3%	50.9%	44.6%	33.0%	16.9%	21.2%	24.4%	27.6%
NXP Semiconductor	10.4%	13.1%	14.6%	12.2%	11.0%	0.0%	0.0%	21.4%	17.6%	14.8%	19.0%	22.7%	24.8%
Analog Devices	37.3%	11.3%	11.8%	10.1%	11.1%	6.8%	12.1%	10.7%	7.9%	11.0%	17.1%	19.5%	21.4%
Texas Instruments	32.9%	41.0%	52.5%	47.5%	52.0%	62.0%	57.9%	30.6%	18.8%	19.9%	31.0%	35.4%	41.7%
Microchip	13.7%	20.4%	10.3%	10.1%	11.5%	16.3%	22.6%	23.0%	7.1%	4.9%	13.5%	17.5%	19.9%
Navitas Semiconductor					-436.2%	-332.2%	-35.2%	-33.2%	-33.3%	-28.8%	-35.3%	-38.8%	-50.2%
ON Semiconductor	9.0%	14.3%	17.8%	11.0%	7.3%	20.1%	33.8%	24.0%	17.0%	10.8%	14.4%	19.2%	24.3%
SG Micro	186.2%	23.0%	12.9%	15.5%	31.0%	45.8%	47.1%	13.6%	18.7%	15.5%	24.2%	29.4%	34.0%
Silergy	21.1%	25.4%	21.8%	24.7%	33.3%	52.3%	35.2%	-3.7%	10.8%	6.9%	12.8%	23.4%	28.9%
Innoscience						-23.4%	-28.2%	-27.3%	-29.1%	-15.2%	-17.7%	1.4%	19.4%
Yangjie Technology	10.3%	12.2%	9.4%	9.5%	15.1%	18.8%	17.4%	9.5%	11.6%	13.9%	17.0%	19.7%	22.4%
SICC			-0.4%	-19.0%	-34.3%	0.0%	-8.8%	-2.2%	2.1%	-3.5%	2.4%	3.7%	4.7%
StarPower	5.9%	11.1%	18.4%	21.0%	13.8%	17.3%	19.2%	14.5%	6.6%	4.3%	4.5%	7.6%	11.0%
Allegro MicroSystems					5.7%	24.1%	24.2%	19.6%	4.8%	4.4%	11.2%	18.5%	26.3%
Silan Microelectronics	1.6%	2.8%	1.5%	-2.1%	0.5%	13.9%	9.1%	4.8%	2.1%	4.2%	8.1%	10.5%	12.5%
ROCE													
Infineon	9.6%	13.0%	17.2%	8.7%	3.5%	9.0%	15.2%	16.0%	7.3%	6.3%	16.2%	22.3%	25.7%
STMicroelectronics	8.5%	22.9%	28.4%	21.5%	19.5%	31.4%	43.6%	36.5%	12.9%	4.1%	8.8%	18.7%	23.8%
Melexis		43.0%	38.4%	19.4%	20.0%	37.9%	46.0%	35.2%	27.8%	16.8%	19.8%	21.5%	23.5%
NXP Semiconductor	-0.7%	9.9%	14.9%	3.5%	2.3%	14.0%	19.0%	18.1%	16.1%	13.4%	21.2%	21.2%	21.8%
Analog Devices	11.7%	6.1%	9.2%	7.8%	8.5%	3.3%	8.5%	7.2%	4.3%	7.9%	15.3%	18.0%	20.0%
Texas Instruments	32.4%	38.3%	43.6%	34.9%	33.7%	39.6%	41.0%	24.7%	16.8%	18.9%	27.0%	30.0%	31.4%
Microchip	3.1%	11.5%	3.9%	5.1%	6.1%	10.8%	19.4%	24.6%	4.6%	1.3%	8.8%	13.3%	14.0%
Navitas Semiconductor					-44.6%	-24.1%	-29.9%	-27.2%	-35.4%	-24.0%	-14.8%	-15.5%	-16.2%
ON Semiconductor	4.4%	11.8%	13.9%	6.6%	5.0%	15.9%	23.8%	23.0%	13.9%	0.8%	7.7%	15.4%	21.5%
SG Micro	35.7%	21.0%	11.8%	15.3%	20.5%	34.6%	34.5%	7.4%	12.1%	10.6%	15.2%	18.3%	20.2%
Silergy	19.7%	17.5%	15.8%	16.5%	18.1%	31.0%	20.7%	-1.6%	6.5%	5.5%	8.5%	14.7%	17.2%
Innoscience							-87.1%	-23.2%	-23.2%	-15.3%	-9.6%	1.4%	18.3%
Yangjie Technology	11.1%	12.4%	11.0%	10.2%	16.2%	16.8%	16.5%	7.5%	9.5%	11.9%	16.1%	18.3%	20.5%
SICC			-0.7%	-20.1%	-26.0%	0.0%	-4.9%	-2.0%	1.9%	-2.4%	1.8%	2.3%	2.9%
StarPower	8.1%	14.8%	21.2%	22.1%	14.9%	8.4%	12.2%	12.4%	6.7%	4.1%	4.5%	7.4%	10.2%
Allegro MicroSystems					1.9%	16.8%	18.0%	16.8%	0.7%	0.0%	7.7%	15.5%	20.0%
Silan Microelectronics	1.6%	3.4%	1.7%	-2.9%	0.9%	15.5%	10.6%	3.6%	2.7%	3.5%	7.0%	8.1%	8.8%

Source: Company data, Morgan Stanley Research estimates (e)

Prices for stocks mentioned (in local currency, last close): Infineon Technologies (IFX-DE) 55.97, STMicroelectronics (STMMI.IT) 43.10, Analog Devices (ADI-US) 373.09, NXP Semiconductors (NXPI-US) 225.56, Allegro MicroSystems (ALGM-US) 37.16, Renesas Electronics (6723-JP) 3,433.00, Yangjie Technology (300373-CN) 103.04, SICC (688234-CN) 109.95, Melexis (MELE-BE) 65.00, Microchip Technology (MCHP-US) 76.08, Innoscience (2577-HK) 46.74, SG Micro (300661-CN) 116.60, StarPower Semiconductor (603290-CN) 97.96, Texas Instruments (TXN-US) 264.36, Navitas Semiconductor (NVTS-US) 12.97, Silergy (6415-TW) 445.50, Silan Microelectronics (600460-CN) 35.89.

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A family member of an author of this report has an investor relations role at Qualcomm Inc.

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In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Advanced Micro Devices, Advanced Micro-Fabrication Equipment Inc, Aeva Technologies Inc, Aixtron SE, Alchip Technologies Ltd, Allegro Microsystems Inc, Ambarella Inc, Amkor Technology Inc, Analog Devices Inc., AP Memory Technology Corp, Arm Holdings plc, ASE Technology Holding Co. Ltd., ASM International NV, ASMedia Technology Inc, ASML Holding NV, ASMPT Ltd, Aspeed Technology, Astera Labs Inc, BE Semiconductor Industries NV, Broadcom Inc., Cadence Design Systems Inc, Cerebras Systems, Espressif Systems, GigaDevice Semiconductor Beijing Inc, GlobalFoundries Inc, GlobalWafers Co Ltd, Gudeng Precision, Himax Technologies Inc, HOYA, Hua Hong Semiconductor Ltd, Iluvatar CoreX Semiconductor Co., Ltd., Infineon Technologies AG, Innoscience, Intel Corporation, IonQ Inc, King Yuan Electronics Co Ltd, KIOXIA Holdings, Macronix International Co Ltd, Marvell Technology Group Ltd, MediaTek, Melexis N.V., MetaX Integrated Circuits, Microchip Technology Inc., Micron Technology Inc., Montage Technology Co Ltd, Navitas Semiconductor Corp, Nordic Semiconductor ASA, Novatek, NVIDIA Corp., NXP Semiconductor NV, ON Semiconductor Corp., Phison Electronics Corp, Powerchip Semiconductor Manufacturing Co, Qualcomm Inc., Quantinuum, Realtek Semiconductor, Renesas Electronics, Rohm, SanDisk Corporation., Semtech Corp., SG Micro Corp., Shenzhen Longsys Electronics Co Ltd, SICC Co Ltd, Silergy Corp., Silicon Laboratories Inc., Silicon Motion, Skyworks Solutions Inc, Socionext, Soitec SA, STMicroelectronics NV, Synopsys Inc., Texas

Instruments, TSMC, UMC, Universal Scientific Ind. (Shanghai), Vanguard International Semiconductor, VAT Group AG, Winbond Electronics Corp, WinWay Technology Co Ltd, Wolfspeed, INC, WPG Holdings, WT Microelectronics Co. Ltd..

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from Advanced Micro Devices, Allegro Microsystems Inc, Ambarella Inc, Amkor Technology Inc, Analog Devices Inc., ASE Technology Holding Co. Ltd., ASM International NV, BE Semiconductor Industries NV, Broadcom Inc., Cadence Design Systems Inc, Cerebras Systems, GlobalFoundries Inc, Infineon Technologies AG, Intel Corporation, King Yuan Electronics Co Ltd, Marvell Technology Group Ltd, MediaTek, Microchip Technology Inc., Micron Technology Inc., Nanya Technology Corp., Novatek, Nuvoton Technology Corporation, NVIDIA Corp., NXP Semiconductor NV, ON Semiconductor Corp., Qorvo Inc, Qualcomm Inc., Realtek Semiconductor, Semtech Corp., Silicon Laboratories Inc., Silicon Motion, SMIC, Synopsys Inc., Texas Instruments, TSMC, UMC, Universal Scientific Ind. (Shanghai), Winbond Electronics Corp, WT Microelectronics Co. Ltd..

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Global Stock Ratings Distribution

(as of July 31, 2026)

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	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1529	42%	442	47%	29%	750	43%
Equal-weight/Hold	1582	43%	396	42%	25%	773	44%
Not-Rated/Hold	3	0%	1	0%	33%	1	0%
Underweight/Sell	560	15%	97	10%	17%	217	12%
Total	3,674		936			1741	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O or Over) - The stock's total return is expected to exceed the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.

Equal-weight (E or Equal) - The stock's total return is expected to be in line with the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.

Not-Rated (NR) - Currently the analyst does not have adequate conviction about the stock's total return relative to the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U or Under) - The stock's total return is expected to be below the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

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Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

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Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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INDUSTRY COVERAGE: Technology - European Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/24/2026)
Lee Simpson		
ASML Holding NV (ASML.AS)	O (09/22/2025)	€1,489.80
Infineon Technologies AG (IFXGn.DE)	O (02/06/2025)	€54.16
STMicroelectronics NV (STMPA.PA)	O (03/26/2026)	€42.22
Nigel van Putten		
Aixtron SE (AIXGn.DE)	E (05/25/2023)	€36.75
ASM International NV (ASMI.AS)	O (06/19/2024)	€822.40
BE Semiconductor Industries NV (BESI.AS)	O (11/07/2022)	€208.00
Melexis N.V. (MLXS.BR)	E (02/05/2026)	€63.80
Nordic Semiconductor ASA (NOD.OL)	E (02/10/2025)	NKr 159.50
Soitec SA (SOIT.PA)	O (03/26/2026)	€107.85
VAT Group AG (VACN.S)	E (03/21/2025)	SFr 603.40

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Greater China Technology Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/24/2026)
Charlie Chan		
ACM Research Inc (ACMR.O)	O (03/07/2023)	US$77.35
Advanced Micro-Fabrication Equipment Inc (688012.SS)	O (11/06/2023)	Rmb357.65
Advanced Wireless Semiconductor Co (8086.TWO)	U (07/14/2025)	NT$112.00
Alchip Technologies Ltd (3661.TW)	O (05/14/2021)	NT$3,735.00
ASE Technology Holding Co. Ltd. (3711.TW)	O (09/15/2024)	NT$592.00
Cambricon Technology Corporation (688256.SS)	O (04/27/2026)	Rmb969.05

Global Unichip Corp (3443.TW)	O (06/24/2026)	NT$5,365.00
GlobalWafers Co Ltd (6488.TWO)	E (05/19/2026)	NT$1,010.00
Gudeng Precision (3680.TWO)	O (11/25/2025)	NT$464.00
Hua Hong Semiconductor Ltd (1347.HK)	E (03/12/2026)	HK$108.80
Iluvatar CoreX Semiconductor Co., Ltd. (9903.HK)	O (04/27/2026)	HK$361.00
King Yuan Electronics Co Ltd (2449.TW)	O (03/03/2023)	NT$239.00
Maxscend Microelectronics Co Ltd (300782.SZ)	U (01/11/2021)	Rmb74.55
MediaTek (2454.TW)	O (11/28/2025)	NT$3,765.00
MetaX Integrated Circuits (688802.SS)	E (04/27/2026)	Rmb664.00
Nanya Technology Corp. (2408.TW)	O (05/28/2026)	NT$501.00
NAURA Technology Group Co Ltd (002371.SZ)	O (11/06/2023)	Rmb707.90
OmniVision Integrated Circuits Group Inc (603501.SS)	E (11/17/2025)	Rmb82.50
Phison Electronics Corp (8299.TWO)	E (02/25/2026)	NT$2,135.00
SG Micro Corp. (300661.SZ)	E (11/03/2025)	Rmb111.13
Silergy Corp. (6415.TW)	U (05/19/2026)	NT$450.00
SMIC (0981.HK)	O (10/21/2025)	HK$66.75
TSMC (2330.TW)	O (02/07/2022)	NT$2,375.00
UMC (2303.TW)	O (05/19/2026)	NT$123.50
Vanguard International Semiconductor (5347.TWO)	E (01/14/2026)	NT$151.00
WIN Semiconductors Corp (3105.TWO)	U (07/14/2025)	NT$355.00
Daisy Dai, CFA		
ASMPT Ltd (0522.HK)	O (07/24/2025)	HK$157.80
China Resources Microelectronics Limited (688396.SS)	U (03/02/2026)	Rmb61.22
Empyrean Technology Co Ltd (301269.SZ)	E (01/17/2025)	Rmb91.25
Hangzhou Silan Microelectronics Co. Ltd. (600460.SS)	U (08/25/2025)	Rmb35.56
Hygon Information Technology Co., Ltd. (688041.SS)	O (07/03/2026)	Rmb230.81
Innoscience (2577.HK)	E (10/13/2025)	HK$43.48
JCET Group Co Ltd (600584.SS)	E (01/16/2026)	Rmb73.80
Shanghai Fudan Microelectronics (1385.HK)	O (03/07/2025)	HK$25.34
SICC Co Ltd (688234.SS)	O (03/20/2026)	Rmb105.05
StarPower Semiconductor Ltd (603290.SS)	E (05/14/2026)	Rmb92.99
Unigroup Guoxin Microelectronics Co Ltd (002049.SZ)	U (01/10/2023)	Rmb60.99
Universal Scientific Ind. (Shanghai) (601231.SS)	O (11/05/2025)	Rmb25.90
Yangjie Technology (300373.SZ)	O (06/10/2022)	Rmb97.80
Daniel Yen, CFA		
AP Memory Technology Corp (6531.TW)	O (07/11/2025)	NT$845.00
ASMedia Technology Inc (5269.TW)	U (10/03/2025)	NT$1,400.00
Aspeed Technology (5274.TWO)	O (06/09/2025)	NT$15,115.00
Egis Technology Inc (6462.TWO)	E (01/28/2026)	NT$98.90
Elan Microelectronics Corp (2458.TW)	O (10/03/2025)	NT$139.00
eMemory Technology Inc (3529.TWO)	O (08/18/2026)	NT$2,200.00
Espressif Systems (688018.SS)	O (05/15/2023)	Rmb108.31
GigaDevice Semiconductor Beijing Inc (603986.SS)	O (05/15/2025)	Rmb381.66
Macronix International Co Ltd (2337.TW)	O (09/18/2025)	NT$124.00
Montage Technology Co Ltd (6809.HK)	O (03/18/2026)	HK$250.00
Montage Technology Co Ltd (688008.SS)	O (03/18/2026)	Rmb191.83
Novatek (3034.TW)	U (02/04/2026)	NT$542.00
Nuvoton Technology Corporation (4919.TW)	U (11/10/2025)	NT$116.00
Parade Technologies Ltd (4966.TWO)	O (05/27/2026)	NT$557.00
Powerchip Semiconductor Manufacturing Co (6770.TW)	O (10/27/2025)	NT$70.80
Realtek Semiconductor (2379.TW)	E (01/30/2026)	NT$716.00
Shenzhen Goodix Technology Co Ltd (603160.SS)	U (07/14/2025)	Rmb47.29
Winbond Electronics Corp (2344.TW)	O (05/28/2026)	NT$177.00
WPG Holdings (3702.TW)	O (03/16/2026)	NT$111.00
WT Microelectronics Co. Ltd. (3036.TW)	O (01/27/2026)	NT$200.50

Duan Liu		
Dosilicon Co Ltd (688110.SS)	U (09/06/2024)	Rmb116.10
Shenzhen Longsys Electronics Co Ltd (301308.SZ)	E (02/25/2026)	Rmb364.90
Tiffany Yeh		
AllRing Tech Co. (6187.TWO)	O (09/23/2025)	NT$1,205.00
FOCI Fiber Optic Communications Inc (3363.TWO)	O (01/15/2025)	NT$567.00
Himax Technologies Inc (HIMX.O)	E (02/04/2026)	US$13.44
Hon Precision (7769.TW)	O (04/17/2026)	NT$6,255.00
MPI Corporation (6223.TWO)	O (04/17/2026)	NT$5,565.00
Silicon Motion (SIMO.O)	O (05/06/2024)	US$243.18
WinWay Technology Co Ltd (6515.TW)	O (04/17/2026)	NT$6,145.00

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Japan Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/24/2026)
Kazuo Yoshikawa, CFA		
HOYA (7741.T)	E (10/30/2023)	¥24,895
KIOXIA Holdings (285A.T)	O (08/12/2025)	¥50,930
Renesas Electronics (6723.T)	O (11/26/2019)	¥3,428
Rohm (6963.T)	++	¥4,669
Socionext (6526.T)	U (01/27/2026)	¥1,926

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* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/24/2026)
Joseph Moore		
Advanced Micro Devices (AMD.O)	E (06/09/2024)	US$456.75
Aeva Technologies Inc (AEVA.O)	E (07/19/2021)	US$16.46
Allegro Microsystems Inc (ALGM.O)	O (02/13/2026)	US$35.63
Ambarella Inc (AMBA.O)	O (03/29/2016)	US$70.00
Amkor Technology Inc (AMKR.O)	E (11/08/2023)	US$47.90
Analog Devices Inc. (ADI.O)	O (11/16/2023)	US$371.17
Astera Labs Inc (ALAB.O)	O (05/11/2025)	US$277.53
Broadcom Inc. (AVGO.O)	O (06/09/2024)	US$358.76
Cerebras Systems (CBRS.O)	O (06/08/2026)	US$185.43
GlobalFoundries Inc (GFS.O)	E (10/28/2024)	US$45.95
Intel Corporation (INTC.O)	E (02/22/2023)	US$87.26
IonQ Inc (IONQ.N)	E (04/25/2023)	US$41.06
Marvell Technology Group Ltd (MRVL.O)	E (09/14/2015)	US$229.29
Microchip Technology Inc. (MCHP.O)	E (07/10/2024)	US$74.21
Micron Technology Inc. (MU.O)	O (10/06/2025)	US$910.43
Navitas Semiconductor Corp (NVTS.O)	U (04/06/2025)	US$12.23
NVIDIA Corp. (NVDA.O)	O (03/16/2023)	US$208.48
NXP Semiconductor NV (NXPI.O)	O (02/11/2025)	US$222.44
ON Semiconductor Corp. (ON.O)	++	US$71.93
Qorvo Inc (QRVO.O)	E (10/28/2025)	US$95.37
Qualcomm Inc. (QCOM.O)	E (06/24/2026)	US$158.53
Quantinuum (QNT.O)	E (06/29/2026)	US$52.07
SanDisk Corporation. (SNDK.O)	O (03/03/2025)	US$1,493.12
Semtech Corp. (SMTC.O)	E (04/06/2025)	US$120.91
Silicon Laboratories Inc. (SLAB.O)	E (01/19/2021)	US$218.08

Skyworks Solutions Inc (SWKS.O)	E (11/28/2018)	US$66.86
Texas Instruments (TXN.O)	U (04/13/2020)	US$258.94
Wolfspeed, INC (WOLF.N)	NR (04/06/2025)	US$24.76
Lee Simpson		
Arm Holdings plc (ARM.O)	E (04/07/2026)	US$238.78
Cadence Design Systems Inc (CDNS.O)	O (02/14/2024)	US$315.92
Synopsys Inc. (SNPS.O)	E (02/27/2026)	US$394.51

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