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SOCIETE GENERALE GROUP

17 June 2026
Price Target Change

Asia Tech Hardware

Asia Tech Hardware: Insights from a 15-year balance sheet & cash flow analysis; Chroma ATE and Sunny Optical model update

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Following our 2025 balance sheet & cash flow deep dive, we update analysis across our coverage with a focus on business models, profitability, solvency, and efficiency.

AI demand is driving a sharp ROE upcycle, with AI-exposed names significantly outperforming consumer electronics peers. Chroma, Delta, and Quanta are all likely reaching 30%+ ROE in 2026E, and we expect Unimicron's ROE to recover from previous cyclical trough. In contrast, consumer names (Luxshare, Largan, Sunny) are set to improve more gradually to mid-teens to low-20% ROE, reflecting the nascent contribution of AI businesses. 3-year DuPont analysis shows **Largan's** high ~40% NPM is offset by low leverage and asset turnover (cash-heavy balance sheet). **Chroma** leads in both ROE and ROIC, supported by structurally high margins and low capital intensity. **In PCB supply chain**, Japanese leaders' dominance in raw material doesn't yield outstanding ROIC, likely due to a limited AI revenue mix. Server-exposed firms (Elite, Gold Circuit, WUS, Victory Giant; all not covered)) show higher ROIC.

Balance sheets remain strong across coverage: most companies maintain net cash positions, with stable to declining D/E ratios, except **Quanta** where leverage is rising with AI server expansion. Cash conversion cycles are generally under 120 days, reflecting solid operational efficiency and bargaining power; **Chroma** is an outlier due to longer inventory and qualification cycles. For capex intensity, **Unimicron** and **Largan** have demonstrated relatively high capex levels, driven by strong demand in PCB markets and Apple's stringent requirements for lens manufacturing equipment, respectively. On shareholder returns, **Quanta** and **Chroma** lead with 75–85% payout ratios, while none of our covered companies have established regular share buyback plans.

Model update: for Chroma, we model sales/operating profit CAGR of 46%/65% through 2028. We raise topline estimates meaningfully on surging AI datacenter power demand, ESS recovery, and semi/photonics growth. ATS revenue is projected to grow 80% / 45% in 2026/2027 on AIDC power testing, while SLT revenue should rise ~80% in 2026 and reach record levels in 2027 on next-gen platforms for Rubin Ultra and Google. For **CPO,** we model Chroma's TAM to be NT$5B+ in 2027 (mainly from insertion 3), and to likely contribute to 7% of company revenue. Our 2026-27 EPS are above consensus. We raise our price target to NT$**2,750** (38x P/E unchanged) based on 2027-28 avg. EPS estimate of NT$72.4 (vs. old 2027 EPS NT$43.7). **Outperform**.

For Sunny Optical, we forecast a 12% / 19% revenue / EPS CAGR over 2025-28, We raise 2027-28 revenue forecasts on iPhone camera module share gains. While we lower GM estimates due to memory cost pressure in 2026, we expect it to recover by ~1ppt in 2027. Communication optics remains early-stage; further updates expected at Investor Day and 1H26 results (CPO optics primer). Increasing target P/E to 18x from 17x on potential Apple camera module share gain and rolling forward to 2027 EPS of RMB4.5 (vs. prior 2026-27 avg. EPS of RMB3.9), we raise price target to HK$**94**. **Outperform.**

See the Disclosure Appendix of this report for required disclosures, analyst certifications and other important information. Alternatively, visit our Global Research Disclosure Website.
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BERNSTEIN TICKER TABLE

Ticker	Rating	Cur	17 Jun 2026 Closing Price	Price Target	TTM Rel. Perf.	Cur	Reported EPS 2025A	Reported EPS 2026E	Reported EPS 2027E	Reported P/E (x) 2025A	Reported P/E (x) 2026E	Reported P/E (x) 2027E
2308.TT (Delta)	O	TWD	2,155.00	2,620.00	400.7%	TWD	23.09	37.09	58.40	93.3	58.1	36.9
2360.TT (Chroma ATE)	O	TWD	2,230.00	**2,750.00**	479.8%	TWD	27.50	**41.39**	**63.61**	81.1	53.9	35.1
OLD				1,660.00				33.22	43.66			
2382.TT (Quanta)	U	TWD	374.00	250.00	(12.7)%	TWD	18.91	21.07	23.08	19.8	17.7	16.2
3008.TT (Largan)	O	TWD	5,145.00	5,150.00	71.3%	TWD	158.08	187.55	208.38	32.5	27.4	24.7
002475.CH (Luxshare)	O	CNY	67.32	86.00	61.2%	CNY	2.26	2.66	3.45	29.8	25.3	19.5
3037.TT (Unimicron)	O	TWD	988.00	990.00	836.1%	TWD	4.36	14.06	25.10	226.5	70.3	39.4
2382.HK (Sunny Optical)	O	HKD	79.35	**94.00**	(24.3)%	CNY	4.25	**3.44**	**4.52**	16.1	19.9	15.2
OLD				76.00				3.39	4.46			
ASIAX			2,032.93									

PRICE TARGET CHANGE / ESTIMATE CHANGE IN BOLD

O - Outperform, M - Market-Perform, U - Underperform, NR - Not Rated, CS - Coverage Suspended

Source: Bloomberg, Bernstein estimates and analysis.

INVESTMENT IMPLICATIONS

Delta Electronics (model): We rate Delta Electronics Outperform, with PT = NT$2,620.00.

Chroma ATE (model): We rate Chroma ATE Outperform, with PT = NT$2,750.00.

Quanta Computer (model): We rate Quanta Computer Underperform, with PT = NT$250.00.

Unimicron Technology (model): We rate Unimicron Technology Outperform, with PT = NT$990.00.

Luxshare Precision (model): We rate Luxshare Precision Outperform, with PT = RMB86.00.

Sunny Optical (model): We rate Sunny Optical Outperform, with PT = HK$94.00.

Largan Precision (model): We rate Largan Precision Market-Perform, with PT = NT$5,150.00.

Table Of Contents

Profitability....3
Return on equity (ROE)....3
Return on invested capital (ROIC; including cash in the invested capital)....7
Solvency....11
Operational efficiency....12
Capital Expenditure and depreciation....16
Shareholder return....18
Model update....19
Chroma ate (OP, PT=NT$2,750.00)....19
Sunny Optical (OP, PT=HK$94.00)....23

DETAILS

PROFITABILITY

RETURN ON EQUITY (ROE)

The trend of ROE among companies reflects broader sector trends and cycles, and individual company competitiveness in each market (Exhibit 1):

- **Equipment supplier: Chroma's** ROE has increased over the past 15 years primarily driving by its rising profitability. The company's NPM has risen from 12% in 2010 to 20%+ in 2021, partially attributed to the divestment of its low-margin material trading segment in 2022 (c.15% of revenue in 2021). The ROE further increased to 40%+ starting from 2025. This is attributed to its ability to capitalize on strong demand from SLT and photonics testers for AI chips & optical transceiver, and its expertise in AI power testers. We project an 46%/65% CAGR for revenue/operating profit in 2025–28, fueled by the robust AI demand (for both semi and power testers) and significant operating leverage (*more details are available in Model Update Section*).

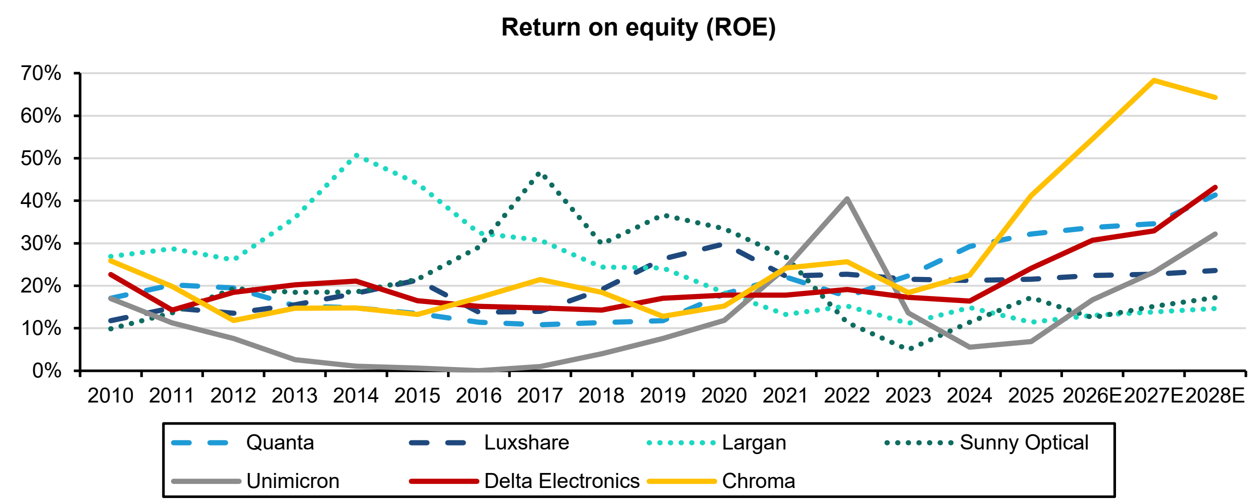
- **PCB supplier: Unimicron's** ROE has been volatile over the past 15 years, reflecting the fluctuation in the HDI and substrate markets. The overall PCB market saw sluggish demand in 2010~2016 due to declining PC market and FX headwind. Early investment for ABF substrate and intensifying competition on Apple HDI business further impact Unimicron's financial performance. Despite these challenges, its ROE began recovering in 2017 and saw a surge in 2021-22, due to severe shortage of ABF substrate. Although the market turned to oversupply post-COVID, the capacity digestion was over and ABF market turned tight in 2H25 due to rising demand from both AI accelerators and CPU this year. As we model Unimicron's gross margin to see a strong recovery from mid-teens in 2025 to mid-30s by 2028, ROE should rise from 7% last year to 30%+ (1Q26 PCB market update & Unimicron model update).

- **Power/cooling supplier:** Prior to 2025, **Delta Electronics'** ROE fluctuate between mid-teens % to low-20s amid market volatility across consumer electronics, industrial and server. In 2014-18, Delta faced challenges with its OPM decreased from 12% to 7% and ROE dropping from 21% to 14% in the same period. During this period, the company has acquired Eltek (Telecom power), and VIVOTEK (building automation), resulting in a 6% CAGR in revenue. However, challenges such as pricing war in PC power electronics, rising material cost, slower-than-expected cost synergies from acquisition, and further investment in EV and factory automation have weighed on profitability. Since 2025, 40% of Delta's revenue comes from AI datacenter across different power components and cooling solutions. We expect its ROE to rise from 24% to 40%+ in 2025-26, driven by the accelerated revenue and profitability growth from surging AI demand (Delta Electronics 1Q26: adding capacity for long-term AI demand. PT raise to NT$2,620).

- **ODMs**: **Luxshare's** ROE was stable in recent years as its diversification effort offset the slower growth in consumer electronics market. Management also follows a disciplined M&A strategy with a target of 20% and above ROE for acquired assets over the long term. We model its ROE to trended up to 24% as AI server components bear fruit and newly acquired Leoni business becomes more profitable (Luxshare deep dive: the Next AI Server Winner; PT raised to RMB 86, Outperform). As world's largest ODM for the PC market, **Quanta's** financial have been very much relied on the PC market before Gen-AI wave. The PC market downturn from 2011 to 2016 negatively impacted Quanta's ROE, but the surge in PC shipments during the work-from-home trend amid COVID-19 greatly improved it. Since 2H23, the robust AI server assembly business become the second growth engine, driving the ROE to low-30% last year. Despite the impressive ROE, we see downside risk for consensus estimates for Quanta and rate Quanta Underperform (Quanta 1Q26: a sharp decline in profitability; Reiterate Underperform).

- **Camera/lens suppliers:** The global smartphone market witnessed strong growth until 2015, followed by a decline from 2018 due to longer replacement cycle. Nonetheless, the increasing number of camera per phone allowed total handset lens shipment to grow until 2021. This explains the exceptionally strong ROE demonstrated by **Largan** in early years, and **Sunny Optical's** aggressive market share gains in the Android market narrowed the gap. Both companies faced deteriorated ROE in 2022-23, impacted by the camera de-spec trend amid COVID, but showed signs of recovery in 2024-25. The inflationary memory price is a headwind to consumer electronics this year, particularly for Android camp. We recently upgraded **Largan** to Outperform as we expect the company will successfully expand to CPO area, which will likely contribute 5% of revenue by 2028 (Largan: deep dive of communication optics (CPO) market; Upgrading to Outperform; PT=NT$5,150) .

EXHIBIT 1: **The trend of ROE among companies reflects broader sector trends and cycles, and individual company competitiveness in each market**



2026E - 2028E numbers are based on Bernstein estimates
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 2: **Global PCB market has been highly cyclical over the past 16 years and is now experiencing a strong upcycle**

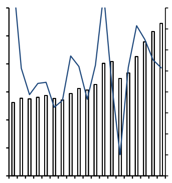
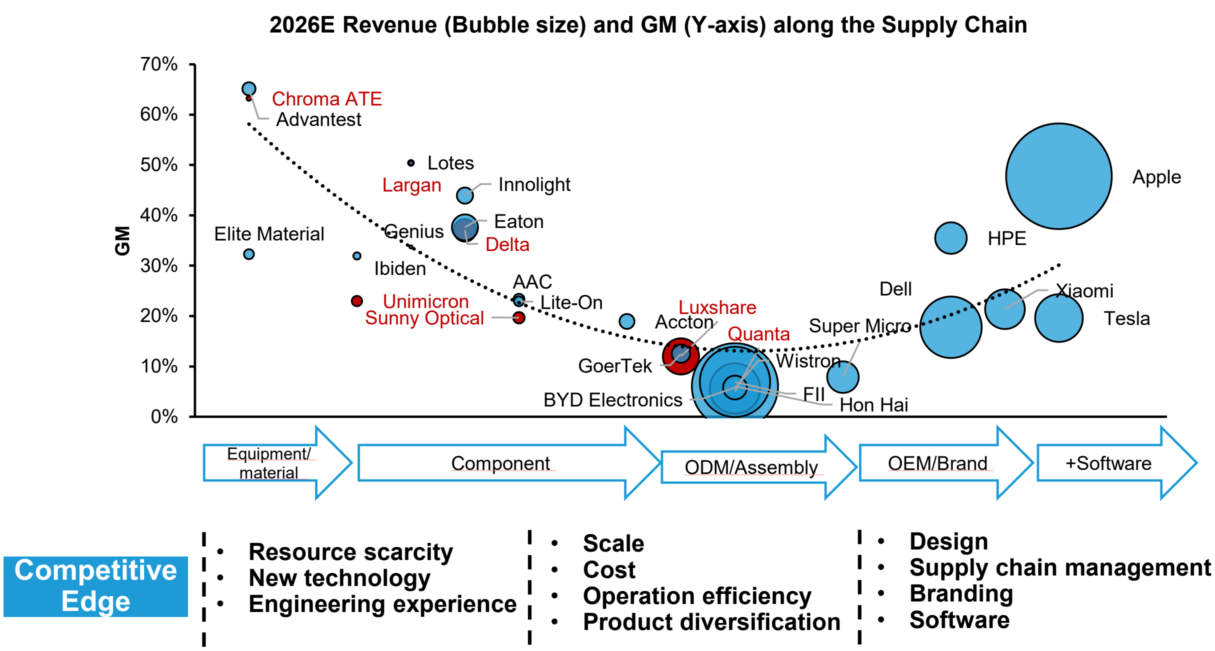


EXHIBIT 3: **The DuPont analysis to break down the ROE drivers**

Sub-sector	Sub-sector/ Company	Past 3 years average								2022-2025				2025-2028	
		ROE	= Net margin					X Turnover	X Leverage	CAGR		Earning volatility		CAGR	
			NPM	= (GM	- R&D	- SG&A	- Other)	Sales/ Asset	Asset/ Equity	Sales	Net profit	Sales	Net profit	Sales	Net profit
Equipments	**Equipment suppliers**														
Equip.	Chroma	27%	30%	59%	10%	22%	(2%)	58%	147%	9%	32%	22%	59%	46%	48%
Smartphone c	**Hardware component suppliers**														
Hardware component	Largan	12%	39%	51%	9%	3%	(0%)	27%	117%	9%	(2%)	12%	19%	9%	11%
	Sunny Optical	11%	7%	17%	8%	4%	(2%)	69%	210%	9%	25%	15%	63%	12%	7%
	Unimicron	9%	7%	16%	4%	6%	(1%)	50%	232%	(2%)	(38%)	12%	41%	30%	115%
	Delta Electronics	19%	11%	32%	9%	10%	2%	85%	192%	13%	22%	18%	33%	33%	62%
OEM/ODMs	**ODM suppliers**														
OEM/ODMs	Quanta	28%	4%	8%	2%	1%	0%	156%	429%	18%	37%	34%	30%	27%	19%
	Luxshare	21%	5%	11%	3%	3%	(0%)	124%	263%	16%	20%	18%	20%	14%	25%

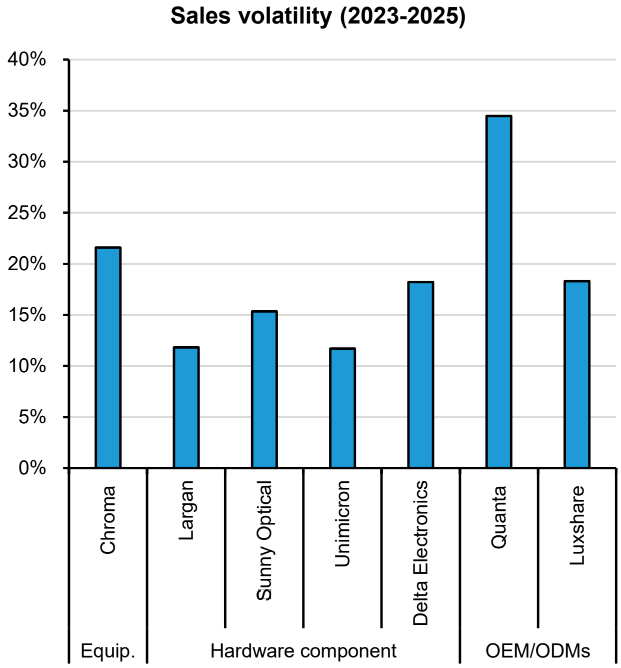
The future sales and profits are estimated by Bernstein
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 4: **Profitability along the tech supply chain follows a smile curve reflecting the varying value add of each product/service offering**



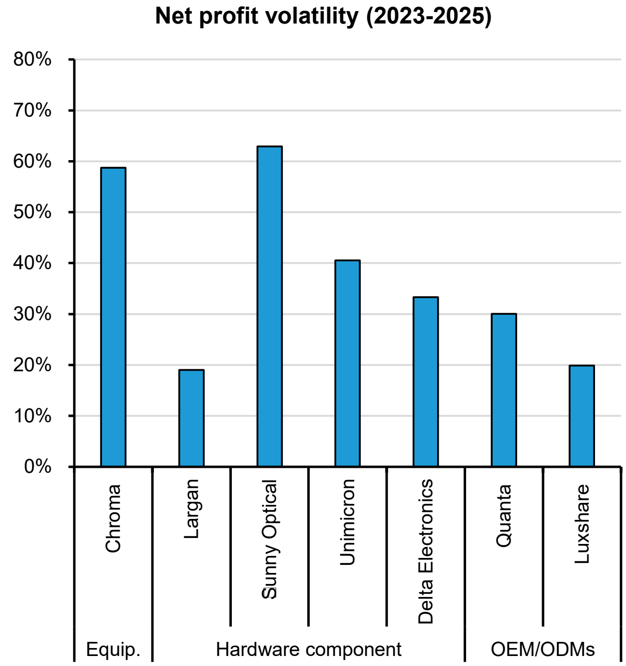
Red bubble is our coverage. Xiaomi & Geely are covered by China Auto Team, Apple, Super Micro, Dell, HPE are covered by U.S. IT Hardware Team, Eaton is covered by U.S. Electrical Equipment Team, and Ibiden is covered by Japan Semiconductors team
Source: Bloomberg estimates and Bernstein analysis

EXHIBIT 5: **Our coverage companies exhibit similar level of sales volatility, except for Quanta**



Sales volatility are calculated as 2023-2025 standard deviation divided by the 2023-25 average sales
Source: Bloomberg, Bernstein analysis

EXHIBIT 6: **Net profit volatility is highest at Sunny Optical, mainly due to GM swings, followed by Chroma, which is structurally more cyclical**



Net profit volatility are calculated as 2023-2025 standard deviation divided by the 2023-25 average net profit
Source: Bloomberg, Bernstein analysis

RETURN ON INVESTED CAPITAL (ROIC; INCLUDING CASH IN THE INVESTED CAPITAL)

The trends in ROIC and ROE generally align, as ROIC accounts for the impact of interest-bearing debts, compared to ROE. **Quanta** no longer leads our Coverage once debts is included in the calculation. As discussed in our Server ODM/OEM primer (2025), the buy-sell business model requires Quanta to procure all components (incl. GPU) prior to the assembly and sale of complete servers, which results in increased demand for debt. Facing the rising memory price and increasingly pricy AI accelerators for future generations of IT rack, many ODMs are discussing a shift from buy-sell model to consignment with their customers. **Luxshare's** ROIC dropped from 15% in 2021 to low-teens in 2025, while its ROE maintained 21~22% during the same period. This decline is due to a RMB39B increase in debt to finance Capex for overseas expansion and M&A activities. (Exhibit 7-Exhibit 14)

We also analyzed the ROIC ratio across the supply chain of PCB and tester market:

- **PCB supply chain:** The overall PCB market requires substantial capital investments as companies must expand capacities to meet changing demand, often cyclical in nature. ROIC for firms within this supply chain ranges from low-single-digit to low-20s. While Nittobo (3110 JT, not covered) and Ajinomoto (2802 JT, covered by APAC Food & Beverages team) dominates the T-glass and ABF film supply respectively, these products represent only 10%-30% their respective revenue. Companies with greater exposure to the server market, such as Elite material, Gold Circuit, WUS, Victory Giant Tech (2383 TT, 2368 TT, 002463 CH, 300476 CH, all not covered), show higher ROIC. In contrast, ABF substrate supplier like Unimicron, despite its significant exposure to AI servers, face financial pressure from an oversupply situation of low-mid end ABF, and yield issues in HDI until last year. However, its should recover rapidly this year driven by supply tightness in ABF market.
- **Tester market: Exhibit 12-Exhibit 14** include companies focusing on power and semiconductor teste consumable parts in testing like socket and probe card. Regarding the profitability, tester companies typicall margins above 50% due to customized equipment/parts. OPM is typically 30%+ with semi tester compar profitability comparing to power tester suppliers. ROIC shows greater dispersion, but overall follows a simil and OPM.

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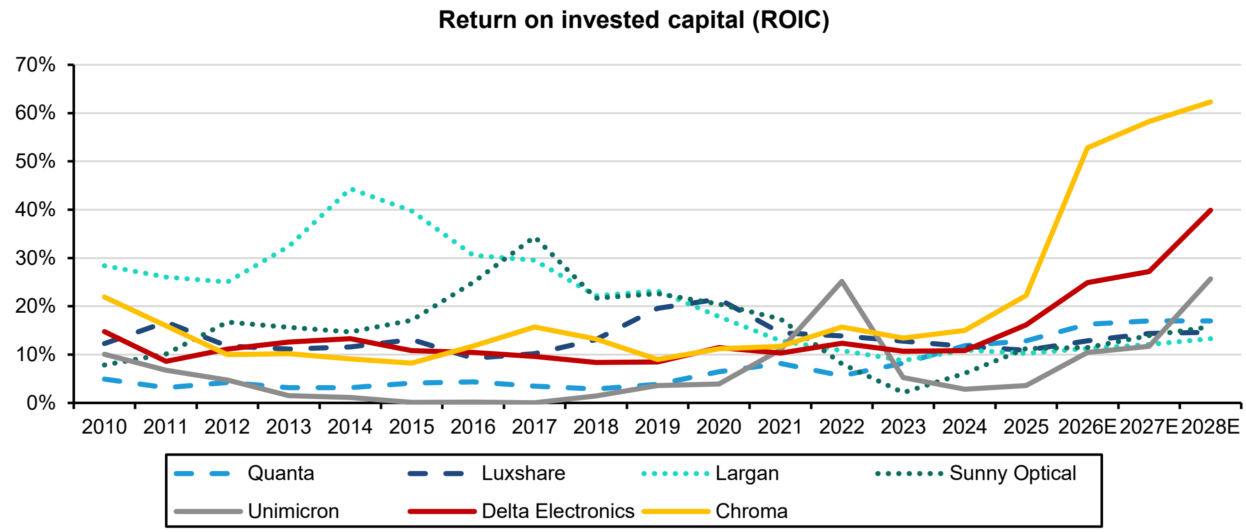
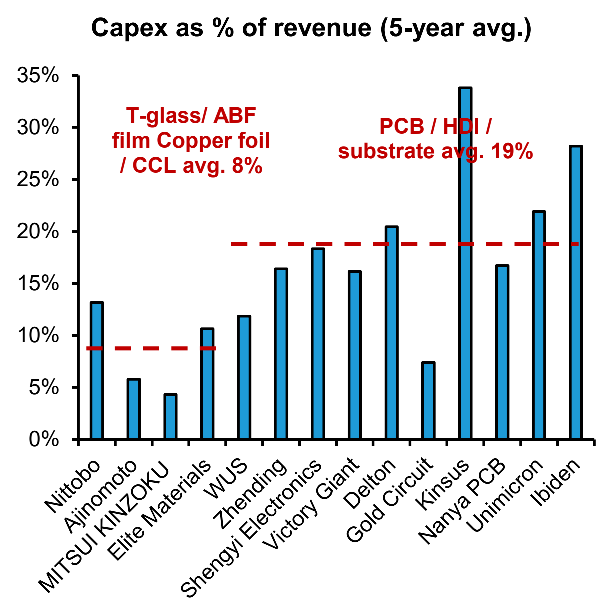
EXHIBIT 7: **In general, the ROIC trend parallels the ROE trend, except that Quanta's ranking apears lower with its debts included in ROIC calculation**



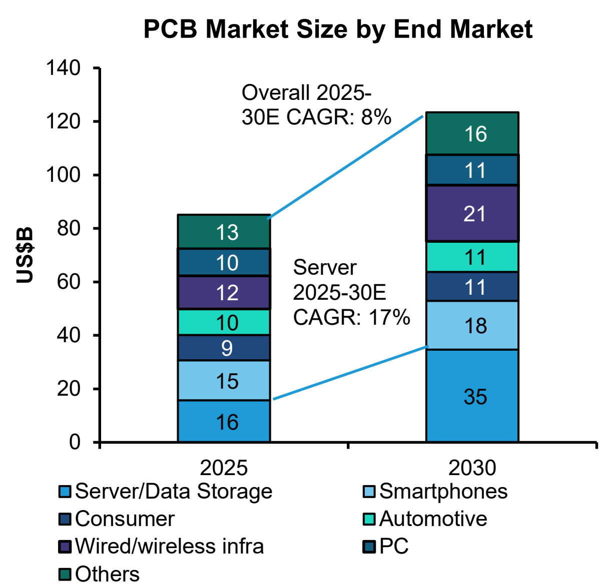
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 8: **The overall PCB industry is capex-intensive as companies need to expand capacities to meet changing demand, often cyclical in nature**



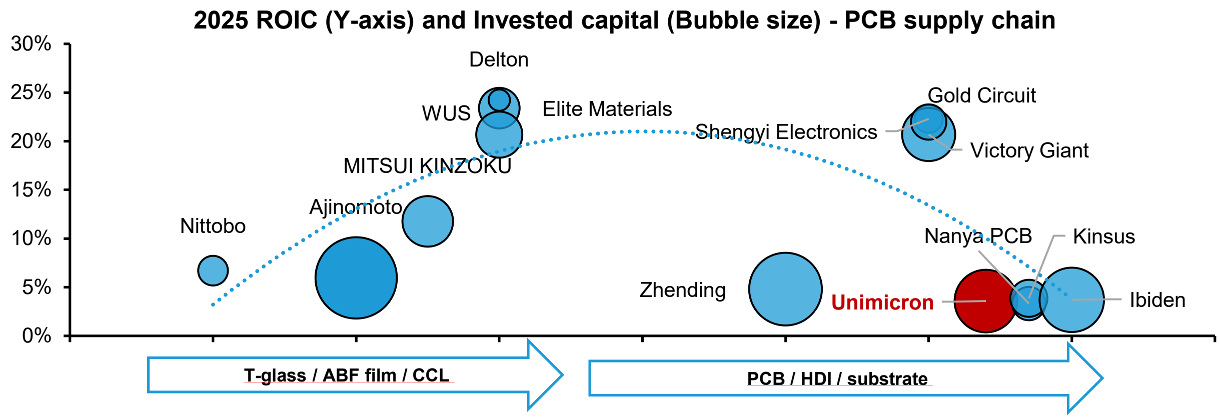
Source: Bloomberg, Bernstein analysis

EXHIBIT 9: **PCB in the server segment will likely grow faster than the overall market at a 17% CAGR in 2025-30E**



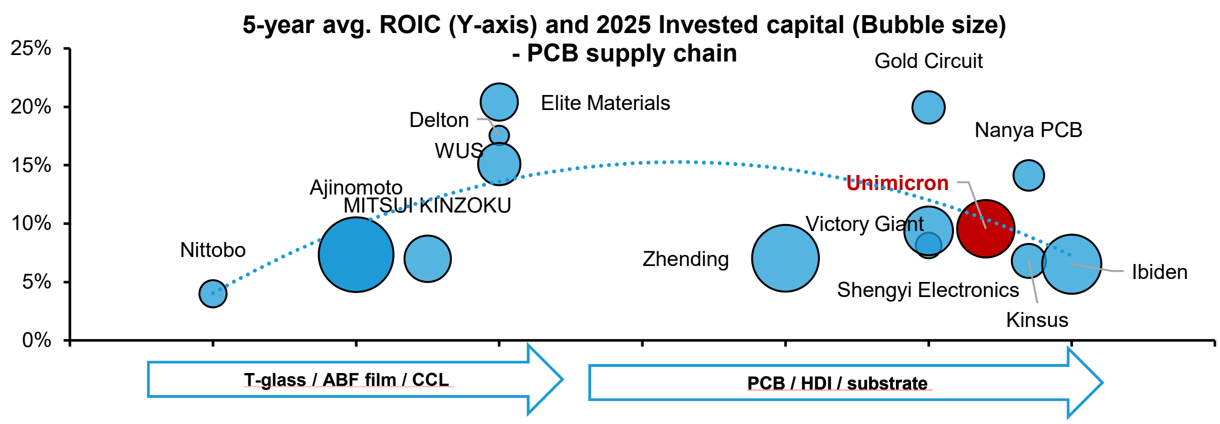
Source: Prismark data and estimates, Bernstein analysis

EXHIBIT 10: **PCB supply chain companies with higher exposure to server market would present better ROIC. ABF companies had relatively low ROIC last year as low-end product was still oversupplied**



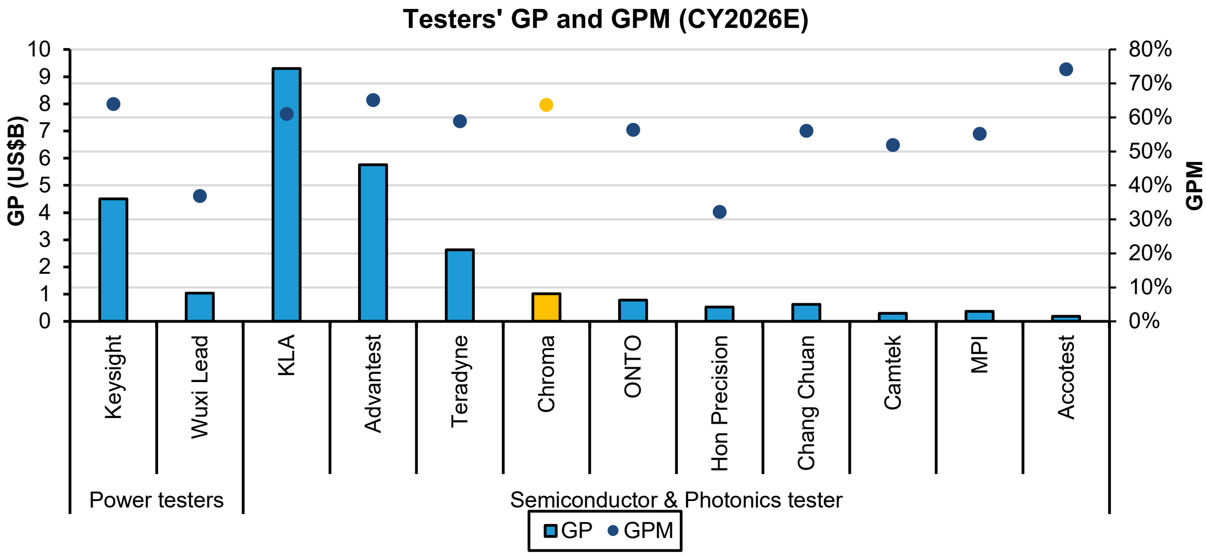
Red bubble is our coverage. Ibiden is covered by Japan Semiconductors Team.
Source: Bloomberg, Bernstein analysis

EXHIBIT 11: **5-year average ROIC reflects the last ABF upcycle during COVID**



Red bubble is our coverage. Ibiden is covered by Japan Semiconductors Team.
Source: Bloomberg, Bernstein analysis

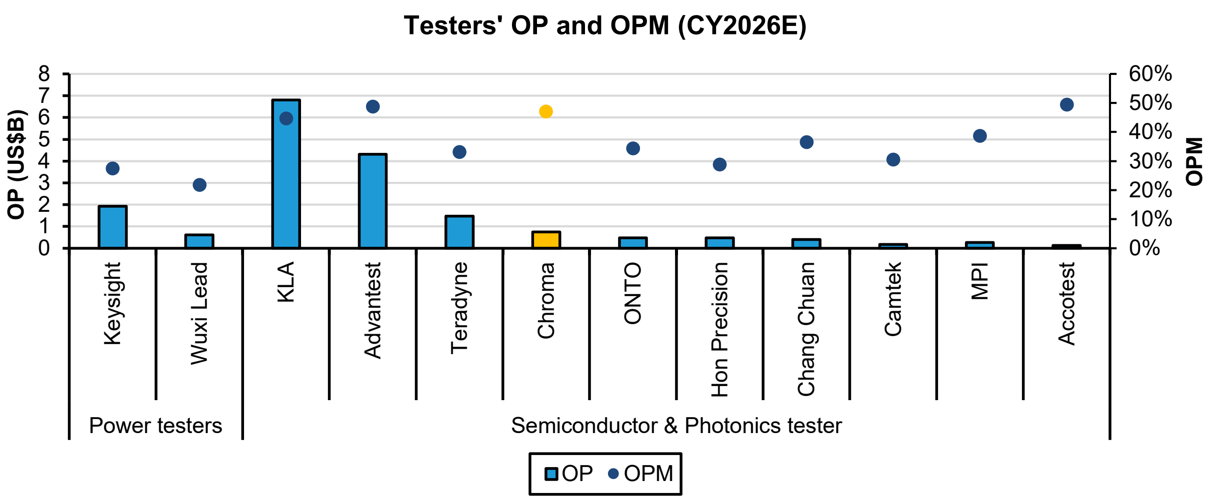
EXHIBIT 12: **Testers' GPMs are relatively high, averaging c.56% in 2026E**



Numbers adjusted to calendar year ending 2026; Chroma, KLA and Advantest are covered by Bernstein while others are not covered; Chomra numbers are based on Bernstein estimates; all others are based on Bloomberg consensus

Source: Bloomberg, Bernstein analysis

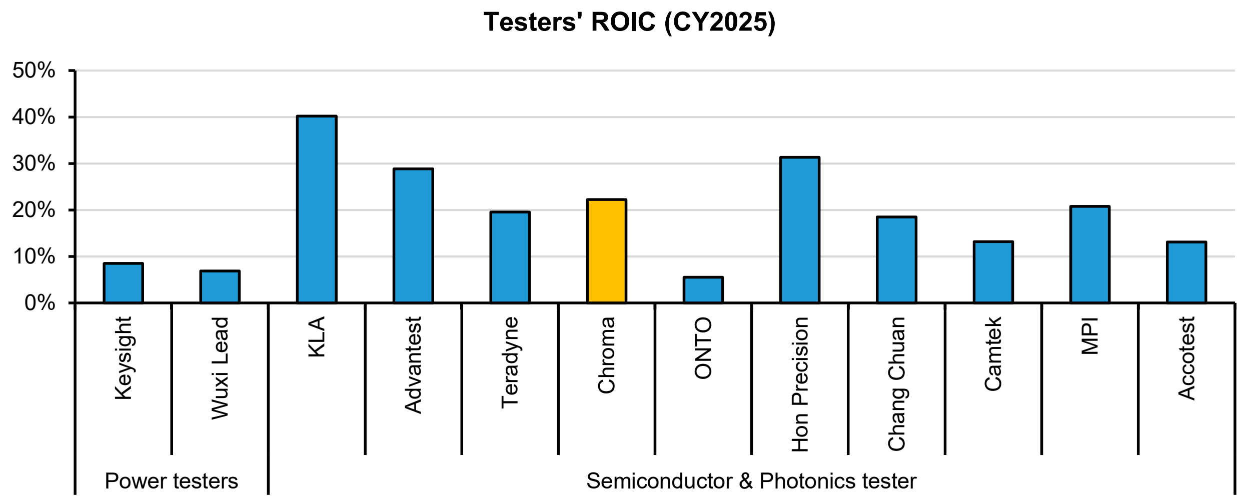
EXHIBIT 13: **In 2026E, testers' OPMs are typically 30%+ with semi tester companies carry higher profitability comparing to power tester suppliers**



OP = GP - R&D - SG&A; Chroma, KLA and Advantest are covered by Bernstein while others are not covered; Chomra numbers are based on Bernstein estimates; All others are based on Bloomberg consensus

Source: Bloomberg, Bernstein analysis

EXHIBIT 14: **ROIC shows greater dispersion, but overall follows a similar trend to GPM and OPM**



Chroma, KLA and Advantest are covered by Bernstein while others are not covered
Source: Bloomberg, Bernstein analysis

SOLVENCY

Debt to equity ratio (D/E ratio)

When it comes to debt to equity ratio (D/E ratio), we note that (Exhibit 15 -Exhibit 17):

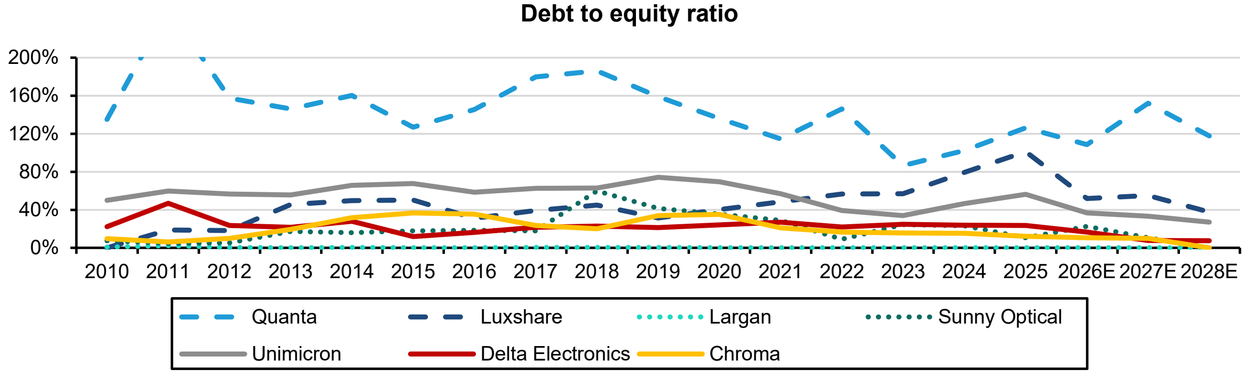
- **ODM suppliers:** within our coverage, **Quanta** and **Luxshare** have the highest D/E ratio due to the substantial capital demands under the buy-sell model. Quanta has been reducing its D/E ratio from 2018 to 2023 by paying down debts, but we anticipate a rapid rebound in the next two years as the fast-growing AI server segment will likely require significant capital. Luxshare's D/E ratio saw a significant rise since 2019 due to M&A needs and its expansion into Apple supply chain and new sectors. However, given Luxshare's improving FCF in recent years, and its plan for HK IPO (Link), the company is likely to see a reduction in its D/E ratio in following years.

- Other suppliers: D/E ratios of Unimicron, Delta, Chroma, Sunny Optical and Largan have all been below 50% over the past 3 years, reflecting their healthy financial position.

Net debt to equity ratio (Net D/E ratio)

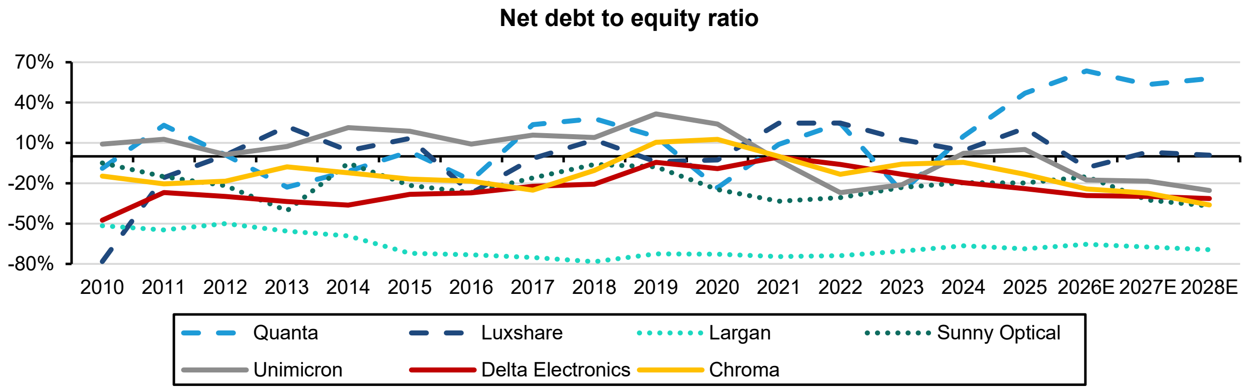
The net debt to equity ratio for our coverage companies have all been below 30% in recent years, reflecting their solid financial status, except for Quanta. Largan's net debt to equity ratio was even lower than -60% over the past decade due to its substantial cash balance. Nonetheless, we expect Quanta's net debt to equity ratio to pick up significantly in the upcoming years due to working capital burden from AI server business. We model Quanta to face net interest expense, instead of income starting this year, weighting on EPS growth despite strong top line growth.

EXHIBIT 15: **Quanta exhibits the highest D/E ratio within our coverage**



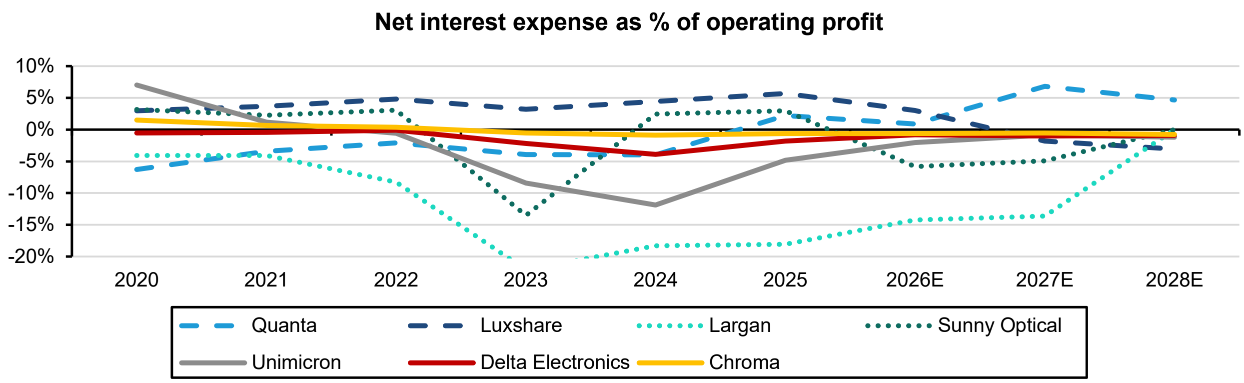
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 16: **Within our coverage, Quanta is the sole company with a notably high net debt-to-equity ratio**



Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 17: **Quanta incurred net interest expenses in 2025 for the first time since 2020, primarily due to increased working capital burden from its fast-growing AI server business**



Source: Bloomberg, Bernstein analysis and estimates

OPERATIONAL EFFICIENCY

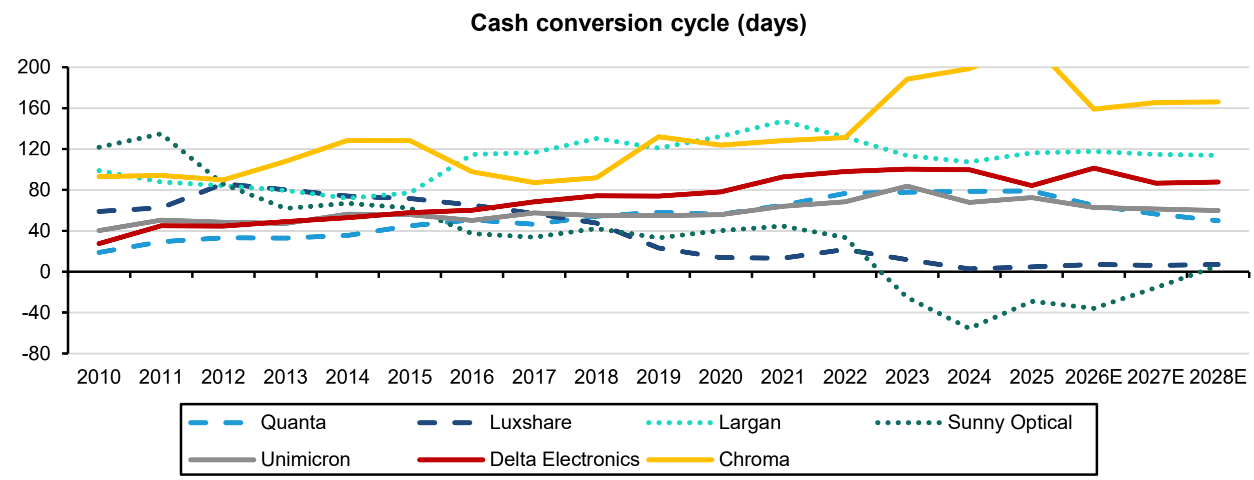
Within our coverage, suppliers in mainland China have shorter cash conversion cycle due to proficient management of receivables and inventory, as well as different corporate structures (Exhibit 18 - Exhibit 23).

- **Equipment supplier**: **Chroma** exhibits the longest cash conversion cycle, mainly due to the prolonged inventory turnover days, reflecting testing equipment industry's characteristics of infrequent purchases and extensive inspection & trial processes. In 2025, inventory turnover days of Chroma was 224 days, higher than other companies within our coverage, yet still below the tester industry average. Despite this, Chroma's free cash flow margin ranked the top among our coverage, thanks to its strong NPM. Moreover, its cash on balance amounts to 20-30% of revenue over the past 5 years, maintaining a healthy liquidity level. Notably, Chroma's inventory turnover days have risen significantly over the past five years, likely due to strategic stockpiling during the pandemic and the cessation of its high-turnover material trading business in 2022.

- **Component suppliers: Largan** has maintained the highest cash flow generation capability over the past 15 years, driven by its superior NPM. **Unimicron and Delta's** cash conversion cycles have been stable. **Sunny Optical's** cash conversion cycle is the shortest among our coverage thanks to its extended accounts payable turnover days (including notes payable). However, this result should be viewed cautiously, as Sunny's operates through multiple subsidiaries, leading to significant internal transactions (e.g. some handset modules use internal-made lenses) and other inter-corporate activities. This structure tends to inflate notes payables, which saw a spike in 2023-24.

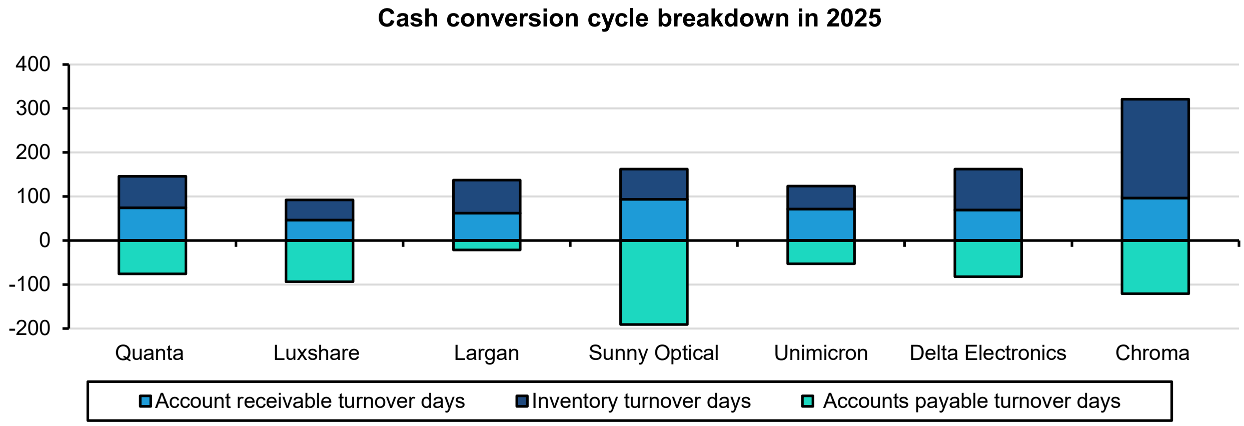
- **ODM suppliers: Luxshare** has achieved an almost zero cash conversion cycle in recent years, demonstrating remarkable operational efficiency. Over the past decade, the accounts receivable turnover days of Luxshare have consistently declined and has now become the second shortest within our coverage, reflecting strong bargaining power against downstream customers. In comparison, **Quanta's** cash conversion cycle is longer due to the extended transportation process between its L6 sites in Asia and L10 sites in US and Germany (Apple and AI server supply chain in a deglobalizing world), and more time-consuming testing procedures of AI servers compared to consumer electronics.

EXHIBIT 18: **Chroma exhibits the longest cash conversion cycle within our Coverage**



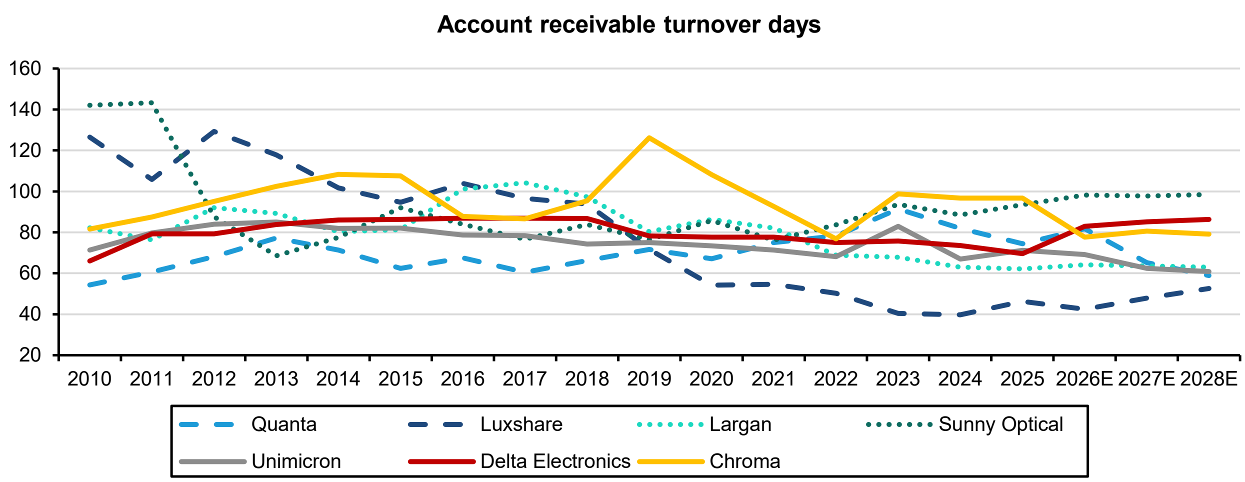
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 19: **Sunny Optical's lengthy account payable days and Chroma's long inventory turnover days result in the shortest and the longest cash conversion cycle within our Coverage respectively**



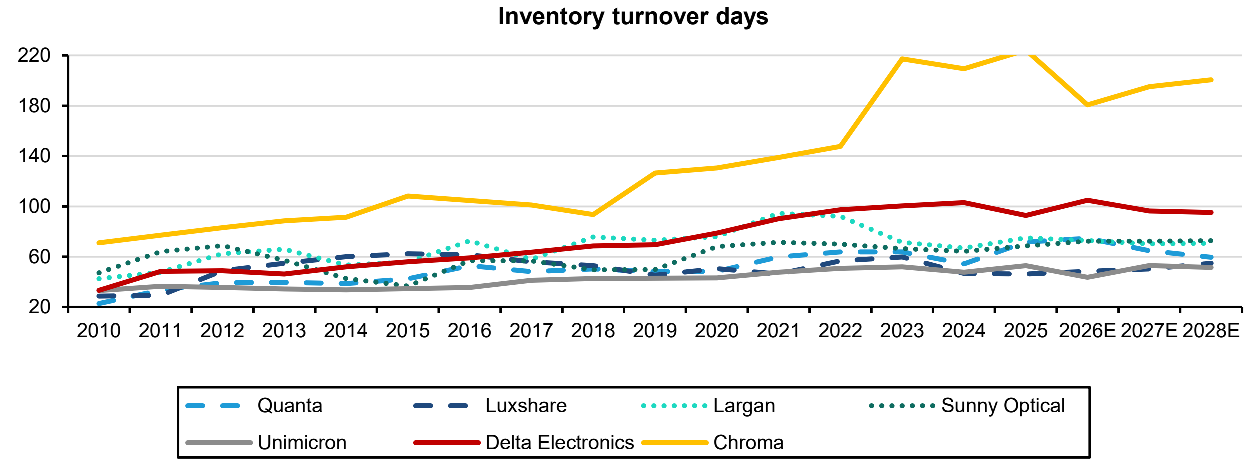
Source: Bloomberg, Bernstein analysis

EXHIBIT 20: **Over the past decade, the accounts receivable turnover days of Luxshare have consistently declined and now become the shortest within our coverage, indicating its strong bargaining power against downstream customers**



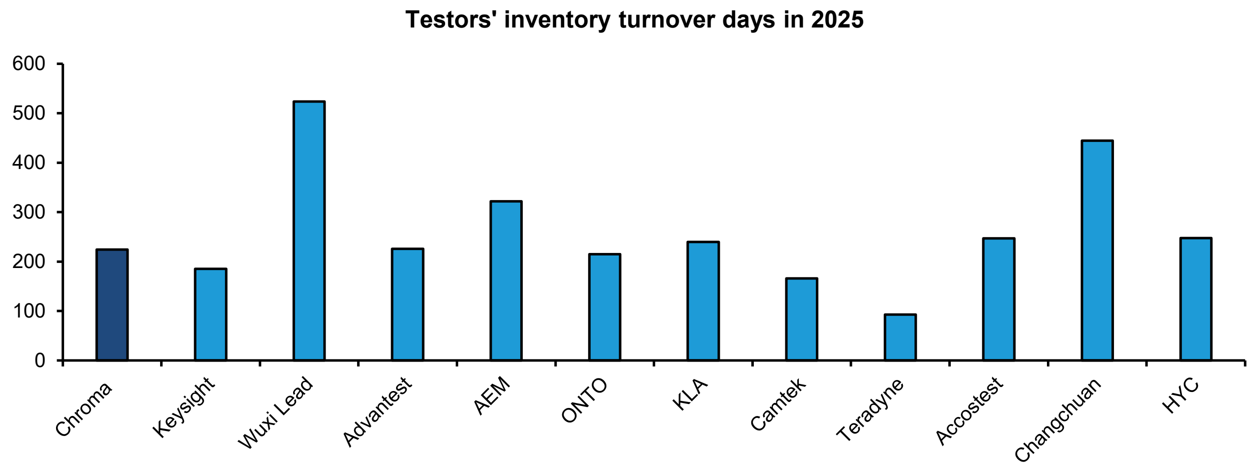
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 21: **Chroma exhibits the longest inventory turnover days, which reflects the nature of the testing equipment industry characterized by infrequent purchases and prolonged inspection and trial processes**



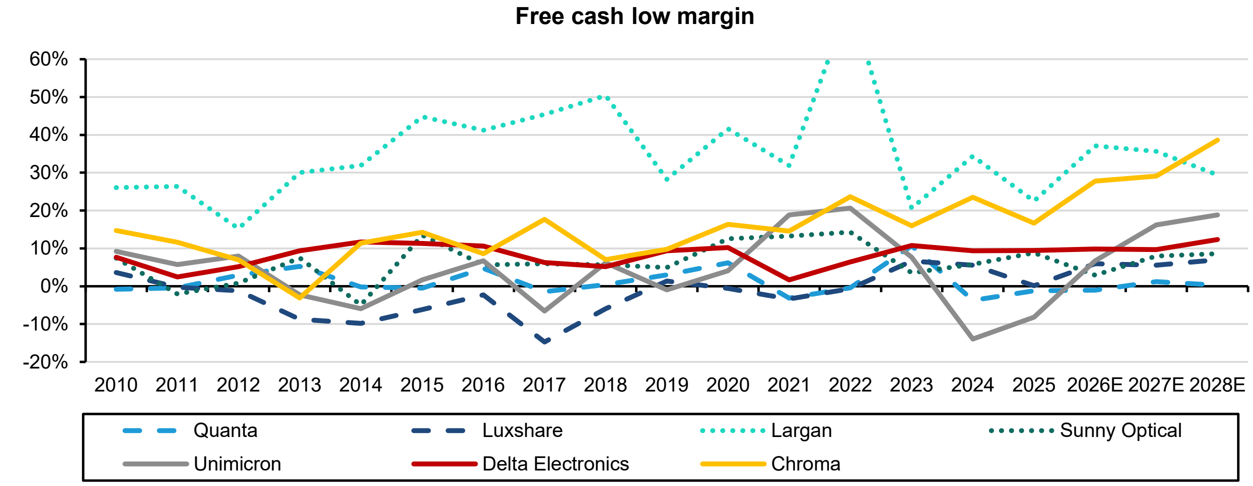
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 22: **Chroma's inventory turnover days in 2025 was below industry average**



Source: Bloomberg, Bernstein analysis

EXHIBIT 23: **Largan and Chroma showcased the most robust cash flow generation ability despite the longer cash conversion cycle, thanks to their high NPM**



Source: Bloomberg, Bernstein analysis and estimates

CAPITAL EXPENDITURE AND DEPRECIATION

In terms of Capex, we noted that Largan and Unimicron were the most Capex-intensive companies within our coverage (Exhibit 24 -Exhibit 27):

- **Equipment supplier**: **Chroma's** Capex was among the lowest within our coverage, reflecting testing equipment industry's reliance on engineers rather than physical assets.

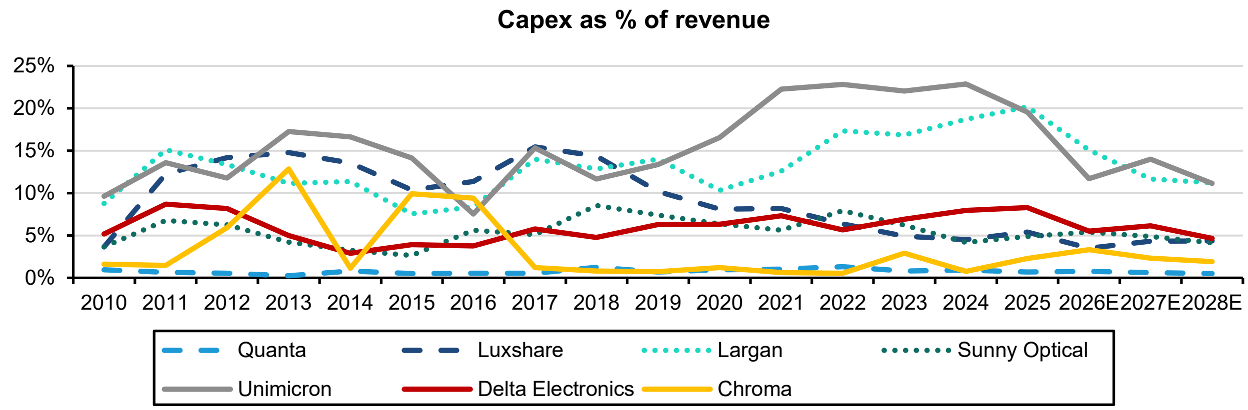
- **PCB and power components suppliers:** The Capex as percentage of revenue for **Delta Electronics** was relatively low and stable, representing approximately 5% of its revenue over the last 15 years. In contrast, Unimicron's Capex as percentage of revenue was considerably high and volatile, indicating the cyclical and asset-intensive characteristics of PCB industry. **Unimicron's** Capex has increased significantly since 2021, driven by its ABF (Yangmei and KF sites) and PCB (Thailand site) segments. The company has also accelerated the capex spending this year, and targets to increase ABF capacity by 40% YoY end-2026 (1Q26 PCB market update & Unimicron model update

- **Camera suppliers**: **Largan** has ramped capex in recent years as rising camera specs demand more advanced equipment and
larger production space. The utilization rate in existing sites are almost full, and the new site in Taichung started ramping up
in late-2025, with 2x floor space of the latest site in Taichung starts in end-2023. We believe this additional space prepares
for variable-aperture lenses for iPhone 18, plastic prisms, and CPO optics

. By contrast, Sunny's capex
reflecting its relatively asset-light camera-module business. We forecast Sunny's capex to remain around R
the next two years, with capex as a share of revenue trending down as sales grow. **From 2H27, we expect A**
part of its iPhone camera-module orders to Sunny, leveraging Sunny's advanced COB (chip-on-bo
without imposing the heavy capex burden some investors fear. Across the camera supply chain, lens ma
structurally higher capex-to-sales than module vendors, and Apple camera suppliers tend to be particular
given complex processes, dedicated lines, and bespoke equipment.

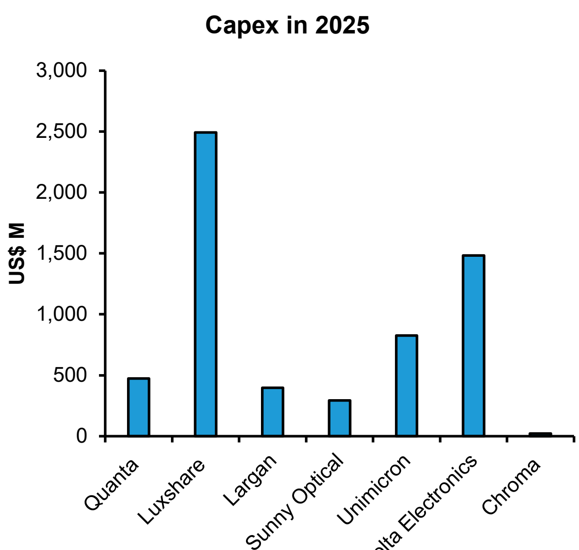
- ODM suppliers: **Quanta** has the lowest Capex across our coverage as server and NB assembly rely more on
PP&E, and the buy-sell model enlarges the revenue size. **Luxshare's** Capex % of revenue decreased signif
growing ODM business inflates the revenue yet require relatively small Capex investment. We model the c
peak of capex this year at RMB 21B, but capex as % of sales to gradually decrease to 3% by 2028.

EXHIBIT 24: **Unimicron and Largan are the most capital intensive companies with our coverage**



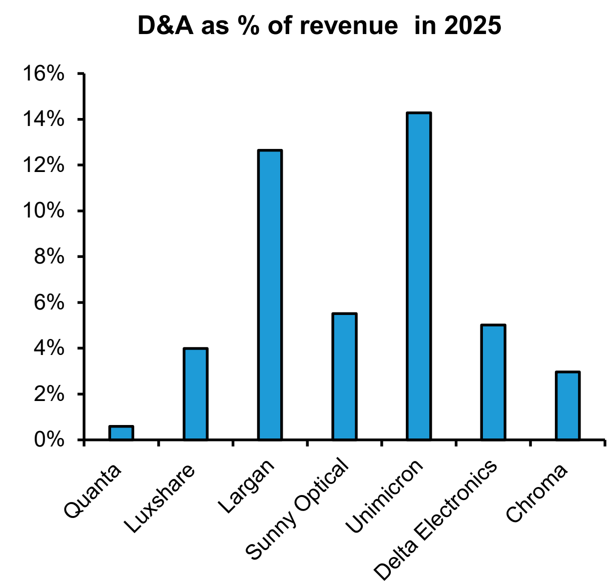
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 25: **Luxshare has the highest Capex in 2025 within our coverage, followed by Delta**



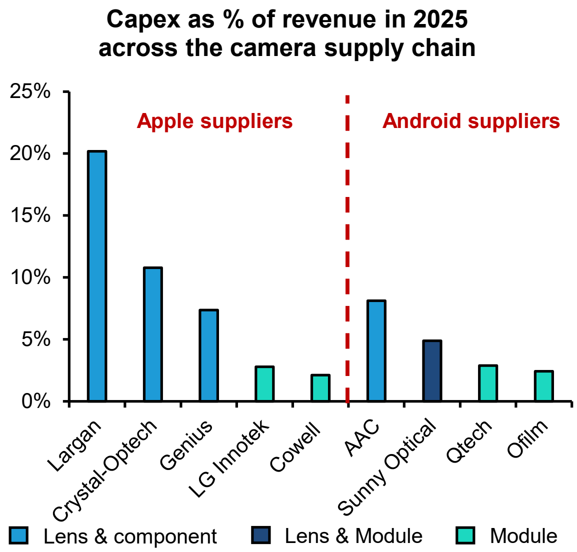
Source: Bloomberg, Bernstein analysis

EXHIBIT 26: **Largan and Unimicron presented the highest D&A to revenue ratio as a result of substantial capex-intensity**



Source: Bloomberg, Bernstein analysis

EXHIBIT 27: **The Lens sector demonstrates greater capex intensity compared to module sector, and Apple suppliers typically incur higher capex than Android suppliers**



Source: Bloomberg, Bernstein analysis

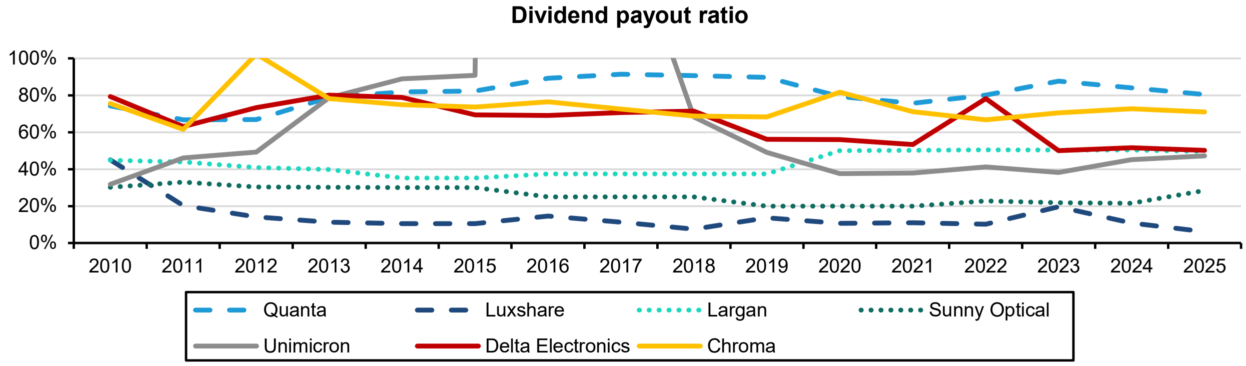
SHAREHOLDER RETURN

Geologically, Taiwanese companies typically have higher dividend payout ratios, while mainland China companies including Luxshare and Sunny Optical, tend to reserve more cash to fund future expansion and potential M&A, rather than paying out dividend. With the encouragement from regulators and the slowdown of business expansion, mainland China companies may increase the dividend pay-out ratio gradually in the future (Link). (Exhibit 28)

Among Taiwanese companies, **Quanta** has the highest dividend payout ratio, with **Chroma** second to it. When it comes to dividend yield, **Quanta** and **Largan** generate >2% dividend yield. For Largan, the TW$119B cash on balance (nearly 2x of revenue) accounts for roughly one fourth of Largan's market capitalization, providing a safe cushion for investors. (Exhibit 29)

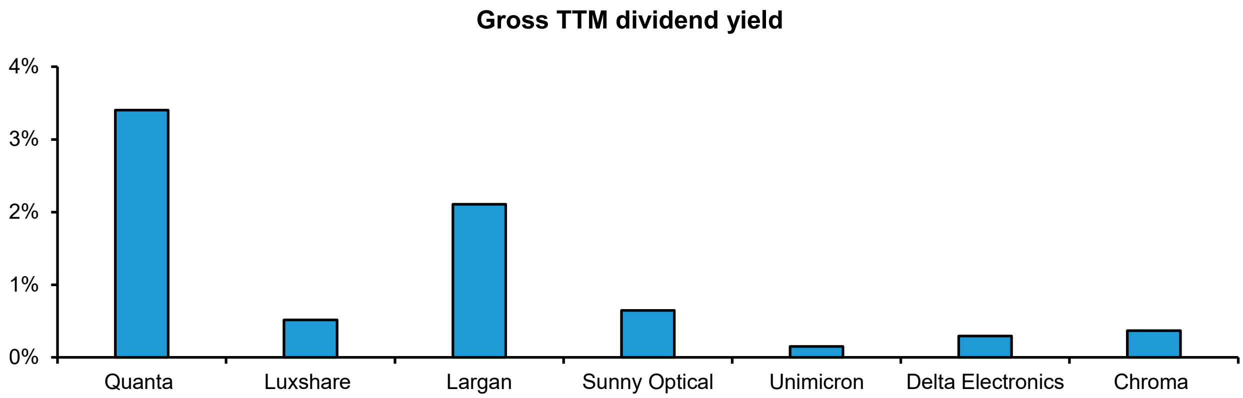
Compared to dividends, share buybacks are less favored by these companies. Over the past five years, only **Sunny Optical**, **Luxshare** and **Largan** announced share buyback plans during periods of low share prices, yet no companies in our Coverage have established regular share buyback policies. In particular, Largan has recently completed a buyback in 1Q26 as its share price hit a low level in Dec 2025.

EXHIBIT 28: **Geologically, Taiwanese companies typically have higher dividend payout ratios than mainland China companies**



Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 29: **Quanta and Largan generate >2% dividend yield**



Source: Bloomberg, Bernstein analysis and estimates

MODEL UPDATE

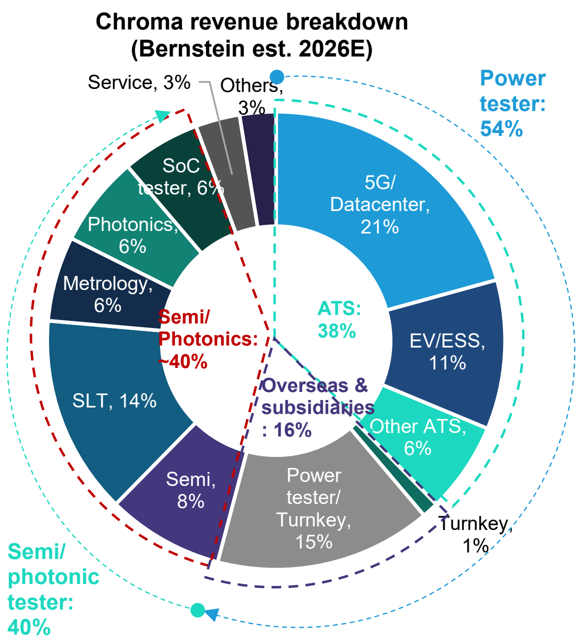
CHROMA ATE (OP, PT=NT$2,750.00)

All cylinders on fire in 2026-27. We forecast ATS revenue growth of 80% in 2026 and 45% in 2027, driven by surging AI datacenter power demand for PSU, BBU, and upcoming HVDC power rack testing. A strong recovery in China's ESS sector could further support power/battery tester growth, which will likely be classified under the overseas/subsidiary segment. Sales of ESS projets will likely be lumpy, and we believe the strong Apr-May monthly sales are partially attributed to this demand. **For semi sector, robust demand from AI accelerators are photonics products remains a key growth driver.** We expect AI SLT revenue to nearly triple in 2026 supported by Vera Rubin, AMD, and Google's new chips, lifting total SLT (auto + gaming) ~80% YoY. In 2027, next-generation SLT for Rubin Ultra and Google should drive record SLT sales. For metrology, strong capex guidance from TSMC and OSATs will likely double Chroma's metrology sales to ~NT$3B in 2026 and NT$5B in 2027, or 5-10% of company's revenue.

CPO revenue will commence in 2H26, and we expect it to contribute 7% of company revenue in 2027. Chroma offers a growing portfolio of CPO test systems, including PIC wafer testers (insertion 1), packaged optical engine tester (insertion 3) and testers for insertion 4 (Chroma focusing on optical I/O step). These systems combine automation, precise temperature control, and multi-channel optical/electrical measurement, and build on Chroma's long experience testing laser diodes and active optical components. Optical engine testers (insertion 3) will support pilot runs in 2H26, with meaningful revenue starting in 2027. For insertion 3 testers, we expect ASP is US$1-1.5M. We expect CPO revenue will reach c. NT$5B in 2027, or 7% of company's total revenue.

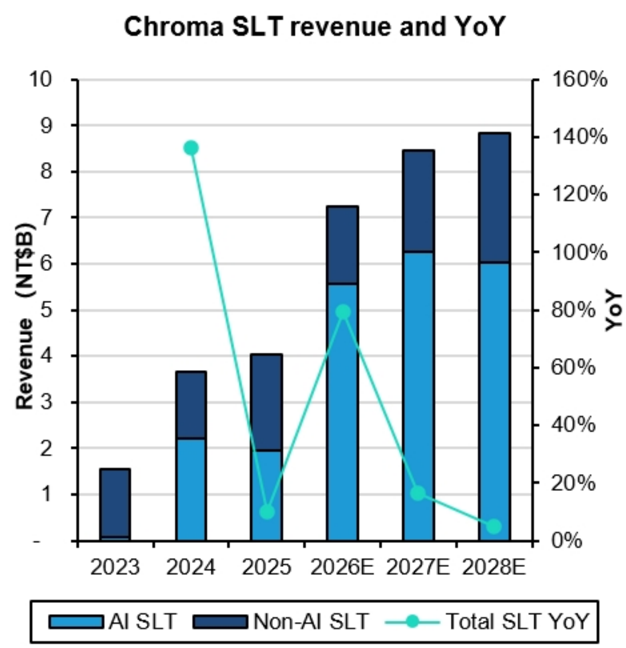
We project Chroma's sales / operating profit to grow at a 46% / 65% CAGR, respectively, over 2025-28. A higher AI revenue mix will likely sustain gross margins above 60%, with operating profit more than double this year, and further grew 35%+ CAGR in 2027-28. While EPS growth will likely appear softer due a one-off NT$3.2B asset disposal gain in 3Q25, our 2026/2027 EPS forecasts remain above consensus. We kept our target P/E at 38x, applying this to average 2027-28 EPS estimate of NT $72.4 (old 2027 EPS of NT$43.7), we increase our price target to NT$2,750 (from NT$1660), Outperform.

EXHIBIT 30: **Semi/Photonics represents ~40% of Chroma's revenue and Power tester represents ~55% (incl. the part under overseas & subsidiaries and Turnkey)**



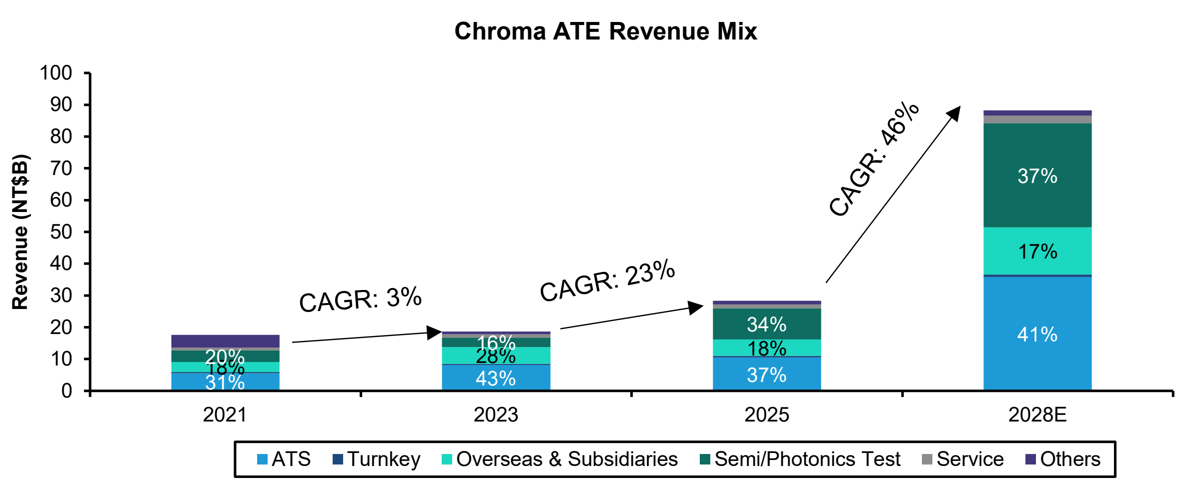
Source: Company reports, Bernstein analysis and estimates

EXHIBIT 31: **We expect Chroma's SLT revenue to grow by c.80% in 2026**



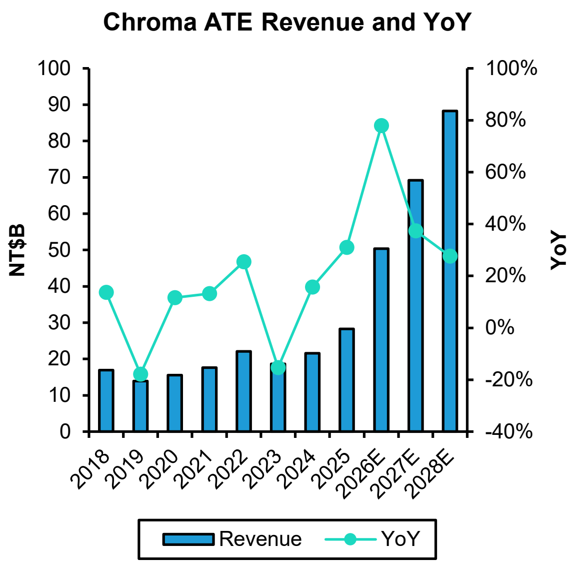
Company reports, Bernstein analysis and estimates

EXHIBIT 32: **We expect robust demand from AI datacenter power and semi/photonic products will drive Chroma to grow topline at 46% in 2025-28**



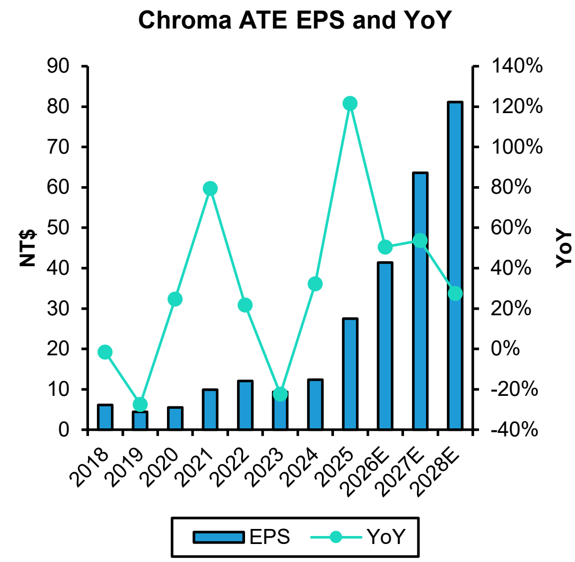
Source: Company reports, Bernstein analysis and estimates

EXHIBIT 33: **We project Chroma's revenue to grow at a 46% CAGR in 2025-28**



Source: Company disclosure, Bernstein estimates and analysis

EXHIBIT 34: **We model EPS to grow at 43% CAGR in 2025-28, driven by higher-margin AI related revenue**



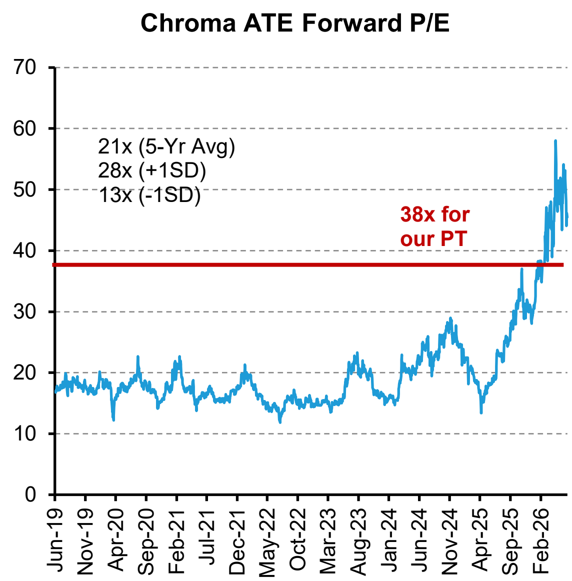
Source: Company disclosure, Bernstein estimates and analysis

EXHIBIT 35: **We model Chroma's revenue / EPS to grow at 46%/43% CAGR from 2025-28**

Chroma Comparision Table	2025	2026E	2027E	2028E
Revenue (NT$ B)				
Bernstein Old		41.3	51.5	
YoY			25%	
Bernstein	28.3	50.4	69.2	88.3
YoY	31%	78%	37%	28%
Consensus		50.5	70.6	93.4
YoY		83%	40%	32%
New vs. old		22%	34%	
BERN vs. consensus		0%	-2%	-6%
GM				
Bernstein Old		62.9%	63.4%	
Bernstein	61.5%	63.7%	63.8%	61.9%
Consensus		63.3%	64.4%	64.9%
New vs. old		0.8%	0.3%	
BERN vs. consensus		0.4%	-0.6%	-3.0%
OPM				
Bernstein Old		39.4%	41.3%	
Bernstein	32.5%	43.4%	46.7%	46.6%
Consensus		41.3%	44.4%	46.5%
New vs. old		4.0%	5.4%	46.6%
BERN vs. consensus		2.1%	2.3%	0.1%
Diluted EPS (NT$)				
Bernstein Old		33.2	43.7	
YoY			31%	
Bernstein	27.5	41.4	63.6	81.1
YoY	122%	51%	54%	28%
Consensus		40.6	60.6	90.7
YoY		54%	49%	50%
New vs. old		25%	46%	
BERN vs. consensus		2%	5%	-11%

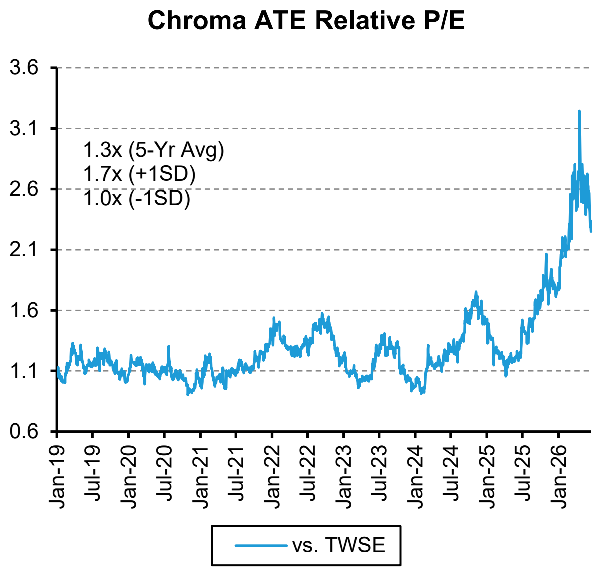
Source: Company disclosure, Bloomberg, Bernstein estimates and analysis

EXHIBIT 36: **Chroma is trading at 45x P/E**



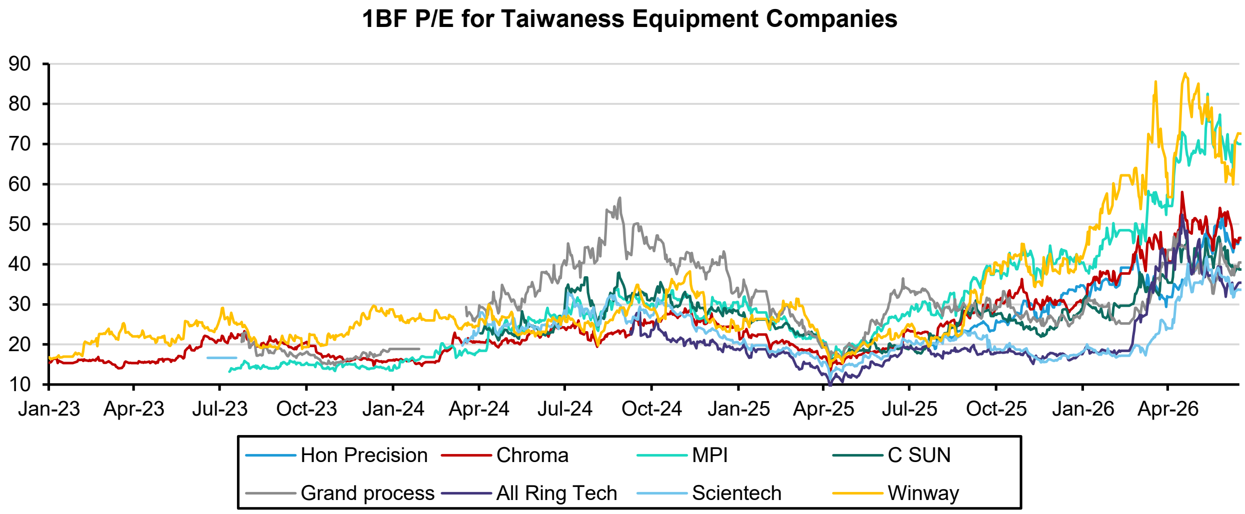
Source: Bloomberg, Bernstein estimates and analysis

EXHIBIT 37: **Chroma is valued at 2.3x against TWSE**



Source: Bloomberg, Bernstein analysis

EXHIBIT 38: **Chroma is valued at relatively higher P/E multiple vs. other Taiwanese equipment companies**



Source: Bloomberg and Bernstein analysis

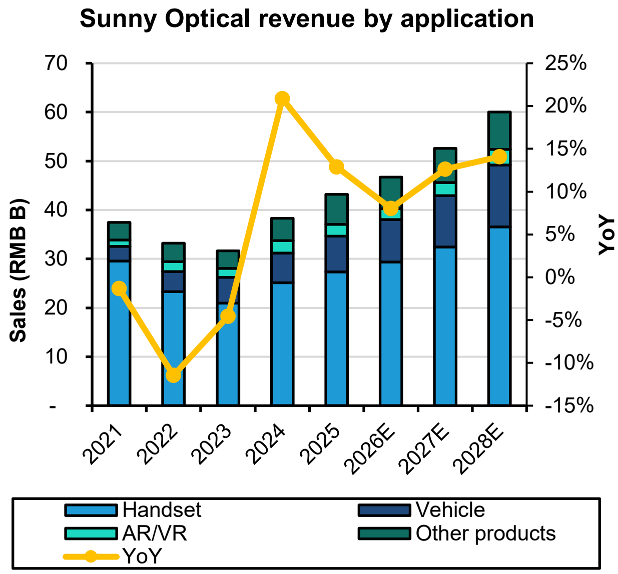
SUNNY OPTICAL (OP, PT=HK$94.00)

We forecast Sunny Optical to deliver 12% revenue CAGR and 23% operating profit CAGR from 2025-2028, driven by handset share gains and structural growth in auto lenses and modules amid rising ADAS adoption. Compared with our prior model, we lower gross margin assumptions due to strong memory cost pressure in 2026. However, we raise 2027-28 revenue forecasts as we believe Sunny is likely to gain share in iPhone camera modules. We expect Apple to allocate part of its iPhone camera-module orders to Sunny, leveraging Sunny's advanced COB (chip-on-board) packaging, without imposing the heavy capex burden some investors fear. We expect corporate GM to recover by ~1ppt in 2027, supported by a richer mix of higher-margin auto and premium handset products and easing memory costs.

In communication optics (optical transceiver/CPO), Sunny has formed a dedicated team and appointed Dr. Gu Bo as CTO, an academician of the Canadian Academy of Engineering and Deputy Secretary-General of the Chinese Optical Society. We see the business at an early stage of product development and customer engagement, with further updates likely at the late-June Investor Day or 1H26 results in late August. (see more about CPO optical in deep dive of communication optics (CPO) market).

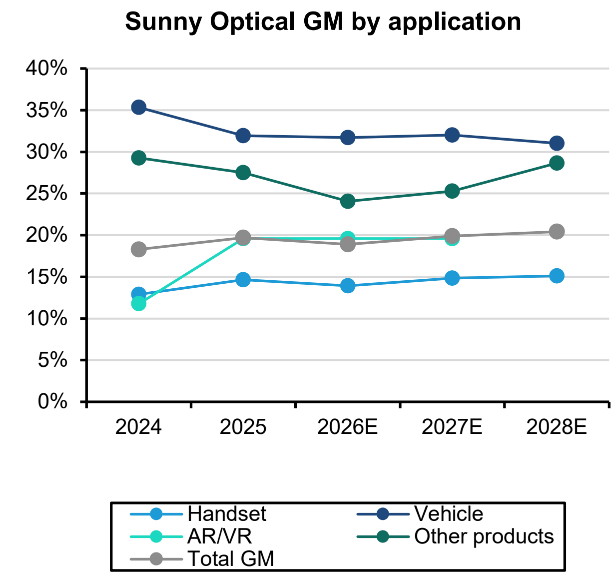
We estimate EPS to grow at a 19% CAGR through 2028 (excluding one-off RMB919m investment gain in 2025). Increasing target P/E to 18x from 17x on potential Apple camera module share gain and rolling valuation forward to 2027 EPS of RMB4.5 (vs. prior RMB3.9 based on 2026-27 average), we raise our price target to **HK$94** from HK$76 (RMB/ HKD=1.16). **Outperform.** (Exhibit 39 - Exhibit 46)

EXHIBIT 39: **We expect Sunny Optical to grow at 12% CAGR in 2025-28**



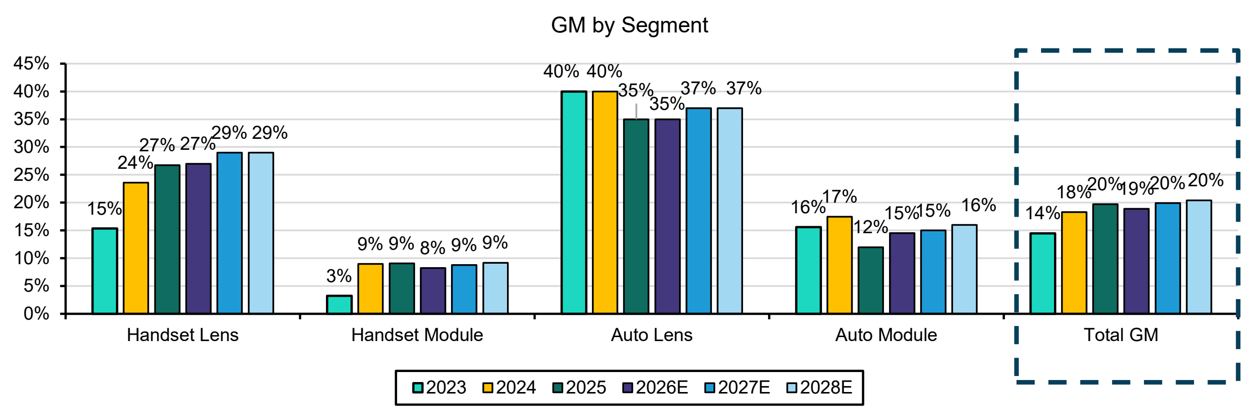
Source: Company reports, Bernstein analysis and estimates

EXHIBIT 40: **We model Sunny Optical's GM to see slightly decline in 2026 due to memory price impact while to recover in 2027**



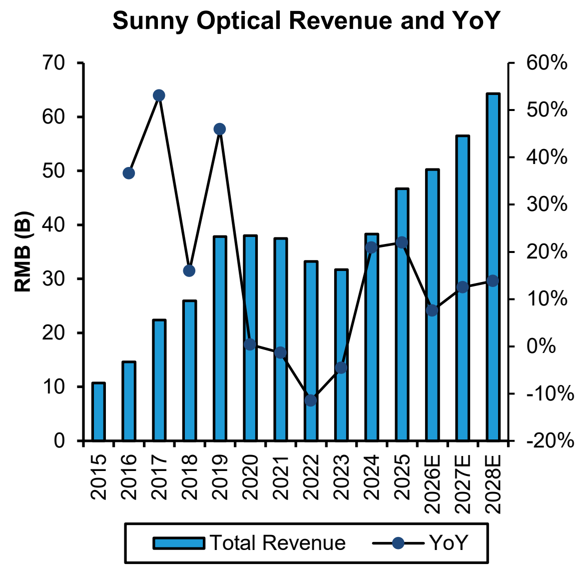
Source: Company reports, Bernstein analysis and estimates

EXHIBIT 41: **We expect Sunny Optical's handset module and overall GM to decline slightly in 2026 amid surging memory price, and to rebound in 2027 as memory price pressure easing**



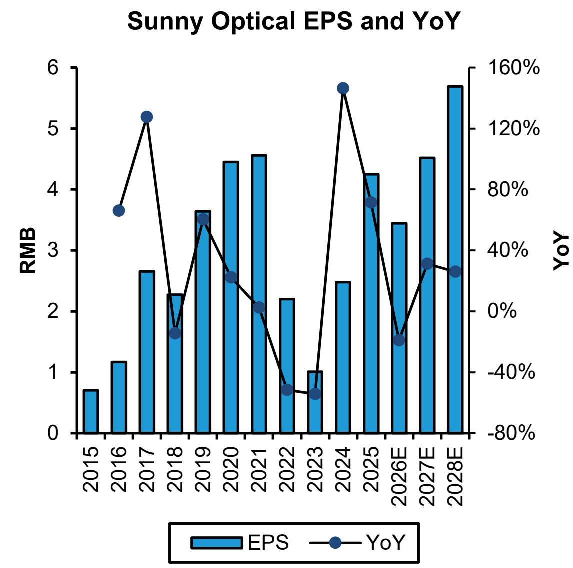
Source: Company disclosure, Bernstein estimates and analysis

EXHIBIT 42: **Overall we estimate Sunny Optical will achieve 12% revenue CAGR from 2025 to 2028...**



Source: Company disclosure, Bernstein estimates and analysis

EXHIBIT 43: **... and have 10% EPS CAGR in EPS over the same period (2025 includes an one-off gain)**



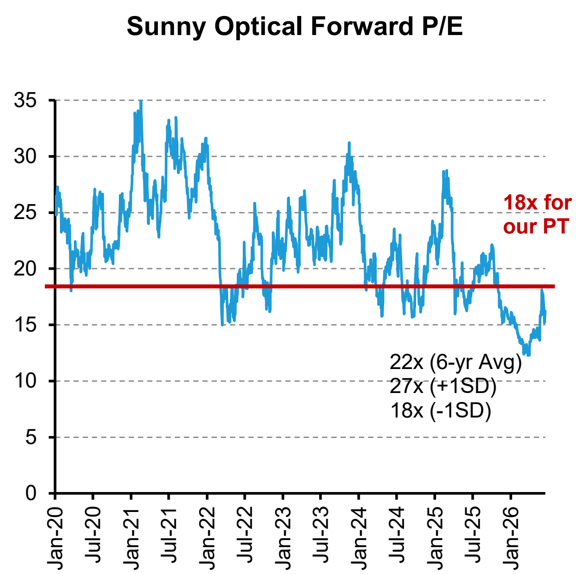
Source: Company disclosure, Bernstein estimates and analysis

EXHIBIT 44: **We expect Sunny Optical's GM to decline slightly in 2026 and rebound in 2027, with strong recovery of EPS in next year**

Comparision Table	2025	2026E	2027E	2028E
Revenue (RMB B)				
Bernstein Old		46.6	50.7	
YoY		8%	9%	
Bernstein	43.2	46.7	52.6	60.0
YoY	13%	8%	13%	14%
Consensus		46.4	51.5	58.0
YoY		8%	11%	13%
New vs. old		0%	4%	
BERN vs. consensus		1%	2%	3%
GM				
Bernstein Old		19.5%	21.1%	
Bernstein	19.7%	18.9%	19.9%	20.4%
Consensus		19.7%	20.4%	21.0%
New vs. old		-0.6%	-1.2%	
BERN vs. consensus		-0.8%	-0.5%	-0.5%
OPM				
Bernstein Old		8.3%	10.2%	
Bernstein	8.1%	7.9%	9.6%	10.9%
Consensus		9.1%	9.9%	10.5%
New vs. old		-0.3%	-0.6%	
BERN vs. consensus		-1.2%	-0.3%	0.4%
EPS (RMB)				
Bernstein Old		3.4	4.5	
YoY		-20%	31%	
Bernstein	4.2	3.4	4.5	5.7
YoY	71%	-19%	31%	26%
Consensus		3.8	4.4	5.3
YoY		11%	16%	22%
New vs. old		1%	1%	
BERN vs. consensus		-9%	3%	7%

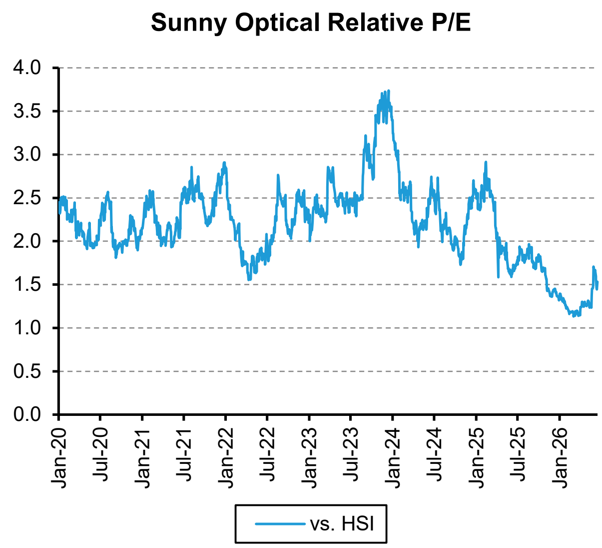
Source: Company reports, Bernstein analysis and estimates

EXHIBIT 45: **We set Sunny's target P/E at 18x**



Source: Bloomberg, Bernstein estimates and analysis

EXHIBIT 46: **Relative P/E against HSI index is at the lowest range compared to past 5 years**



Source: Bloomberg and Bernstein analysis

APPENDIX - FINANCIAL FORECASTS

EXHIBIT 47: **Chroma ATE Financial Statements**

TWD in Millions	2022	2023	2024	2025	2026E	2027E	2028E
Income Statement							
Net Sales	22,067	18,676	21,604	28,311	50,386	69,192	88,283
Gross Profit	11,357	10,757	12,746	17,425	32,080	44,129	54,661
SG&A Expense	4,394	4,313	5,019	5,738	6,935	8,089	9,438
R&D Expense	1,917	1,757	2,199	2,556	3,222	3,710	4,078
EBIT	5,039	4,673	5,482	9,197	21,864	32,330	41,145
EBITDA	5,723	5,420	6,257	10,038	22,788	33,369	42,363
Pretax Income	6,441	5,166	6,708	13,918	22,576	34,552	44,039
Tax	1,220	1,070	1,308	1,992	4,569	6,877	8,746
Net Income	5,106	3,979	5,264	11,692	17,625	27,087	34,543
Earnings Per Share (TWD) (Diluted)	12.1	9.4	12.4	27.5	41.4	63.6	81.1
Margin Analysis							
Gross Profit	51.5%	57.6%	59.0%	61.5%	63.7%	63.8%	61.9%
EBIT	22.8%	25.0%	25.4%	32.5%	43.4%	46.7%	46.6%
Net Income	23.1%	21.3%	24.4%	41.3%	35.0%	39.1%	39.1%
Sequential Growth							
Net Sales	25.5%	-15.4%	15.7%	31.0%	78.0%	37.3%	27.6%
Gross Profit	34.4%	-5.3%	18.5%	36.7%	84.1%	37.6%	23.9%
EBIT	63.9%	-7.3%	17.3%	67.8%	137.7%	47.9%	27.3%
Net Income	22.2%	-22.1%	32.3%	122.1%	50.7%	53.7%	27.5%
Earnings Per Share	21.8%	-22.3%	32.3%	121.6%	50.5%	53.7%	27.5%
Balance Sheet							
Cash and Cash Equivalents	5,942	4,132	4,099	6,222	11,358	15,994	25,639
Accounts Receivable	4,763	5,345	6,070	8,925	12,499	18,071	20,204
Inventory	4,753	4,675	5,458	7,919	10,204	16,605	20,366
Net Fixed Assets	7,018	7,170	6,956	7,232	8,061	9,331	11,058
Total Assets	33,829	33,482	37,308	47,150	60,514	80,735	99,257
Accounts Payable	1,657	1,190	778	1,133	1,578	2,413	2,863
Total Debt	3,189	3,126	3,526	3,318	3,272	4,730	5,490
Total Equity	21,873	22,517	25,450	32,563	33,817	48,274	63,251
Cash Flow							
Cash Flow From Operations	5,297	3,408	4,784	5,258	17,037	17,864	31,687
Cash Flow From Investments	902	(1,394)	(1,891)	1,428	(3,049)	(1,468)	(2,488)
Cash Flow From Financing	(3,471)	(3,832)	(2,997)	(4,548)	(8,875)	(11,760)	(19,555)
Capex	(689)	(1,621)	(2,005)	(2,301)	(1,677)	(2,303)	(2,938)
FCF	2,898	1,690	2,559	2,455	12,973	21,091	27,622
As % of EBITDA	51%	31%	41%	24%	57%	63%	65%
Key Financial Metrics							
ROE	25.6%	18.4%	22.5%	41.2%	54.5%	68.3%	64.3%
ROA	16.5%	12.2%	15.3%	28.2%	33.5%	39.2%	39.2%
Debt / Equity	14.6%	13.9%	13.9%	10.2%	9.7%	9.8%	8.7%
Net Debt / Equity	-13.5%	-4.5%	-2.4%	-10.0%	-24.4%	-27.4%	-36.1%
Debt / Capital	12.7%	12.2%	12.2%	9.2%	8.8%	8.9%	8.0%
Dividend Per Share (TWD)	7.2	8.3	6.7	9.3	20.7	31.2	47.9
Dividend Payout Ratio	72.7%	68.2%	70.9%	74.2%	75.0%	75.0%	75.0%

Source: Company reports, Bernstein analysis and estimates

EXHIBIT 48: **Sunny Optical Financial Summary**

RMB in Millions	2022	2023	2024	2025	2026E	2027E	2028E
Income Statement							
Net Sales	33,197	31,681	38,294	43,229	46,705	52,604	60,004
Gross Profit	6,605	4,590	7,006	8,516	8,830	10,467	12,253
SG&A Expense	1,281	1,425	1,839	1,763	1,718	1,786	1,858
R&D Expense	2,803	2,566	2,924	3,259	3,405	3,609	3,826
EBIT	2,520	599	2,243	3,494	3,707	5,071	6,569
EBITDA	4,400	2,547	4,344	5,726	5,769	7,229	8,826
Pretax Income	2,715	1,358	3,144	5,416	4,360	5,731	7,216
Tax	241	208	367	609	472	632	792
Net Income	2,408	1,099	2,699	4,639	3,761	4,933	6,214
Earnings Per Share (RMB) (Diluted)	2.2	1.0	2.5	4.2	3.4	4.5	5.7
Margin Analysis							
Gross Profit	19.9%	14.5%	18.3%	19.7%	18.9%	19.9%	20.4%
EBIT	7.6%	1.9%	5.9%	8.1%	7.9%	9.6%	10.9%
EBITDA	13.3%	8.0%	11.3%	13.2%	12.4%	13.7%	14.7%
Net Income	7.3%	3.5%	7.0%	10.7%	8.1%	9.4%	10.4%
Sequential Growth							
Net Sales	-11.5%	-4.6%	20.9%	12.9%	8.0%	12.6%	14.1%
Gross Profit	-24.4%	-30.5%	52.6%	21.6%	3.7%	18.5%	17.1%
EBIT	-50.2%	-76.2%	274.5%	55.8%	6.1%	36.8%	29.6%
Net Income	-51.7%	-54.3%	145.5%	71.9%	-18.9%	31.2%	26.0%
Earnings Per Share	-51.7%	-54.3%	146.3%	71.4%	-18.9%	31.2%	26.0%
Balance Sheet							
Cash and Cash Equivalents	7,033	13,085	4,509	7,482	8,113	8,336	8,473
Accounts Receivable	7,762	8,485	10,078	12,072	13,076	15,103	17,297
Inventory	4,721	5,137	5,870	7,180	7,822	8,890	10,132
Net Fixed Assets	10,120	9,927	10,525	9,818	10,278	10,750	11,493
Total Assets	43,001	50,297	53,807	59,215	61,099	65,643	70,857
Accounts Payable	12,927	20,336	21,035	22,001	21,669	22,000	22,081
Total Debt	2,020	5,562	5,826	3,176	3,333	3,746	4,275
Total Equity	22,182	22,882	25,293	29,764	31,525	34,769	38,776
Cash Flow							
Cash Flow From Operations	7,377	2,665	3,455	6,080	4,475	4,130	4,983
Cash Flow From Investments	(3,834)	(1,488)	(10,437)	(999)	(1,901)	(2,472)	(2,960)
Cash Flow From Financing	(2,159)	4,858	(1,574)	(2,094)	(1,943)	(1,435)	(1,887)
Depreciation & Amortization	1,879	1,948	2,101	2,231	2,062	2,158	2,257
Capex	(3,047)	(2,245)	(2,084)	(2,894)	(2,522)	(2,630)	(3,000)
FCF	4,912	159	714	2,798	1,371	2,799	3,357
As % of EBITDA	112%	6%	16%	49%	24%	39%	38%
Key Financial Metrics							
ROE	11.4%	5.0%	11.4%	17.2%	12.5%	15.2%	17.2%
ROA	6.1%	2.5%	5.3%	8.5%	6.5%	8.0%	9.4%
Debt / Equity	9.1%	24.3%	23.0%	10.7%	10.6%	10.8%	11.0%
Net Debt / Equity	-22.6%	-32.9%	5.2%	-14.5%	-15.2%	-13.2%	-10.8%
Debt / Capital	8.3%	19.6%	18.7%	9.6%	9.6%	9.7%	9.9%
Dividend Per Share (RMB)	1.0	0.5	0.2	0.5	0.9	0.7	0.9
Dividend Payout Ratio	21.2%	21.0%	20.9%	20.3%	20.3%	20.3%	20.3%

Source: Company reports, Bernstein analysis and estimates

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