BERNSTEIN
SOCIETE GENERALE GROUP

31 August 2026

Asia Tech Hardware

2Q26 PCB market update - revenue growth accelerates, profitability improves


Alex Wang, CFA
+852 2123 2613
alex.wang@bernsteinsg.com


David Dai, CFA
+852 2918 5704
david.dai@bernsteinsg.com


Euan McLeish
+81 3 5962 9611
euan.mcleish@bernsteinsg.com


Ethan Xu
+852 2123 2634
ethan.xu@bernsteinsg.com


Hao Wang, CFA
+852 2123 2627
hao.wang@bernsteinsg.com


Mufei Gao
+81 3 6777 6995
mufei.gao@bernsteinsg.com


Jack Lin
+852 2123 2683
jack.lin@bernsteinsg.com


Juho Hwang
+81 3 6777 6980
juho.hwang@bernsteinsg.com

Following our primer Inside the War for AI Data Center Connectivity and 1Q26 PCB market update, this 2Q26 PCB/ABF tracker focuses on 1) 2Q26 financial performance of PCB suppliers 2) components shortage situation and 3) capex & capacity plan for 2027-28

Top AI PCB companies revenue grew c.45% YoY and 18% QoQ respectively in 2Q26. Among AI PCB/HDI players, Shengyi, GCE, and WUS—delivered the strongest growth. VGT grew more moderately and saw sequential GM decline ahead of new sites ramp up. The ABF substrate group (e.g. Unimicron, Ibiden) recorded meaningful sequential GM expansion, driven by ASP increases and a richer product mix. New suppliers in AI PCB market including Delton and Zhen Ding are also scaling AI exposure. **ABF substrate revenue growth accelerated to c.50% YoY in 2Q26**. The combined contract liabilities of key suppliers have also risen, reflecting better order visibilities. Initial shipments for NVIDIA Vera Rubin and Google TPU v8 are set to begin in 2H26, driving PCB & substrate demand in 2027.

The PCB industry entered a new investment cycle in 2025 (Exhibit 16)**, while this year marks the start of a new substrate capex cycle** (Exhibit 24)**.** Supported by customer prepayments, capex sharing arrangements, and long-term agreements, substrate makers have become more aggressive in expanding capacity. However, most new ABF substrate capacity will not come online until 2028, leaving supply tight through 2027. T-glass constraints should ease in 1H27 as tier-2 suppliers raise yields, but shortages of high-end CCL—used in both substrates and PCBs—are likely to persist longer.

For Unimicron (OP), the probe into country-of-origin labeling for PCB products is a near-term compliance overhang. On 28th Aug, Taoyuan prosecutors launched an investigation into alleged labeling irregularities. PCB & HDI represents c.35% of revenue, but we believe the products involved represent only a small portion of this business. While the probe may bring near term selling pressure, we do not expect a material impact on fundamentals, particularly given the tight ABF supply over the next two years. We forecast revenue and EPS CAGR of 33% and 117% in 2025-2028. Recent channel checks also suggest upside risk to our estimates.

For Ibiden (OP), we remain positive on the company's AI positioning. Management has turned more constructive on pricing and confirmed that new products are being launched at higher price points. Importantly, **the pricing improvement is broad-based across customers**, rather than concentrated in a specific product category or end market. We now forecast Ibiden's revenue to grow at a 33% CAGR over the next 3 years, reaching ¥980bn, driven by GPUs, CPUs and EMIB-T. We also expect the company's OP to reach ¥344bn in FY29/3E vs. ¥62bn in FY26/3, thanks to both robust demand (GPU, CPU), high utilization and high ASPs.

For Ajinomoto (OP), ABF film revenue and business profit growth both materially accelerated to +54% & 77% in the June-Q. Operational leverage stepped up to 1.4x, still short of the historic 1.5-1.7x range, which suggests that we are yet to see any impact from price increases. (continue on page 2)

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

First Published: 31 Aug 2026 08:57 UTC Completion Date: 31 Aug 2026 08:57 UTC

(continue from page 1) Management report the pace of ABF film demand growth and specification upgrade continuing into the September quarter and have strongly refuted rumors of 30% supply cuts to Chinese customers which have been raising questions over Ajinomoto's ability to flex ABF Film production capacity.

BERNSTEIN TICKER TABLE

Ticker	Rating	Cur	31 Aug 2026 Closing Price	Price Target	TTM Rel. Perf.	Reported EPS Cur	2025A	2026E	2027E	Reported P/E (x) 2025A	2026E	2027E
3037.TT (Unimicron)	O	TWD	999.00	990.00	564.7%	TWD	4.36	20.13	30.18	229.1	49.6	33.1
2802.JP (Ajinomoto)	O	JPY	5,402.00	7,300.00	(2.1)%	JPY	138.36	154.01	197.38	39.0	35.1	27.4
4062.JP (Ibiden)	O	JPY	20,455	29,000	428.7%	JPY	214.91	329.25	511.84	95.2	62.1	40.0
ASIAX			1,972.56									
JPL			2,690.35									

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

2802.JP estimate is Adjusted EPS; 2802.JP valuation is Adjusted P/E (x); 2802.JP base year is 2026;

Source: Bloomberg, Bernstein estimates and analysis.

INVESTMENT IMPLICATIONS

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

We rate Ibiden **Outperform**, with PT = **¥**29,000 (model).

We rate Ajinomoto **Outperform** with PT at **JPY7,300** (model).

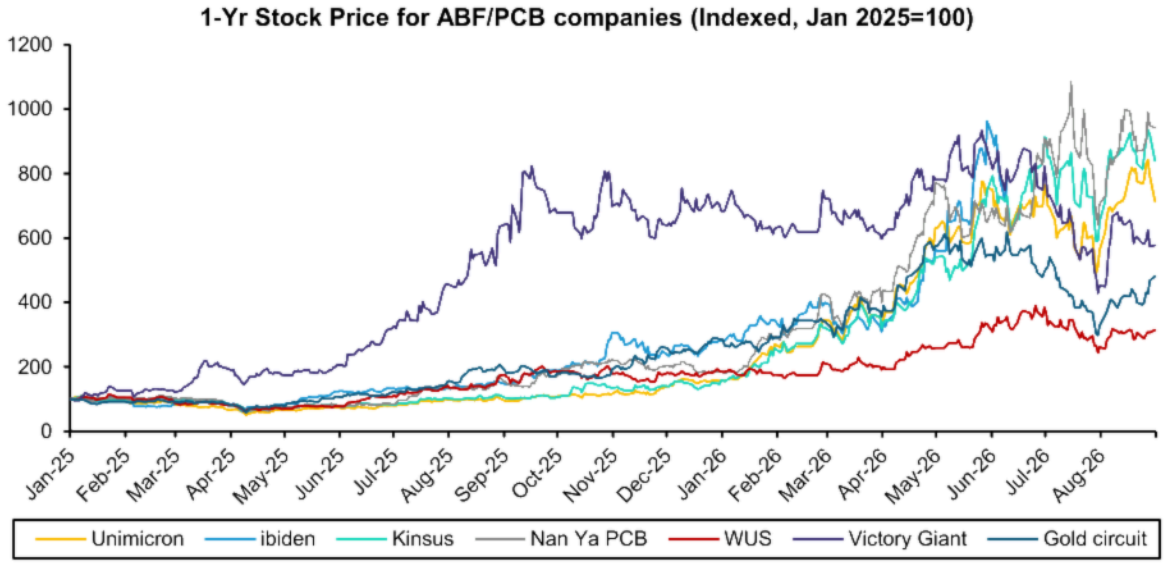
DETAILS

EXHIBIT 1: **Summary of PCB companies**

Ticker	Company	Mkt Cap (US$M)	Forward P/E	Revenue (US$M)		Gross Margin %		EPS
				2026E	25-28E CAGR	2026E	2027E	25-28E CAGR
Material Supplier								
600183 CH Equity	Shengyi Tech	52,575	41.9x	6,437	47%	30.4%	31.8%	68%
2802 JT Equity	Ajinomoto	33,147	34.6x	10,886	5%	37.8%	38.1%	13%
2383 TT Equity	EMC	62,215	29.0x	6,157	73%	34.1%	37.8%	104%
000150 KS Equity	Doosan	14,326	27.7x	15,333	13%	19.2%	20.3%	140%
5706 JP Equity	Mitsui Mining	10,394	17.6x	5,352	5%	22.4%	23.9%	6%
6274 TT Equity	TUC	14,112	22.4x	1,907	77%	30.6%	33.9%	125%
3110 JP Equity	Nittobo	3,573	25.0x	884	14%	41.7%	43.1%	-7%
Key ABF Substrate Suppliers								
3037 TT Equity	Unimicron	55,778	29.8x	5,850	42%	25.9%	36.1%	148%
4062 JT Equity	Ibiden	35,712	60.3x	3,360	24%	38.1%	41.3%	38%
009150 KS Equity	SEMCO	76,039	41.8x	10,381	30%	24.9%	31.8%	90%
8046 TT Equity	Nan Ya PCB	25,341	35.1x	1,878	52%	25.3%	37.9%	192%
3189 TT Equity	Kinsus	14,981	39.5x	1,679	43%	26.7%	32.8%	143%
AUS GR Equity	AT&S	6,779	17.3x	3,150	30%	26.4%	27.5%	n/a
Other PCB Suppliers								
300476 CH Equity	Victory Giant	38,381	17.6x	4,757	65%	37.4%	40.0%	70%
002463 CH Equity	WUS	34,803	28.6x	4,101	53%	38.4%	39.7%	67%
4958 TT Equity	Zhen Ding	16,979	22.7x	7,140	29%	24.4%	27.8%	75%
001389 CH Equity	Delton	10,629	22.3x	1,448	69%	37.9%	38.1%	79%
2368 TT Equity	Gold Circuit	18,689	20.5x	3,215	50%	36.0%	37.8%	70%
688183 CH Equity	Shengyi Electronics	16,331	29.3x	2,147	45%	34.3%	35.0%	60%
TTMI US Equity	TTM	12,500	19.1x	4,393	28%	23.0%	24%	47%

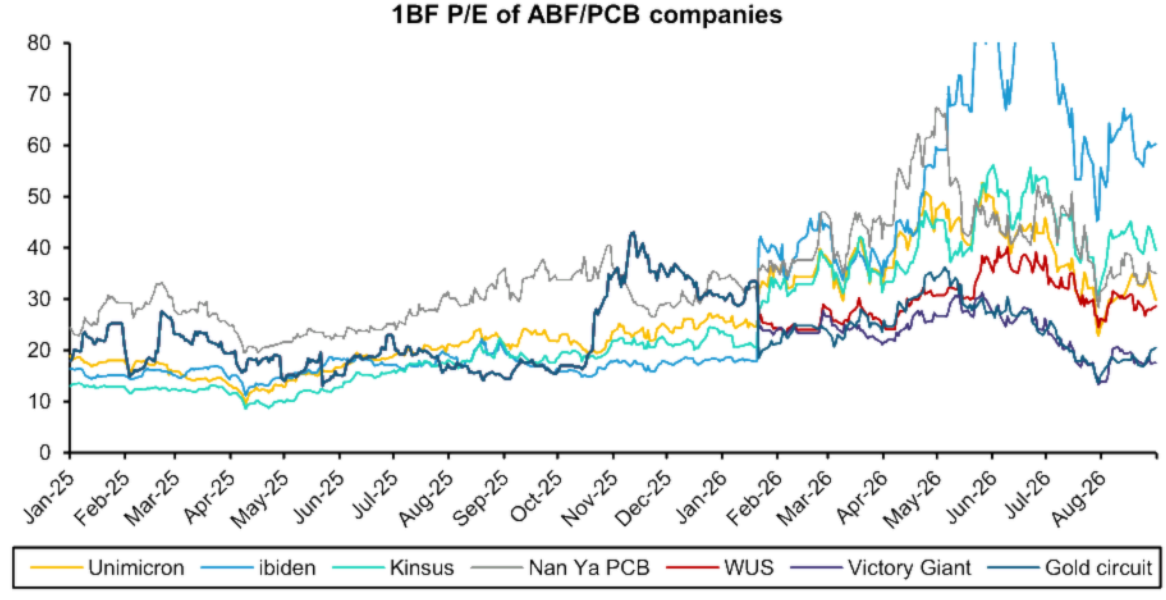
Notes: 1) Unimicron, Ibiden and Ajinomoto are covered by Bernstein, the rest are not covered; 2) Ibiden, AT&S, Ajinomoto, Mitsui Mining, Nittobo's CAGR is based on FY26 ending Mar-2026; 3) Nittobo's FY26 EPS boosted by a non-recurring real-estate asset sale; 4) AT&S's 2025 EPS was negative, pressured by increasign interest expense and FX losses
Source: Bloomberg, Bernstein analysis

EXHIBIT 2: **Following the recent pullback, ABF substrate names have recovered to new highs, whereas PCB suppliers are still trading meaningfully below their previous peaks**



Source: Bloomberg and Bernstein analysis

EXHIBIT 3: **ABF companies enjoys higher valuation than other PCB companies driven by more severe supply shortage**



Source: Bloomberg and Bernstein analysis

PCB MARKET UPDATE

Top AI PCB companies revenue grew c.45% YoY and 18% QoQ respectively in 2Q26 and the growth momentum is likely to continue in 2H26. Among non-substrate AI PCB players, **Shengyi, GCE, and WUS** delivered the strongest growth. VGT grew more moderately, at 38% YoY and 13% QoQ in US dollar terms, while gross margin declined due to upfront labor and depreciation costs ahead of new-site ramp-up.

Beyond revenue growth, the ABF substrate group—**Unimicron, Ibiden, Kinsus,** and **Nan Ya PCB**—recorded meaningful sequential gross-margin expansion, driven by ASP increases and a richer product mix *(see more discussions in ABF substrate market in next section).*

Delton, which is exposed to CPU-board PCBs, doubled revenue YoY in 2Q and lifted gross margin to 41%, the highest in our sampled universe. Growth was supported by robust demand for general-server boards and ASIC MLPCBs, as well as strong profitability at its Thailand facility. Meanwhile, FPC leader **Zhen Ding** continued to increase its non-consumer exposure. Revenue from IC substrates and server/optical-transceiver PCBs rose 40% QoQ, reaching 23% of 2Q26 revenue, versus 20% in 1Q26. *(All stocks mentioned above are not under coverage except for Unimicron and Ibiden.)*

For more discussion on PCB technology & suppliers, please find details in Artificial Intelligence: Inside the War for AI Data Center Connectivity

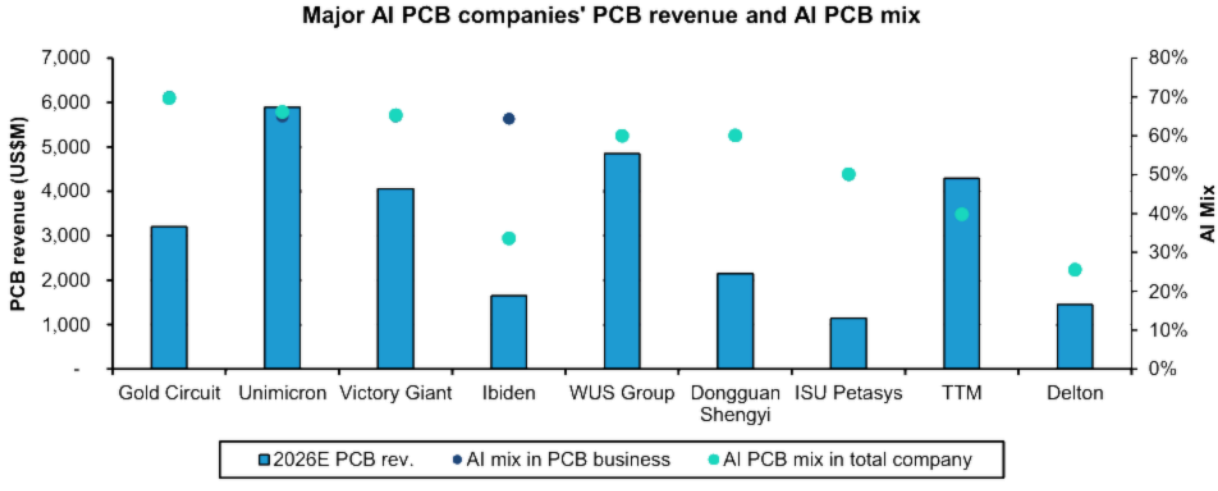
EXHIBIT 4: **Summary of major PCB/HDI/substrate suppliers with AI exposure**

	PCB			
	RPCB	HDI	IC Substrate	FPC+SMA
As % of total PCB market (2026E)	48%	20%	19%	13%
Delton	★			
Dongshan Precision	★	○		○
Gold Circuit	★			○
Ibiden	○		★	○
ISU	★			
Kinsus			★	
Nan Ya PCB	○		★	
SEMCO			★	
Shengyi Electronics	★			
TTM	★			
Unimicron	○	★	★	○
Victory Giant	○	★		
WUS Group	★			
Zhen Ding	○		○	★

○ Industry exposure; ★ Major business

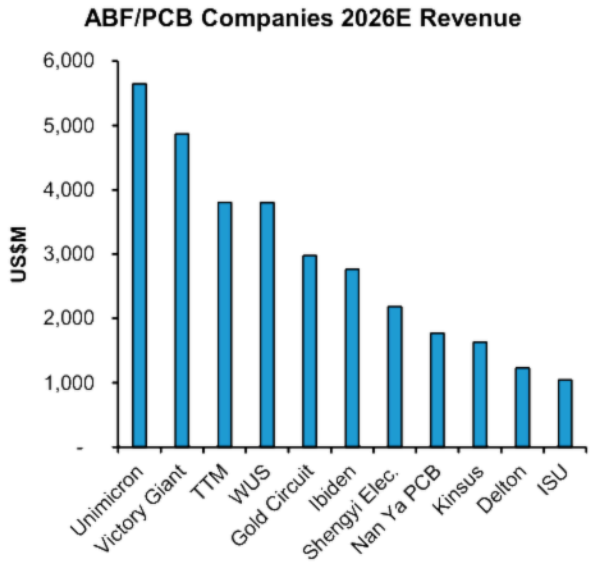
Source: Company reports, Prismark estimates of PCB market %, Bernstein analysis

EXHIBIT 5: **PCB revenue of major companies and AI PCB mix (2026E)**



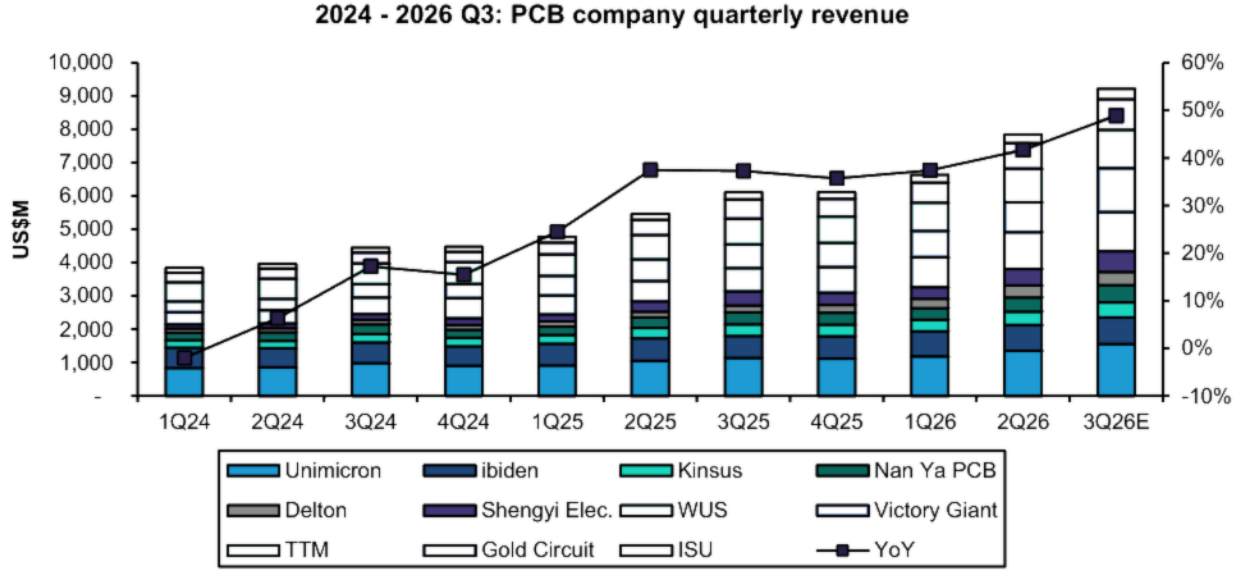
Source: Prismark, Bernstein analysis and estimates

EXHIBIT 6: **Bloomberg consensus revenue ranking for PCB companies (2026E)**



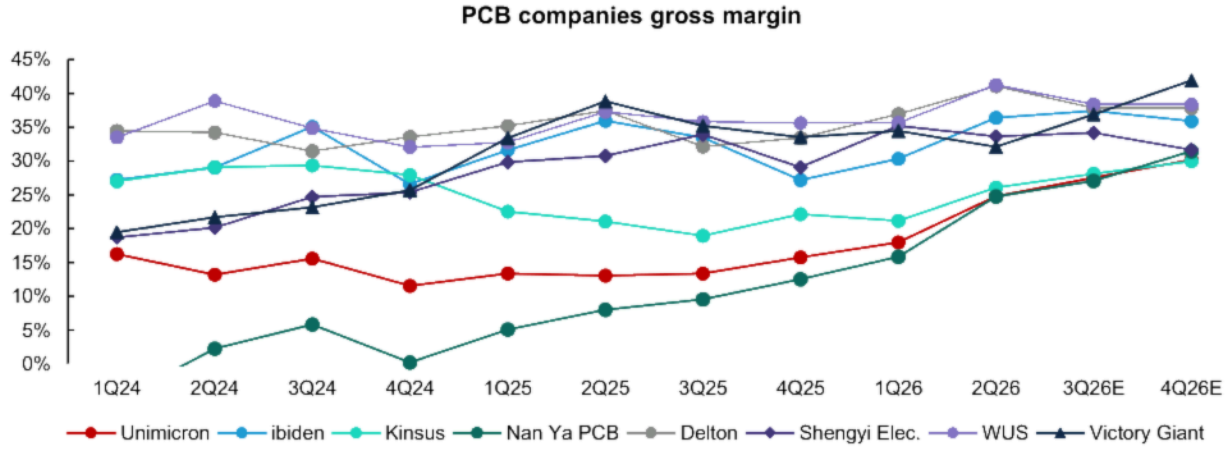
Source: Bloomberg, Bernstein analysis

EXHIBIT 7: **Quarterly revenue of PCB companies were trending up since 2H 2024**



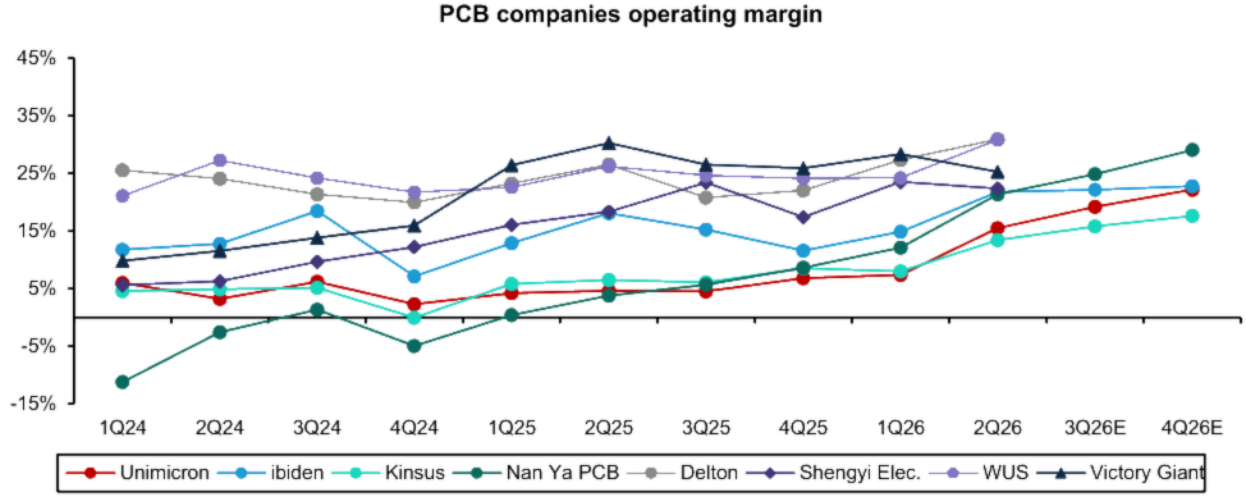
Source: Bloomberg and Bernstein analysis

EXHIBIT 8: **Consensus forecasts all PCB companies' GM to see sequential growth in 2026**



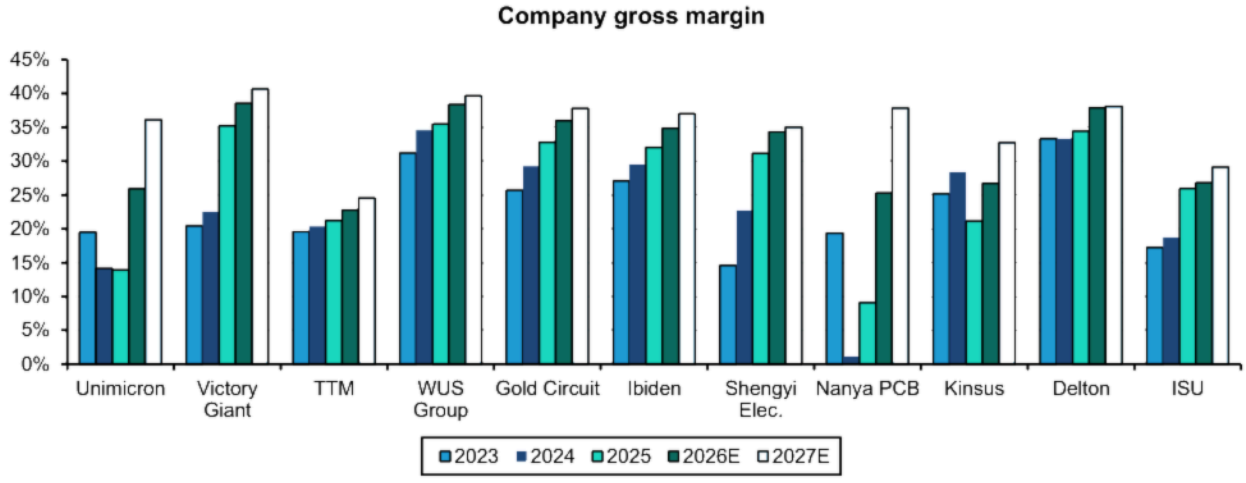
All forecasts are from Bloomberg consensus; Delton data starts from 2024
Source: Bloomberg, Bernstein analysis

EXHIBIT 9: **...same for OPM**



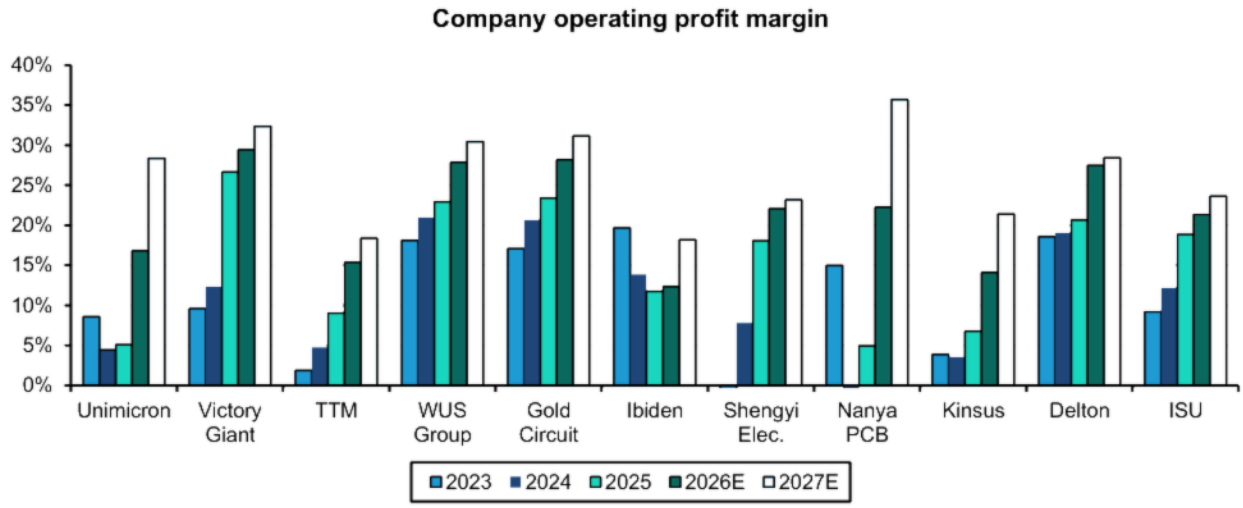
All forecasts are from Bloomberg consensus; Delton data starts from 2024
Source: Bloomberg, Bernstein analysis

EXHIBIT 10: **Most AI PCB companies saw meaningful gross margin expansion last year, and consensus expects most of them to see sequential growth in 2026-27E...**



All forecasts are from Bloomberg consensus, adjusted to calendar year
Source: Bloomberg, Bernstein analysis

EXHIBIT 11: **...similarly for operating margin**



All forecasts are from Bloomberg consensus, adjusted to calendar year
Source: Bloomberg, Bernstein analysis

Looking ahead, ongoing specification upgrades should further accelerate earnings growth for AI PCB and ABF substrate suppliers. Initial shipments for NVIDIA Vera Rubin and Google TPU v8 are set to begin in 2H26, both requiring significantly higher PCB and substrate performance. Key upgrades include an increase in MLPCB layer counts from ~20L to 30-44L, broader adoption of 6+N+6 HDI designs, and greater penetration of M8-grade-and-above CCLs and HVLP-4 copper foil. Meanwhile, NVIDIA and its supply chain continue to advance the development of PCB backplanes for the Kyber rack.

Outside of AI rack, **mSAP** HDI is also gaining tractions, driven by growing shipment of 1.6T optical transceivers. PCB technology in these modules is transitioning from the conventional subtractive process widely used in 800G optical transceivers to mSAP, which enables finer line/space dimensions and higher routing density. Several PCB manufacturers, including Zhen Ding, VGT, and Compeq, have announced mSAP capacity expansion plans over the next 12 months. Despite being the leading mSAP supplier, Unimicron's expansion efforts remain primarily focused on ABF substrates rather than HDI capacity.

EXHIBIT 12: **Nvdia's VR200 require substantially higher PCB performance vs. GB300**

		GB300	VR200
Compute tray	PCB	5+N+5 HDI (22L)	5+N+5 HDI (26L)
	CCL	M8 (mixed)	M8
	Copper foil	HVLP 3	HVLP 4
Switch tray	PCB	22L MLPCB & HDI	32L MLPCB & HDI
	CCL	M8	M8.5
	Copper foil	HVLP 3	HVLP 4
Mid-plane	PCB		44L MLPCB
	CCL		M8.5
	Copper foil		HVLP 4

Source: Bernstein analysis

EXHIBIT 13: **PCB spec for TPU rack**

		TPU v7	TPU v8
UBB	PCB	28L MLPCB	36-40L MLPCB
	CCL	M7	M8
	Copper foil	HVLP 2	HVLP 3
CPU board	PCB	16-18L MLPCB	22L MLPCB
	CCL	M6	M6

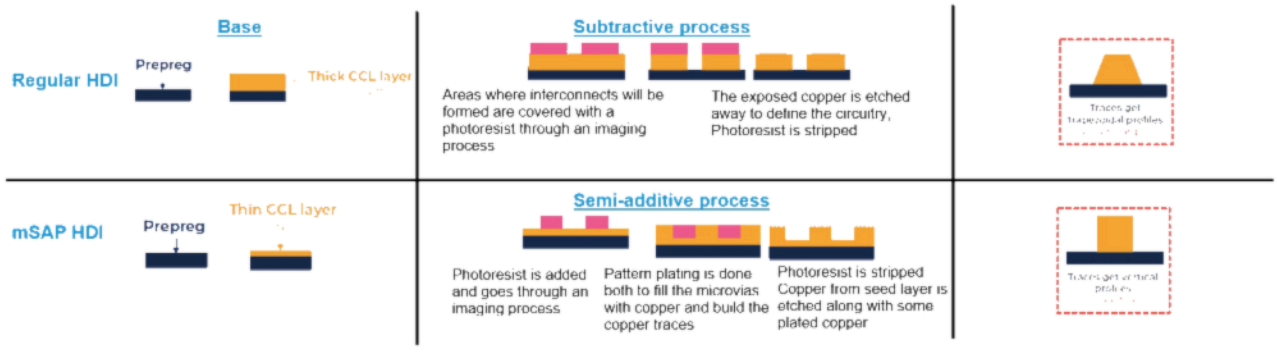
Source: Bernstein analysis

EXHIBIT 14: **mSAP HDI adoption has been expanded from smartphon to optical transceivers, particularly in 1.6T products**

Optical transceivers	400G	800G	1.6T
HDI type	Regular HDI	Regular/ mSAP HDI	mSAP HDI
Line Width / Spacing	>50/50 μm	30/30-50/50μm	25/25-30/30μm

Source: Bernstein analysis

EXHIBIT 15: **mSAP manufacturing process**



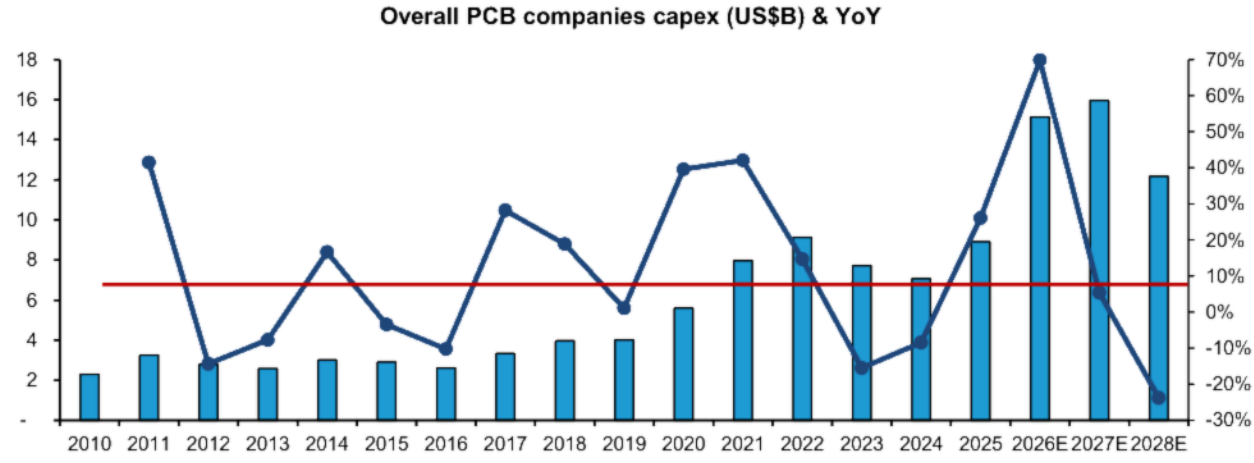
Source: Yole and Bernstein analysis

Supply tightness is likely to continue in the next few quarters. For overall PCB (incl. substrate), 2025 marked the 1st year of new capex cycle, with total spending increasing by 70% this year. Based on company guidance and Bloomberg consensus, the top spenders are Zhen Ding, VGT, and Unimicron. As a significant portion of this investment is allocated to new facility construction, many companies have indicated that capex will remain elevated next year as equipment purchases accelerate. We expect supply of MLPCB and HDI products to remain tight until new capacity is fully ramped up in 2H27.

Supply shortage of upstream materials has lead to several rounds of ASP hikes this year (Exhibit 17). Due to higher technological barriers, longer yield-ramp cycles, and constrained equipment availability, shortages of T-glass, HVLP-4 copper foil, and high-end CCLs, are likely to persist over the next few quarters. **T-glass, the key bottleneck for the ABF substrate industry this year,** should see some relief as Nittobo's new capacity begins ramping in 1H27. Tier-2 suppliers including Taiwan Glass, Sinoma and Grace Fabric are also ramping up capacity and yield, aiming to securing qualification from major AI accelerator customers. While ABF substrate makers like Unimicron expect raw material constraints to continue in the near term, they anticipate a more balanced supply environment next year. In addition, concerns are emerging over potential shortages of **ABF film**, following market reports that Ajinomoto may be reducing ABF film supply to Chinese customers, but the company strongly denied such claims.

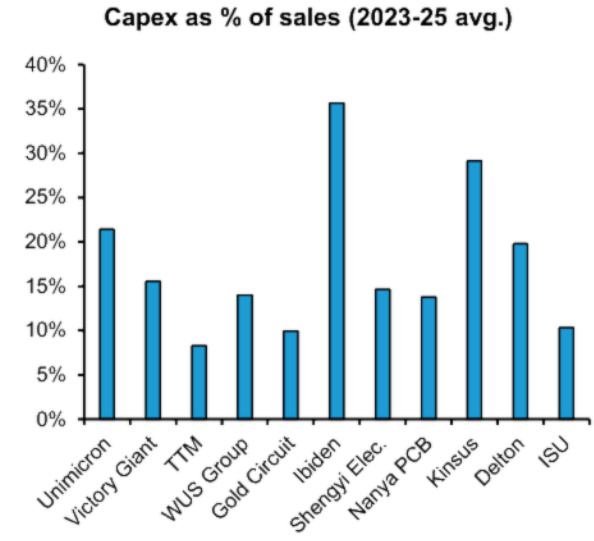
Amid persistent supply shortages, key upstream materials, particularly CCLs used in HDI and MLPCB production, are entering a new capacity expansion cycle. CCL industry leader EMC is set to begin ramping its Guanyin facility in Taiwan in 4Q26. Together with new plants in China and Malaysia, the company has guided for a 50% increase in capacity by 2027. Meanwhile, despite a few months' delay due to long equipment lead time, TUC's Thailand site will come online in 3Q26, with the company targeting a 45% expansion in total capacity next year.

EXHIBIT 16: **Consensus expects industry-wide PCB capex to grow by 70% in 2026E**



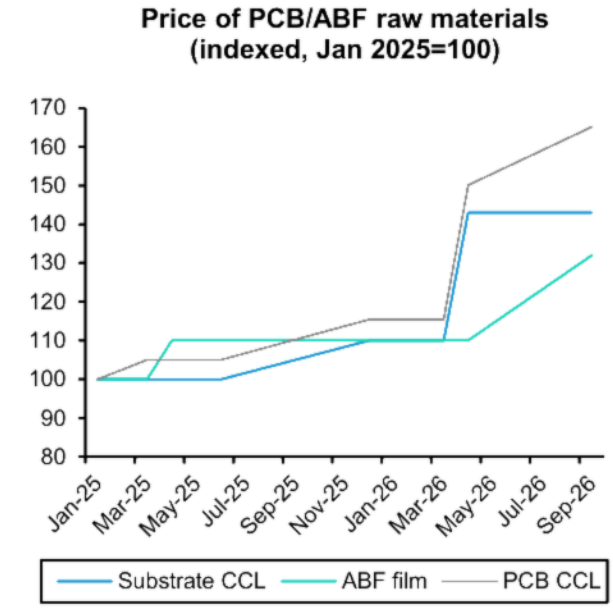
Source: Bloomberg and Bernstein analysis

FIGURE 1: **PCB companies' capex intensity diversified historically**



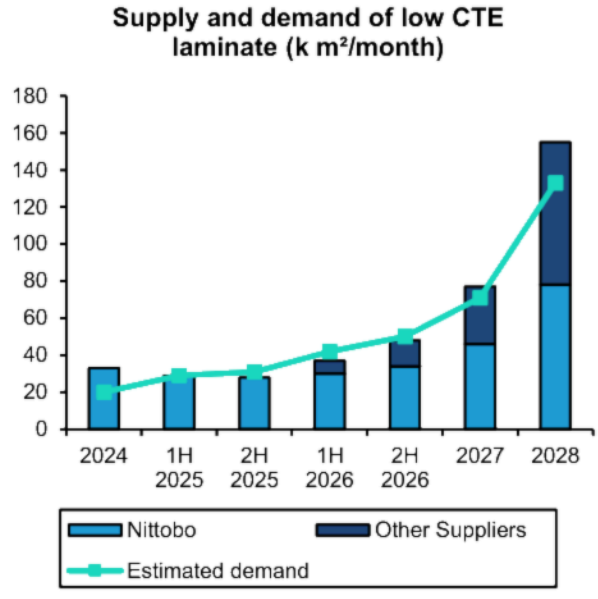
All forecasts are from Bloomberg consensus, adjusted to calendar year
Source: Bloomberg, Bernstein analysis

EXHIBIT 17: **Upstream material prices continue to rise as supply shortages persist**



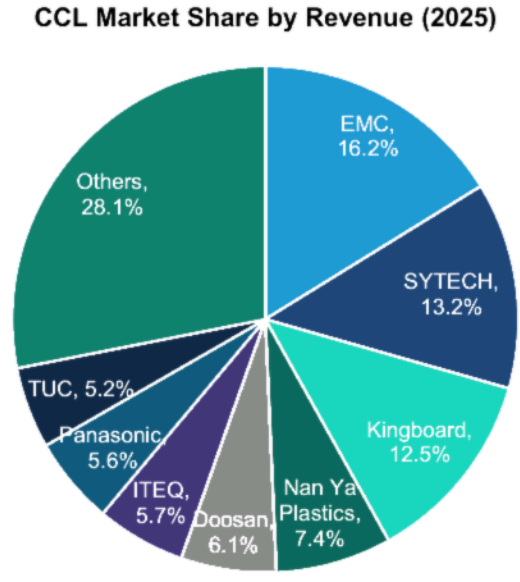
Source: Digitimes, Bernstein analysis

EXHIBIT 18: **Prismark expects low-CTE laminate supply to catch up with demand next year**



Source: Prismark estimates and Bernstein analysis

EXHIBIT 19: **EMC. Sytech and Kingboard led the CCL market in 2025**



Source: Prismark and Bernstein analysis

EXHIBIT 20: **CCL suppliers in Taiwan and China mainland are leading the industry's current capacity expansion cycle**

Company	Capacity (mn sheets / month)				Notes
	2024	2025	2026E	2027E	
EMC	4.4	5.9	6.2	9.3	2026: Expand in Guanyin (Taiwan). 2027: Expand four sites in China, one in Taiwan, and one in Malaysia.
TUC	2.0	2.3	2.6	3.8	2026: Add capacity in China and Thailand. 2027: Further expand in both China and Thailand.
Shengyi Technology	13.0	14.5	15.5	16.1	Jiangsu II: Annual capacity of 18M sqm CCL and 34M meters prepreg; reaching full operations by 1H26. Thailand: Mass production to start in Sep 2026 with initial capacity of 400k sheets/month. Dongguan II: Ramp-up begins in 2H27, reaching full scale in 2028; adding 48M sqm CCL and 100M meters prepreg annually.
Doosan	1.3	1.3	1.5	2.0	Plan to expand capacity by 50% by early 2027.

Source: company guidance, Bernstein estimates and analysis

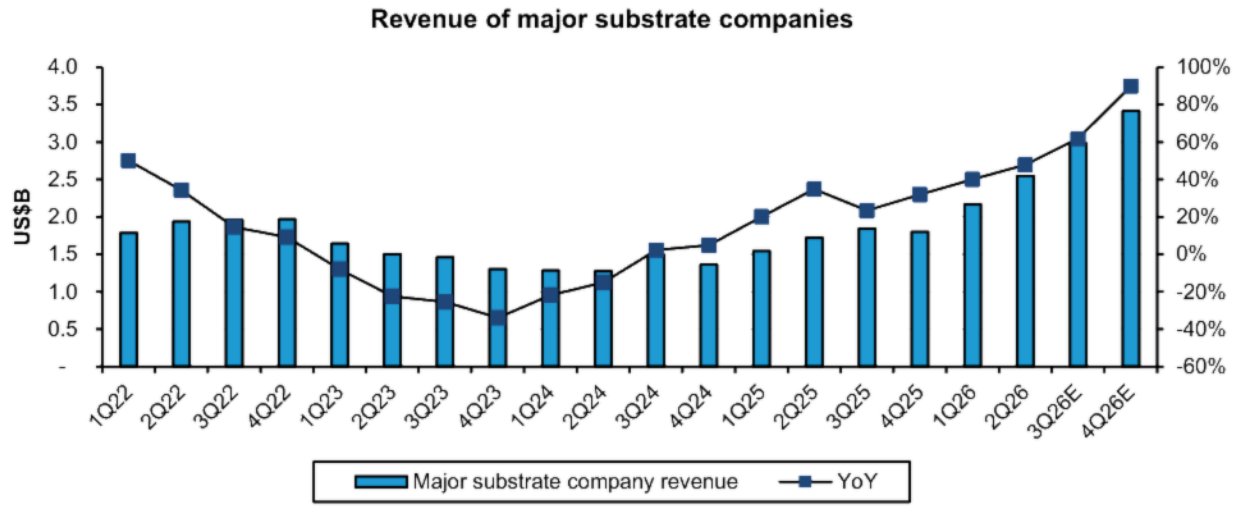
ABF SUBSTRATE

ABF substrate revenue growth accelerated in 2Q26 and is likely to gain momentum in the coming quarters. Top 8 companies' ABF substrate revenue in 1Q26 has exceeded the 4Q22 peak. Growth rate accelerated to nearly 50% YoY in 2Q26, driven by ASP hike and shipment. Demand is strong across CPU, GPU, ASICs and networking chips, and is likely to further accelerate in 2H26. The combined contract liabilities of key suppliers have also risen in 2Q, reflecting better order visibilities (Exhibit 21-Exhibit 23,).

With customer support through mechanisms such as prepayments, capex sharing, and LTAs, substrate companies have become more aggressive in capex this year (Exhibit 24-Exhibit 26)**. Unimicron** has increased its 2026 capex budget to NT$53.7bn from initial plan of NT$19.4B. The company targets 40% YoY ABF capacity growth by end-2026, with additional expansion expected from the ramp-up of its new Kaohsiung (KF) and Yangmei facilities in 2H27 and 2028, respectively. **Ibiden** has guided FY27/3E capex of ¥210bn, representing more than 40% of its ¥500bn three-year substrate investment plan. Meanwhile, **Kinsus** plans to invest c.NT$23.5bn during 2026–28, including NT$7–8bn in 2026. Its Yangmei K6 Phase 1 should raise AI-related revenue mix to 10–15% in 2026 from 5–10% last year; Phase 2, planned for 2027, would add c.25% capacity to 50m

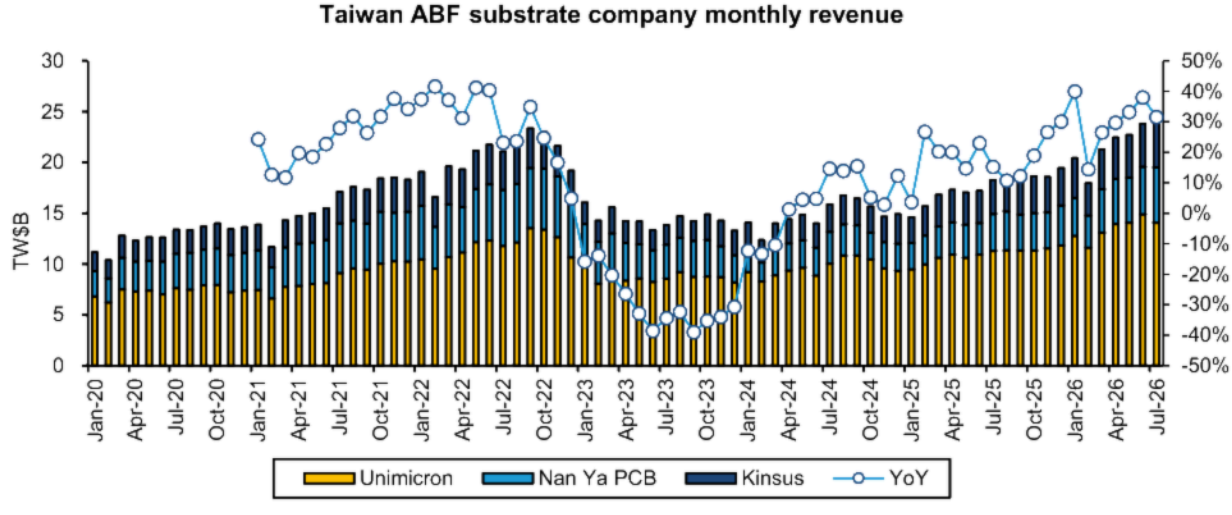
units per month. **Nan Ya PCB** announced an additional NT$19.6bn investment plan in July, lifting expectations for FY26 capex to c.NT$40bn. **SEMCO** expects its ABF capacity to reach full utilization in 2H26 and has reportedly registered a ~KRW1.8tn (~US $1.4bn) second-phase investment targeting ABF substrates for robotics, autonomous driving, and AI in Vietnam plant. Last but not least, **AT&S** recently guided to €1.0–1.2bn of FY26/27 capex, announced a €1.5–2.0bn Malaysia investment plan in June, and continues to expand its Chongqing facility. **Overall, consensus FY26 capex estimates for major ABF substrate suppliers have risen by 66% since the beginning of the year.**

EXHIBIT 21: **Revenue growth among major ABF substrate suppliers accelerated to c.60% YoY in 2026E**



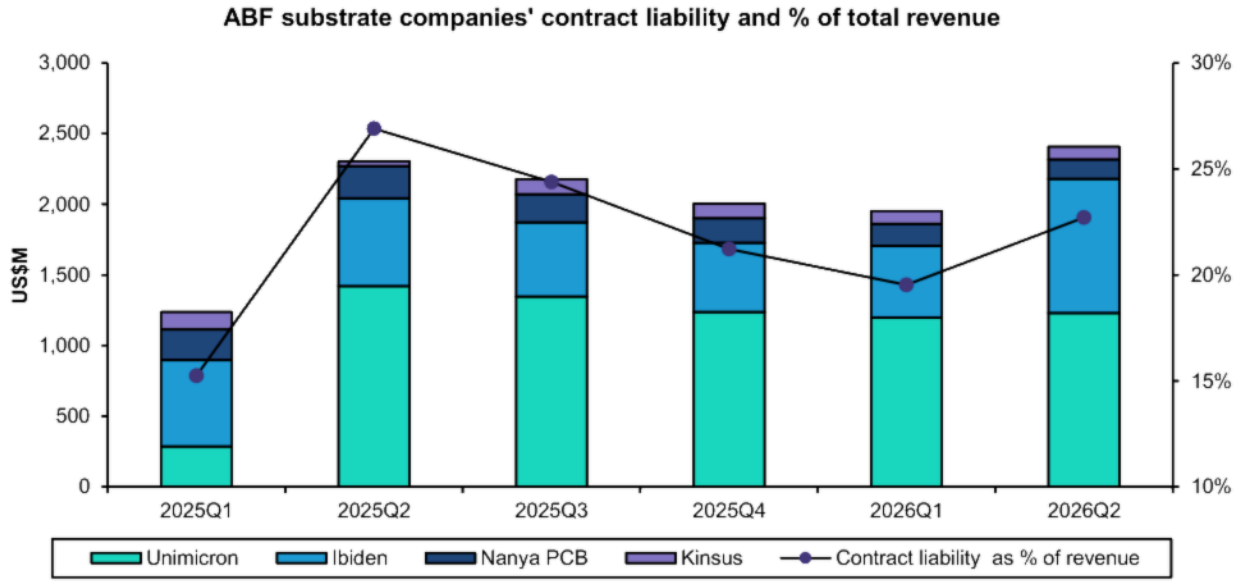
Companies included: Ibiden (OP), Unimicron (OP), Zhen Ding, Nanya PCB, Kinsus, SEMCO, Shinko, and AT&S (all not covered); All 3Q26 and 4Q26 numbers are Bernstein estimates
Source: Bloomberg, Bernstein analysis and estimates

EXHIBIT 22: **Taiwan ABF substrate companies' monthly sales are trending higher in recent months**



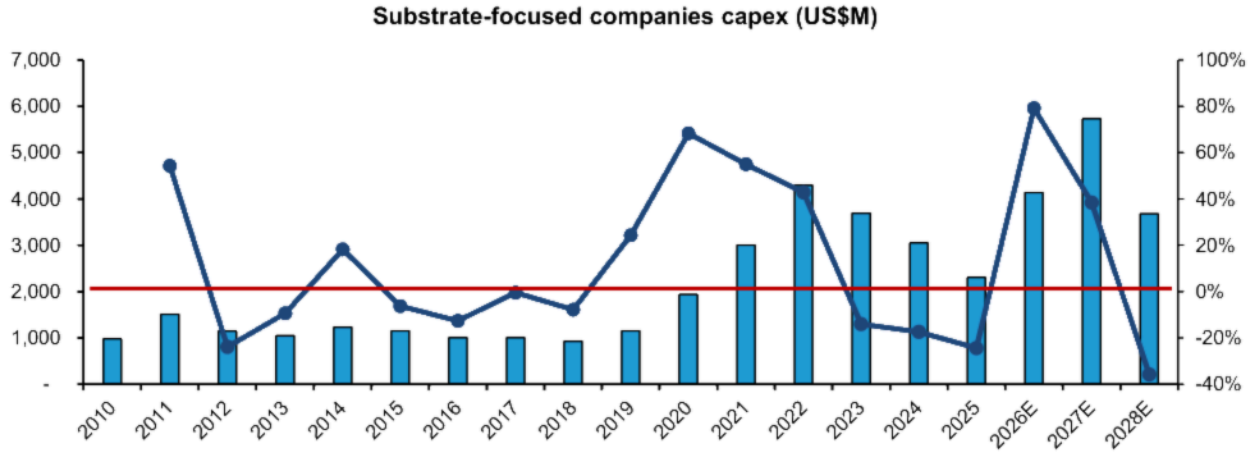
Source: Company disclosure, Bloomberg, Bernstein analysis

EXHIBIT 23: **Contract liabilities at major ABF substrate suppliers have started to rise since 2Q26, reflecting strong customer commitments and improving demand visibility**



Source: Bloomberg and Bernstein analysis

EXHIBIT 24: **Consensus expects substrate industry capex to rise by c.80% in 2026E**



Source: Bloomberg and Bernstein analysis

EXHIBIT 25: **Major ABF substrate suppliers have significantly increased capex investments in 2026**

Company name	2025 capex (US$M)	2026 capex (initial cons., US$M)	2026 capex (latest cons., US$M)	Notes
Unimicron	826	704	965	Raised 2026 capex by TW$86B in Mar 2026 and TW$197B in Jul 2026
Ibiden	877	652	1132	Announced a 500 billion yen capex plan for FY26-28 in Feb 2026
Nan Ya PCB	78	108	127	Announced additional TW$46.8B capex plan in Aug 2026
Kinsus	199	178	243	Announced additional TW$19.6B capex plan in Jul 2026
AT&S	229	329	825	Guided EUR1-1.2B capex for FY26/27 in Aug 26; Announced EUR1.5-26 investment in Malaysia sites in Jun 26
Total	**2,209**	**1,971**	**3,292**	

Source: Company disclosures and Bloomberg

EXHIBIT 26: **Substrate Capacity Expansion Plan**

Company	Site	Product	Capacity	Production Start (Calendar Year)
Unimicron	Yangmei site, TW	ABF (Server)	Site 1 for both YM/GF is 35% of total capacity; Site 2 of both projects will add another 30% of capacity from mid-2027 to end-2028	2021 (site 1 starts in 2024 and fully ramp up in end-2026; 2nd/3rd sites start in 2028 focusing on EMIB-T)
	Guangfu site, TW	ABF (Server)		End-2024 (site 1 fully ramp by end-2026, 2nd site starts in mid-2027)
Ibiden	Ogaki	ABF	Will almost double ibiden's capacity with these investments	Expansion in 2023
	Ono Plant, JP	ABF (Server)		2H25
	Gama Plant, JP	ABF (Server)		2027
Nanya	Shulin, TW (1st Phase)	ABF	Total ABF production capacity: 50M Units/M by End-2023	3Q22
	Shulin, TW (2nd Phase)	ABF (HPC)		3Q23
	Kunshan, CN (2nd Phase)	ABF		3Q22
	Jinxing, TW	ABF		Upgrade in 2Q23-1Q24
Shinko	Chikuma Plant (New)	Flip Chip	Increase capacity by c.50% by 1H25, compared to 2H21	By 1Q24
	Kohoku Plant	Flip Chip		By 1Q24
	Wakaho Plant	Flip Chip		4Q24-1Q25
SEMCO	Vietnam Plant	Flip Chip		Expansion in 2022; potentially to expand 2nd phase in 2026-27
Kinsus	Yangmei K6 site, TW	ABF	To increase capacity by c.25% with 2nd phase in 2027; 3rd-4th phase start ramp up in 2028-29	1st phase fully ramped, 2nd phase mass production starts in 2027
Leading (ZDT)	Shenzhen, CN	ABF	2026 production value is guided to be NT$10B+	Site 1 reached 30% of designed capacity in 2025, and will fully ramped up by 2027; site 2 starts ramping this year
AT&S	Chongqing, CN	ABF		Summer 2027
	Kedah, Malaysia	ABF		Site 1 will ramp in summer/fall 2027; Site 2 will start to ramp in 2028

Source: Company reports, Bernstein analysis

I. REQUIRED DISCLOSURES

References to "Bernstein" or the "Firm" in these disclosures relate to the following entities: Bernstein Institutional Services LLC (April 1, 2024 onwards), Sanford C. Bernstein & Co., LLC (pre April 1, 2024), Bernstein Autonomous LLP, BSG France S.A. (April 1, 2024 onwards), Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司, Sanford C. Bernstein (Canada) Limited, Sanford C. Bernstein (India) Private Limited (SEBI registration no. INH000006378), Sanford C. Bernstein (Singapore) Private Limited, Sanford C. Bernstein Japan KK (サンフォード・C・バーンスタイン株式会社) and analysts employed by Société Générale Africa Technologies & Services to produce Bernstein research under a Global Services Agreement in place between Bernstein and Société Générale.

Bernstein is part of a joint venture between Société Générale (SG) and AllianceBernstein, L.P. (AB). Unless specifically noted otherwise, for purposes of these disclosures, references to Bernstein's "affiliates" relate to both SG and AB and their respective affiliates.

VALUATION METHODOLOGY

Unimicron Technology Corp

We set a NT$990 target price using a P/E multiple of 27X against our 2027-28 avg. EPS of NT$36.9.

Ajinomoto Co Inc

We set a JPY7,300 price target for Ajinomoto using an NTM P/E multiple of 35.0x against our forward NTM+1 EPS estimate of JPY207. This compares to an implied 34.8x FY3/28E P/E based on our DCF (8.5% WACC, 3.5% TVGR) and 35.2x P/E based on our SOTP analysis.

Ibiden Co Ltd

We set a ¥29,000 target price using a P/E multiple of 35x against our FY29/3 EPS estimate of ¥829.

RISKS

Unimicron Technology Corp

Downside risks to our price target for Unimicron include:

- Aggressive ABF capacity expansion among competitors that slow down the ABF market recovery
- Slower-than-expected recovery of HDI yield and gross margin
- Macroeconomic pressure and tariff issue could delay the recovery of smartphones and PCs, impacting the utilization of multiple products at Unimicron

Ajinomoto Co Inc

Potential downside risks to our Price Target for Ajinomoto:

- Natural disaster results in supply chain disruption at single Functional Materials production site
- Entry of a new Build Up Film competitor / near term significant capacity expansion by existing competitor Sekisui
- IC packaging substrate technology advances reduce requirement for thermal barriers like ABF
- Competition from Chinese MSG producers spreads from B2B to branded products
- Value destructive M&A in Healthcare

Ibiden Co Ltd

There are a number of downside risks to our Ibiden target price. (1) Potential continuation of overall pricing pressure with industry level oversupply, (2) Potential expedited share loss in Nvidia's products, (3) More than expected capex burden and hence higher depreciation drag.

RATINGS DEFINITIONS, BENCHMARKS AND DISTRIBUTION

EQUITY RATINGS DEFINITIONS

Bernstein brand

The Bernstein brand rates stocks based on forecasts of relative performance for the next 12 months versus the S&P 500 for stocks listed on the U.S. and Canadian exchanges, versus the Bloomberg Europe Developed Markets Large and Mid Cap Price Return Index EUR (EDME) for stocks listed on the European exchanges and emerging markets exchanges outside of the Asia Pacific region, versus the Bloomberg Japan Large and Mid Cap Price Return Index USD (JPL) for stocks listed on the Japanese exchanges, and versus the Bloomberg Asia ex-Japan Large and Mid Cap Price Return Index (ASIAX) for stocks listed on the Asian (ex-Japan) exchanges -unless otherwise specified.

The Bernstein brand has three categories of ratings:

- Outperform: Stock will outpace the market index by more than 15 pp
- Market-Perform: Stock will perform in line with the market index to within +/-15 pp
- Underperform: Stock will trail the performance of the market index by more than 15 pp

Coverage Suspended: Coverage of a company under the Bernstein research brand has been suspended. Ratings and price targets are suspended temporarily, are no longer current, and should therefore not be relied upon.

Not Rated: A rating assigned when the stock cannot be accurately valued, or the performance of the company accurately predicted, at the present time. The covering analyst may continue to publish research reports on the company to update investors on events and developments.

Not Covered (NC) denotes companies that are not under coverage.

Bernstein brand stock ratings are based on a 12-month time horizon.

Autonomous brand – common stocks

The Autonomous brand rates common stocks as indicated below. As our benchmarks we use the Bloomberg Europe 600 Financials Price Return Index (E600BK) and Bloomberg Europe Dev Mkt Financials Large and Mid Cap Price Ret Index EUR (EDMFI) index for developed European banks and Payments, the Bloomberg Europe 600 Insurance Price Return Index (E600IN) for European insurers, the S&P 500 and S&P Financials for US banks and Payments coverage, S5LIFE for US Insurance, the S&P Insurance Select Industry (SPSIINS) for US Non-Life Insurers coverage, the Bloomberg Emerging Markets Financials Large, Mid and Small Cap Price Return Index (EMLSF) for emerging market banks and insurers and Payments, and the Bloomberg Japan Financials Large & Mid Cap Price Return Index (JPFILM) for Japanese Financials. Ratings are stated relative to the sector (not the market).

The Autonomous brand has three categories of common stock ratings:

- Outperform (OP): Stock will outpace the relevant index by more than 10 pp
- Neutral (N): Stock will perform in line with the market index to within +/-10 pp
- Underperform (UP): Stock will trail the performance of the relevant index by more than 10 pp

Coverage Suspended: Coverage of a company under the Autonomous research brand has been suspended. Ratings and price targets are suspended temporarily, are no longer current, and should therefore not be relied upon.

Not Rated: A rating assigned when the stock cannot be accurately valued, or the performance of the company accurately predicted, at the present time. The covering analyst may continue to publish research reports on the company to update investors

on events and developments.

Those denoted as 'Feature' (e.g., Feature Outperform FOP, Feature Under Outperform FUP) are our core ideas.

Not Covered (NC) denotes companies that are not under coverage.

Autonomous brand common stock ratings are based on a 12-month time horizon.

Autonomous brand – preferred stocks

The Autonomous brand has three categories of preferred stock ratings:

- Outperform (OP): The total return of the preferred instrument is expected to outperform preferred securities of other issuers operating in similar sectors or rating categories over the next six months.
- Neutral (N): The total return of the preferred instrument is expected to perform in line with preferred securities of other issuers operating in similar sectors or rating categories over the next six months.
- Underperform (UP): The total return of the preferred instrument is expected to underperform preferred securities of other issuers operating in similar sectors or rating categories over the next six months.

Autonomous preferred stock ratings are based on a 6-month time horizon.

AUTONOMOUS CREDIT RESEARCH

Where this report contains investment recommendations for credit instruments, as defined in article 3(1)(35) of the Market Abuse Regulation, the information below is presented to comply with its disclosure requirements.

The report may also include reference(s) to published opinions by other Autonomous or Bernstein analysts covering the equity securities of the issuer(s) referenced herein. Please note an investment recommendation for credit instruments published by the author(s) of this report may differ from the published view of the analyst covering equity securities for the issuer(s) contained in this report and vice versa.

CREDIT RATINGS DEFINITIONS

The Autonomous brand has three categories of credit ratings:

- Credit Outperform (C-OP): The total return of the Reference Credit Instrument is expected to outperform the credit spread of bonds of other issuers operating in similar sectors or rating categories over the next six months.
- Credit Neutral (C-N): The total return of the Reference Credit Instrument is expected to perform in line with the credit spread of bonds of other issuers operating in similar sectors or rating categories over the next six months.
- Credit Underperform (C-UP): The total return of the Reference Credit Instrument is expected to underperform the credit spread of bonds of other issuers operating in similar sectors or rating categories over the next six months.

Autonomous credit ratings are based on a 6-month time horizon.

A list of all investment recommendations produced by the author(s) of this report alongside credit ratings history are available upon request.

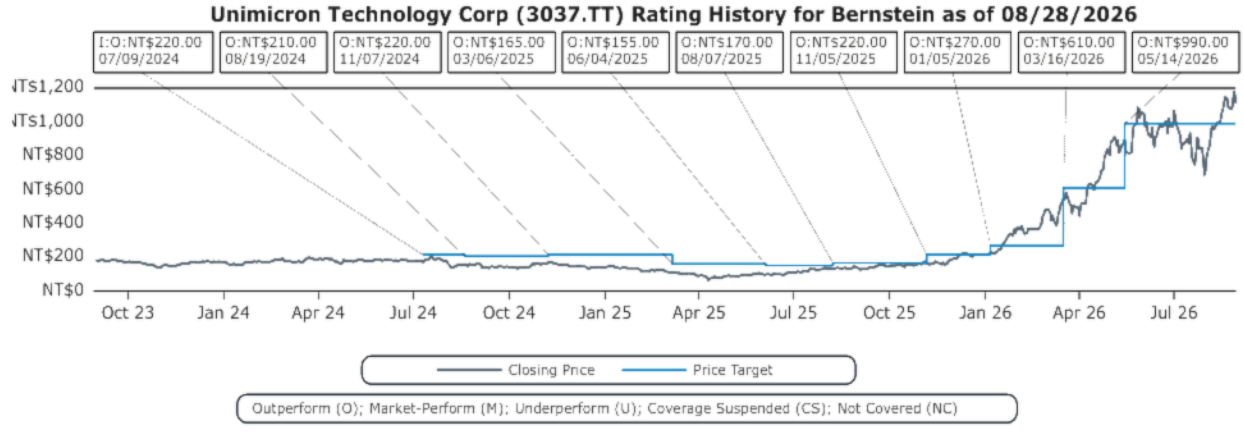
It is at the sole discretion of the Firm as to when to initiate, update and cease research coverage. The Firm has established, maintains and relies on information barriers to control the flow of information contained in one or more areas (i.e. the private side) within the Firm, and into other areas, units, groups or affiliates (i.e. public side) of the Firm

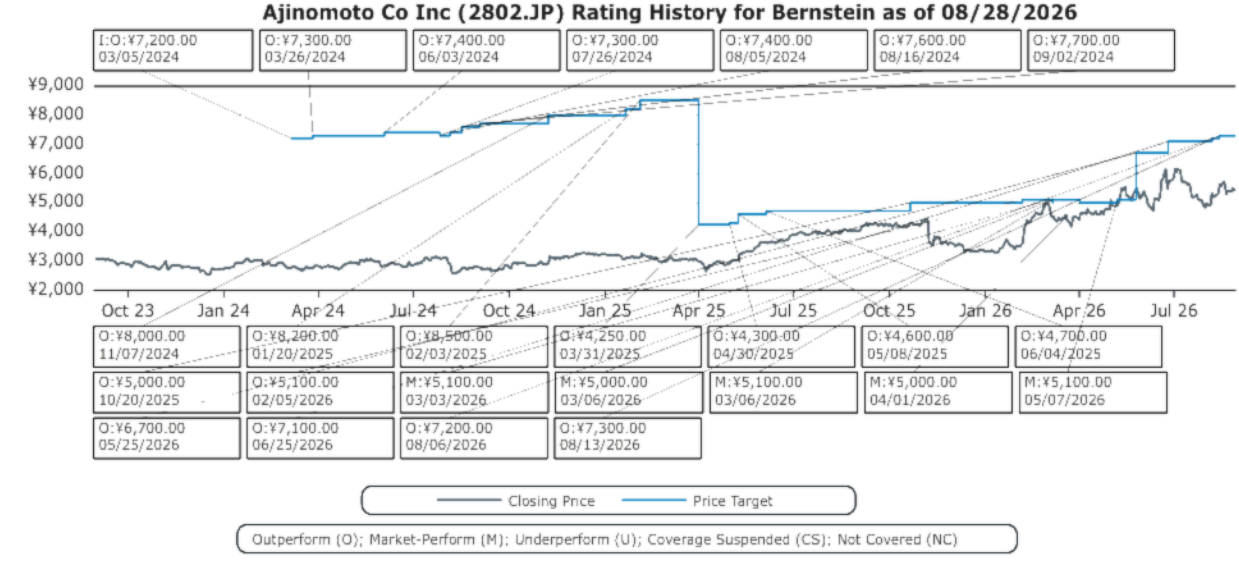
DISTRIBUTION OF EQUITY RATINGS/INVESTMENT BANKING SERVICES

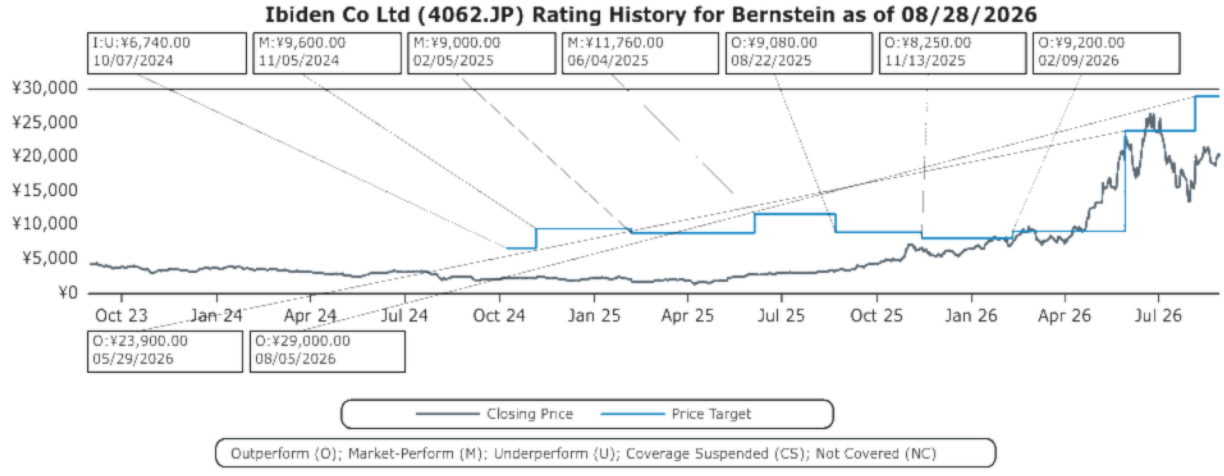
Equity Rating	Market Abuse Regulation (MAR) and FINRA Rating Category	Global Rating Distribution	Investment Banking Relationships*
Outperform	BUY	51.2%	15.3%
Market-Perform (Bernstein Brand) Neutral (Autonomous Brand)	HOLD	35.8%	16.2%
Underperform	SELL	13.1%	13.6%

* These figures represent the percentage of companies within each equity rating category for which affiliates of Bernstein have provided investment banking services within the previous 12 months.
As of June 30, 2026. All figures are updated quarterly.

PRICE CHARTS / RATINGS AND PRICE TARGET HISTORY







All price target and closing price data in the chart(s) above are denominated in the currency noted in the Ticker Table of this report.

CONFLICTS OF INTEREST

SG and/or its affiliates beneficially own 1% or more of a class of common equity securities of the following company: Ibiden Co Ltd.

Bernstein and/or affiliates have received compensation for non-investment banking securities-related products or services in the previous twelve months from the following clients: Ajinomoto Co Inc.

OTHER MATTERS

The legal entity(ies) employing the analyst(s) listed in this report, and their location, can be determined by the country code of their phone number, as follows:

+1 Bernstein Institutional Services LLC; New York, New York, USA

+44 Bernstein Autonomous LLP; London UK

+212 Société Générale Africa Technologies & Services; Casablanca, Morocco

+33 BSG France S.A.; Paris, France

+34 BSG France S.A.; Madrid, Spain

+41 Bernstein Autonomous LLP; Geneva, Switzerland

+49 BSG France S.A.; Frankfurt, Germany

+91 Sanford C. Bernstein (India) Private Limited; Mumbai, India

+852 Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司; Hong Kong, China

+65 Sanford C. Bernstein (Singapore) Private Limited; Singapore

+81 Sanford C. Bernstein Japan KK; Tokyo, Japan

Where this report has been prepared by research analyst(s) employed by a non-US affiliate, such analyst(s), is/are (unless otherwise expressly noted below) not registered as associated persons of Bernstein Institutional Services LLC or any other SEC-registered broker-dealer and are not licensed or qualified as research analysts with FINRA. Accordingly, such analyst(s) may not be subject to FINRA's restrictions regarding (among other things) communications by research analysts with a subject company, interactions between research analysts and investment banking personnel, participation by research analysts in solicitation and marketing activities relating to investment banking transactions, public appearances by research analysts, and trading securities held by a research analyst account.

Where this report has been prepared by research analyst(s) employed by Société Générale Africa Technologies & Services (part of the Société Générale group of companies), it has been prepared on behalf of a Bernstein company under a Global Services Agreement in place between Bernstein and Société Générale.

CERTIFICATION

Each research analyst listed in this report, who is primarily responsible for the preparation of the content of this report, certifies that all of the views expressed in this publication accurately reflect that analyst's personal views about any and all of the subject securities or issuers and that no part of that analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views in this publication.

II. ADDITIONAL GLOBAL CONFLICT DISCLOSURES

It is at the sole discretion of the Firm as to when to initiate, update and cease research coverage. The Firm has established, maintains and relies on information barriers to control the flow of information contained in one or more areas (i.e., the private side) within the Firm, and into other areas, units, groups or affiliates (i.e., public side) of the Firm.

III. OTHER IMPORTANT INFORMATION AND DISCLOSURES

Separate branding is maintained for "Bernstein" and "Autonomous" research products.

- Bernstein produces a number of different types of research products including, among others, fundamental analysis and quantitative analysis under both the "Autonomous" and "Bernstein" brands. Recommendations contained within one type of research product may differ from recommendations contained within other types of research products, whether as a result of differing time horizons, methodologies or otherwise. Furthermore, views or recommendations within a research product issued under one brand may differ from views or recommendations under the same type of research product issued under the other brand. The Research Ratings System for the two brands and other information related to those Rating Systems are included in the previous section.

- Autonomous operates as a separate business unit within the following entities: Bernstein Institutional Services LLC, Bernstein Autonomous LLP, Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司 and Sanford C. Bernstein (India) Private Limited. For information relating to "Autonomous" branded products (including certain Sales materials) please visit: www.autonomous.com. For information relating to Bernstein branded products please visit: www.bernsteinresearch.com.

Analysts are compensated based on aggregate contributions to the research franchise as measured by account penetration, productivity and proactivity of investment ideas. No analysts are compensated based on performance in, or contributions to, generating investment banking revenues.

This report has been produced by an independent analyst as defined in Article 3 (1)(34)(i) of EU 596/2014 Market Abuse Regulation ("MAR") and the same article of MAR as it forms part of United Kingdom domestic law by virtue of the European Union (Withdrawal) Act 2018.

To our readers in the United States: Bernstein Institutional Services LLC, a broker-dealer registered with the U.S. Securities and Exchange Commission ("SEC") and a member of the U.S. Financial Industry Regulatory Authority, Inc. ("FINRA") is distributing this publication in the United States and accepts responsibility for its contents. Where this material contains an analysis of debt product(s), such material is intended only for institutional investors and is not subject to the US independence and disclosure standards applicable to debt research prepared for retail investors.

Bernstein Institutional Services LLC may act as principal for its own account or as agent for another person (including an affiliate) in sales or purchases of any security which is a subject of this report. This report does not purport to meet the objectives or needs of any specific individuals, entities or accounts.

To our readers in Canada: If this publication pertains to a Canadian domiciled company, it is being distributed in Canada by Sanford C. Bernstein (Canada) Limited, which is licensed and regulated by the Canadian Investment Regulatory Organization. If the publication pertains to a non-Canadian domiciled company, it is being distributed by Bernstein Institutional Services LLC, which is licensed and regulated by both the SEC and FINRA, into Canada under the International Dealers Exemption.

This document may not be passed onto any person in Canada unless that person qualifies as "permitted client" as defined in Section 1.1 of NI 31-103.

To our readers in Brazil: This report has been prepared by Bernstein Institutional Services LLC, and Banco BTG Pactual S.A. ("BTG") is responsible for the distribution of this report in Brazil.

To readers in the United Kingdom: This publication has been issued or approved for issue in the United Kingdom by Bernstein Autonomous LLP, authorised and regulated by the Financial Conduct Authority and located at 60 London Wall, London EC2M 5SH, +44 (0)20-7170-5000. Registered in England & Wales No OC343985.

This document is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations, etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

To our readers in the member states of the EEA: This publication is being distributed by BSG France SA, which is authorised and regulated by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and Autorité des Marchés Financiers (AMF).

To our readers in Hong Kong: This publication is being distributed in Hong Kong by Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司, which is licensed and regulated by the Hong Kong Securities and Futures Commission (Central Entity No. AXC846) to carry out Type 4 (Advising on Securities) regulated activities and subject to the licensing conditions mentioned in the SFC Public Register (https://www.sfc.hk/publicregWeb/corp/AXC846/details)). This publication is solely for professional investors, as defined in the Securities and Futures Ordinance (Cap. 571). The purpose of this report is solely to provide an analysis of the issuers referred to in this report and is not intended for any purpose contrary to the laws of Hong Kong.

To our readers in Singapore: This publication is being distributed in Singapore by Sanford C. Bernstein (Singapore) Private Limited, only to accredited investors or institutional investors, as defined in the Securities and Futures Act 2001 of Singapore ("SFA"). Recipients in Singapore should contact Sanford C. Bernstein (Singapore) Private Limited in respect of matters arising from, or in connection with, this publication. Sanford C. Bernstein (Singapore) Private Limited is regulated by the Monetary Authority of Singapore and licensed under the SFA as a capital markets services licence holder for dealing in capital markets products that are securities and collective investment schemes and an exempt financial adviser for advising on, issuing and promulgating analyses and reports on securities. Sanford C. Bernstein (Singapore) Private Limited is registered in Singapore with Company Registration No. 20213710W and located at 8 Marina Boulevard, #12-01, Marina Bay Financial Centre, Singapore 018981, +65-6326-7000.

To our readers in the People's Republic of China: The securities referred to in this document are not being offered or sold and may not be offered or sold, directly or indirectly, in the People's Republic of China (for such purposes, not including the Hong Kong and Macau Special Administrative Regions or Taiwan, the "PRC") in contravention of any applicable laws of the PRC.

This document does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC to any person to whom it is unlawful to make the offer or solicitation in the PRC.

We do not represent that this document may be lawfully distributed, or that any securities may be lawfully offered, in compliance with any applicable registration or other requirements in the PRC, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by us which would permit a public offering of any securities or distribution of this document in the PRC. Accordingly, the securities are not being offered or sold within the PRC by means of this document or any other document. Neither this document nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations.

To our readers in Japan: This publication is being distributed in Japan by Sanford C. Bernstein Japan KK (サンフォード・C・バーンスタイン株式会社), which is registered in Japan as a Financial Instruments Business Operator with the Kanto Local Finance Bureau (registration number: The Director-General of Kanto Local Finance Bureau (FIBO) No.3387) and regulated by the Financial Services Agency. It is also a member of Investment Management Association of Japan. This publication is solely for qualified institutional investors in Japan only, as defined in Article 2, paragraph (3), items (i) of the Financial Instruments and Exchange Act.

For the institutional client readers in Japan who have been granted access to the Bernstein website by Daiwa Securities Group Inc. ("Daiwa"), your access to this document should not be construed as meaning that Bernstein is providing you with investment advice for any purposes. Whilst Bernstein has prepared this document, your relationship is, and will remain with, Daiwa, and Bernstein has neither any contractual relationship with you nor any obligations towards you.

To our readers in Australia: Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司 is responsible for distributing research in Australia. It is regulated by the Securities and Exchange Commission under U.S. laws, by the Financial Conduct Authority under U.K. laws, which differs from Australian laws. Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司 is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 in respect of the provision of the following financial services to wholesale clients:

- providing financial product advice;
- dealing in a financial product;
- making a market for a financial product; and
- providing a custodial or depository service.

To our readers in India: This publication is being distributed in India by Sanford C. Bernstein (India) Private Limited (SCB India) which is licensed and regulated by Securities and Exchange Board of India ("SEBI") as a research analyst entity under the SEBI (Research Analyst) Regulations, 2014, having registration no. INH000006378 and as a stock broker having registration no. INZ000213537. SCB India is currently engaged in the business of providing research and stock broking services. Please refer to www.bernsteinresearch.in for more information.

- SCB India is a Private limited company incorporated under the Companies Act, 2013, on April 12, 2017 bearing corporate identification number U65999MH2017FTC293762, and registered office at Level 3A, 4th Floor, First International Financial Centre, Plot Nos C-54 and C-55, G Block, Near CBI Office, Bandra Kurla Complex, Bandra (East), Mumbai 400098, Maharashtra, India (Phone No: +91-22-68421401).
- For details of Associates (i.e., affiliates/group companies) of SCB India, kindly email MUM-BERNSTEIN-InCompliance@bernsteinsg.com.
- SCB India does not have any disciplinary history as on the date of this report.
- Except as noted above, SCB India and/or its Associates (i.e., affiliates/group companies), the Research Analysts authoring this report, and their relatives
  - do not have any financial interest in the subject company
  - do not have actual/beneficial ownership of one percent or more in securities of the subject company;
  - is not engaged in any investment banking activities for Indian companies, as such;
  - have not managed or co-managed a public offering in the past twelve months for any Indian companies;
  - have not received any compensation for investment banking services or merchant banking services from the subject company in the past 12 months;
  - have not received compensation for brokerage services from the subject company in the past twelve months;
  - have not received any compensation or other benefits from the subject company or third party related to the specific recommendations or views in this report; and
  - do not currently, but may in the future, act as a market maker in the financial instruments of the companies covered in the report.
  - do not have any conflict of interest in the subject company as of the date of this report.
- Except as noted above, the subject company has not been a client of SCB India during twelve months preceding the date of distribution of this research report. Neither SCB India nor its Associates (i.e., affiliates/group companies) have received compensation for products or services other than investment banking, merchant banking or brokerage services from the subject company in the past twelve months.

- The principal research analyst(s) who prepared this report, members of the analysts' team, and members of their households are not an officer, director, employee or advisory board member of the companies covered in the report.
- Our Compliance officer / Grievance officer is Ms. Rupal Talati, who can be reached at +91-22-68421451, or MUM-BERNSTEIN-InCompliance@bernsteinsg.com / Scbin-investorgrievance@bernsteinsg.com
- The Research investor charter and Terms & Conditions of SCB India are available on its website and may be accessed at Sanford C. Bernstein (India) Private Limited (https://bernsteinresearch.in/) for your reference.
- Disclaimer: Registration granted by SEBI, and certification from NISM, is in no way a guarantee of performance of the intermediary or provide any assurance of returns to investors. Investments in securities market are subject to market risks. Read all the related documents carefully before investing.

To our readers in Switzerland: This document is provided in Switzerland by or through Bernstein Autonomous LLP, and is provided only to qualified investors as defined in article 10 of the Swiss Collective Investment Scheme Act ("CISA") and related provisions of the Collective Investment Scheme Ordinance and in strict compliance with applicable Swiss law and regulations. The products mentioned in this document may not be suitable for all types of investors. This document is based on the Directives on the Independence of Financial Research issued by the Swiss Bankers Association (SBA) in January 2008.

To our readers in the Middle East: Bernstein Autonomous LLP, DIFC branch has its principal office at Gate Village 06, DIFC, Dubai, UAE. Bernstein Autonomous LLP, DIFC branch is regulated by the Dubai Financial Services Authority (DFSA) with the registration number CL10040 and is provisioned for Arranging Deals in Investments and Advising on Financial Products. All communications and services are directed at Professional Clients and Market Counterparties only (as defined in the DFSA rulebook). Persons other than Professional Clients and Market Counterparties, such as Retail Clients, are not the intended recipients of our communications or services.

LEGAL

All research publications are disseminated to our clients through posting on the firm's password protected websites, bernsteinresearch.com and autonomous.com. Certain, but not all, research publications are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience.

This publication has been published and distributed in accordance with the Firm's policy for management of conflicts of interest in investment research, a copy of which is available from Bernstein Institutional Services LLC, Director of Compliance, 245 Park Avenue, New York, NY 10167. Additional disclosures and information regarding Bernstein's business are available on our website www.bernsteinresearch.com.

The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors where that permission profile is not consistent with the licenses held by the entities noted herein. This document is for distribution only as may be permitted by law. This publication is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of, or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject any of the entities referenced herein or any of their subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction. This publication is based upon public sources we believe to be reliable, but no representation is made by us that the publication is accurate or complete. We do not undertake to advise you of any change in the reported information or in the opinions herein. This publication was prepared and issued by entity referred to herein for distribution to eligible counterparties or professional clients. This publication is not an offer to buy or sell any security, and it does not constitute investment, legal or tax advice. The investments referred to herein may not be suitable for you. Investors must make their own investment decisions in consultation with their professional advisors in light of their specific circumstances. The value of investments may fluctuate, and investments that are denominated in foreign currencies may fluctuate in value as a result of exposure to exchange rate movements. Information about past performance of an investment is not necessarily a guide to, indicator of, or assurance of, future performance.

This report is directed to and intended only for our clients who are "eligible counterparties", "professional clients", "institutional investors" and/or "professional investors" as defined by the aforementioned regulators, and must not be redistributed to retail clients as defined by the aforementioned regulators. Retail clients who receive this report should note that the services of the entities noted herein are not available to them and should not rely on the material herein to make an investment decision. The result of such act will not hold the entities noted herein liable for any loss thus incurred as the entities noted herein are not registered/ authorised/ licensed to deal with retail clients and will not enter into any contractual agreement/arrangement with retail clients. This report is provided subject to the terms and conditions of any agreement that the clients may have entered into with the entities noted herein. All research reports are disseminated on a simultaneous basis to eligible clients through electronic publication to our client portal.

The information in this report was prepared by Bernstein solely for the internal business use of our clients. Clients may store, display, analyze, reformat and print the information in this report for this limited use only. Clients may not copy, alter, create derivative works, resell, reverse engineer, commercially exploit, share or distribute any part of the information contained herein for any purpose without Bernstein's express written consent. These restrictions include extracting data or using the content to develop indices or other products. Further, you may not use this report, or any portion of this report, to train or finetune any third-party machine learning or artificial intelligence system, or as a prompt or input into any such system. You also may not, without Bernstein's express written consent, do any of the foregoing in connection with your own internal machine learning or artificial intelligence system.

Bernstein may use artificial intelligence tools in the preparation of its materials. Any such materials are reviewed by Bernstein's research analysts prior to publication.

This report has been prepared for information purposes only and is based on current public information that we consider reliable, but the entities noted herein do not warrant or represent (express or implied) as to the sources of information or data contained herein are accurate, complete, not misleading or as to its fitness for the purpose intended even though the entities noted herein rely on reputable or trustworthy data providers, it should not be relied upon as such. Opinions expressed are the author(s)' current opinions as of the date appearing on the material only and we do not undertake to advise you of any change in the reported information or in the opinions herein.

Any references to Societe Generale herein are purely factual, based upon publicly available information, and included for comparative purposes only. They do not constitute an opinion or recommendation with respect to the securities of Societe Generale.

This publication was prepared and issued by the entity referred to herein for distribution to eligible counterparties or professional clients. The information in this report is intended for general circulation and does not constitute an offer to buy or sell any security, investment, legal or tax advice nor a personal recommendation, as defined by any of the aforementioned regulators. It does not take into account the particular investment objectives, financial situations, or needs of individual investors. The report has not been reviewed by any of the aforementioned regulators and does not represent any official recommendation from the aforementioned regulators. The investments referred to herein may not be suitable for you. Investors must make their own investment decisions in consultation with advice sought from a financial adviser regarding the suitability of the investment product, taking into account the specific investment objectives, financial situation or particular needs of any recipient of the recommendation, before the recipient makes a commitment to purchase the investment product.

The analysis contained herein is based on numerous assumptions. Different assumptions could result in materially different results. The information in this report does not constitute, or form part of, any offer to sell or issue, or any offer to purchase or subscribe for shares, or to induce engagement in any other investment activity. The value of any securities or financial instruments mentioned in this report may fluctuate subject to market conditions. Information about past performance of an investment is not necessarily a guide to, indicative of, or assurance of future performance. Estimates of future performance mentioned by the research analyst in this report are based on assumptions that may not be realized due to unforeseen factors like market volatility/fluctuation. In relation to securities or financial instruments denominated in a foreign currency other than the clients' home currency, movements in exchange rates will have an effect on the value, either favorable or unfavorable. Before acting on any recommendations in this report, recipients should consider the appropriateness of investing in the subject securities or financial instruments mentioned in this report and, if necessary, seek independent professional advice.

The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors where that permission profile is not consistent with the licenses held by the entities noted herein. This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject the entities noted herein to any regulation or licensing requirement within such jurisdiction.

Source: Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Neither Bloomberg nor Bloomberg's licensors approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

No part of this material may be reproduced, distributed or transmitted or otherwise made available without prior consent of the entities noted herein. Copyright Bernstein Institutional Services LLC Bernstein Autonomous LLP, BSG France S.A., Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司, Sanford C. Bernstein (Canada) Limited, Sanford C. Bernstein (India) Private Limited (SEBI registration no. INH000006378), Sanford C. Bernstein (Singapore) Private Limited and Sanford C. Bernstein Japan KK (サンフォード・C・バーンスタイン株式会社). All rights reserved. The trademarks and service marks contained herein are the property of their respective owners. Any unauthorized use or disclosure is strictly prohibited. The entities noted herein may pursue legal action if the unauthorized use results in any defamation and/or reputational risk to the entities noted herein and

research published under the Bernstein and Autonomous brands.

人在草木间
更多资料请加V