

Japan Semiconductors, Asia Hardware and APAC Food & Beverages

ABF Substrate: Renaissance of CPU drives ABF shortage; Lifting Ibiden PT to ¥23,900



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ABF demand surges due to Renaissance of CPU. As outlined in [SoftBank & Arm Initiation](#), server CPU volumes should expand 4x over 2026-2030, driven by the rise of agentic AI. This is great for ABF substrates where server CPUs contribute ~40% of the demand. Beyond unit growth, content growth also remains supportive, as newer-gen CPUs require larger substrates and increasing core counts (Intel Diamond Rapids area is ~36% larger vs. Granite Rapids). Driven by volume growth and larger chip sizes of server CPUs (37% CAGR), we revise up our demand forecast by 4%/24% in 2026/2027 and expect the demand to grow 22% CAGR over 2025-2028. Our current estimate likely remains conservative, as it does not yet incorporate lower yields associated with larger and more complex substrates. *Our ABF supply-demand model can be downloaded [here](#).*

ABF supply is far from catching up with demand growth. Suppliers have stepped up capacity investment, but supply growth remains well short of demand growth. We forecast industry supply to grow at a 12% CAGR over 2025-2028. Among the major ABF suppliers, Ibiden and Unimicron appear to be the most aggressive in expanding capacity as they have the best customer exposure, supported in part by customer prepayments.

ABF shortage at full swing from 2027. Based on the above, we forecast the ABF market to enter an industry-wide shortage from 2027, with demand officially surpassing supply, and the imbalance worsening further in 2028. The industry utilization is rapidly surpassing 100% in 2027, from 80-85% in 2025. Demand is growing at 22% CAGR over 2025-28, while supply is only growing at 12% CAGR, so supply shortage is just a matter of time.

Ajinomoto's ABF film production unlikely to be a bottleneck, and we see the company starting to leverage their pricing power on the back of downstream price increases. Ajinomoto has been investing ahead of the curve, increasing capacity by c. 25% in mid 2025 with the Gunma expansion, and further scope to double output by extending the operating week to 7 days and running a second shift daily. Ajinomoto's third production site in Gifu is scheduled to come online in 2032, or 2030 as required.

Raise PT for Ibiden. In light of the anticipated shortage, we revise up Ibiden's revenue by 3-13% for FY27/3E-FY28/3E. Given the tightening supply backdrop alongside rising input costs, we expect Ibiden to implement price hikes. Our current estimates are baked in a 4%/6%/12% price increase across FY27/28/29/3E, though this largely reflects product mix shift rather than outright pricing hike. Any shortage is likely to result in further upside to ASP. We raise our price target to **¥23,900**, based on 35x FY29/3E EPS. We believe the improved demand visibility and stronger earnings growth justify the higher target multiple (35x vs. 30x previously). While we understand Ibiden is trading at a high multiple, we would look for more upside in pricing before taking profit on the name. Reiterate **Outperform**.

For **Unimicron (Outperform)**, We estimate ABF substrate ASP hike will accelerate from 5% QoQ in 1Q26 to 7-10% QoQ through 2026 driven by a ~30% raw material cost hike from 2Q and a richer high-end ABF mix. We assume a more gradual margin recovery vs. consensus, with corporate GM reaching ~35% by end-2028.

BERNSTEIN TICKER TABLE

			28 May 2026		TTM	Reported EPS				Reported P/E (x)		
			Closing	Price	Rel.							
Ticker	Rating	Cur	Price	Target	Perf.	Cur	2025A	2026E	2027E	2025A	2026E	2027E
4062.JP (Ibiden)	O	JPY	19,740	23,900	540.4%	JPY	214.91	259.64	411.19	91.9	76.0	48.0
OLD				9,200.00				238.90	330.73			
2802.JP (Ajinomoto)	O	JPY	5,142.00	6,700.00	1.6%	JPY	138.36	151.45	190.45	20.1	16.6	14.0
3037.TT (Unimicron)	O	TWD	1,025.00	990.00	797.2%	TWD	4.36	14.06	25.10	235.0	72.9	40.8
JPL			2,551.66									
ASIAX			1,997.51									

PRICE TARGET CHANGE / ESTIMATE CHANGE IN BOLD

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

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

Source: Bloomberg, Bernstein estimates and analysis.

INVESTMENT IMPLICATIONS

Ibiden: We rate Ibiden **Outperform**, with PT = **¥23,900**.

Unimicron: We rate Unimicron **Outperform**, with PT = **NT\$990.00**.

Ajinomoto: We rate Ajinomoto **Outperform** with a **¥6,700** price target.

DETAILS

ABF DEMAND SURGES DUE TO RENAISSANCE OF CPU

We revise up our demand forecast for Ajinomoto Build-up Film (ABF) substrates by 4%/24% in 2026/2027. We now expect the demand to grow 22% CAGR over 2025-2028, mostly driven the increased demand outlook of server CPUs (Exhibit 1-Exhibit 2). This is great for ABF substrates where server CPUs contribute ~40% of the demand.

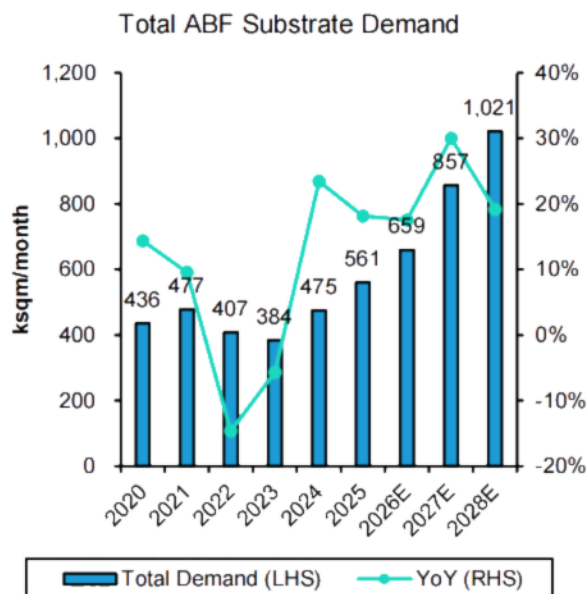
Driven by the rise of agentic AI, as outlined in [SoftBank, Arm: From GenAI to Agentic AI; Initiating with Outperform Ratings](#), server CPU demand should increase materially through 2030. We forecast server CPU volumes reaching 30mn units by 2030, implying a roughly 4x expansion in server CPU TAM over 2026-2030. This translates into a server CPU TAM of \$137bn in 2030 (Exhibit 3), vs. Nvidia (NVDA, covered by Stacy A. Rasgon)'s estimate of a \$200bn TAM.

At the same time, server CPU shipments have been weak over the past 2 years, likely resulting in pent-up demand and providing a further near-term demand tailwind. Beyond unit growth, content growth also remains supportive, as newer-generation CPUs require meaningfully larger substrates vs. prior generations (Exhibit 4-Exhibit 5). For Intel (INTC, covered by Stacy A. Rasgon), substrate size has increased by 24-36% with each generation (Exhibit 6), vs. 12-23% substrate size increase for AMD (AMD, covered by Stacy A. Rasgon) (Exhibit 7).

For Arm-based CPUs, increasing core count is an additional driver of content growth. Graviton, CPU series of Amazon Web Services (AWS, owned by Amazon; AMZN, covered by Mark Shmulik), illustrates this clearly: across 5 generations, core count has risen 12x, from 16 cores in Graviton 1 to 192 cores in Graviton 5 (Exhibit 8).

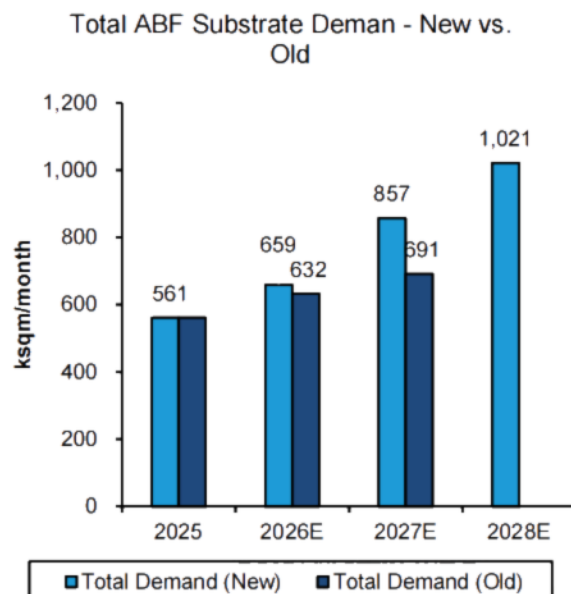
Our ABF supply-demand model can be downloaded [here](#).

EXHIBIT 1: 2020-2028E: Total ABF Substrate Demand



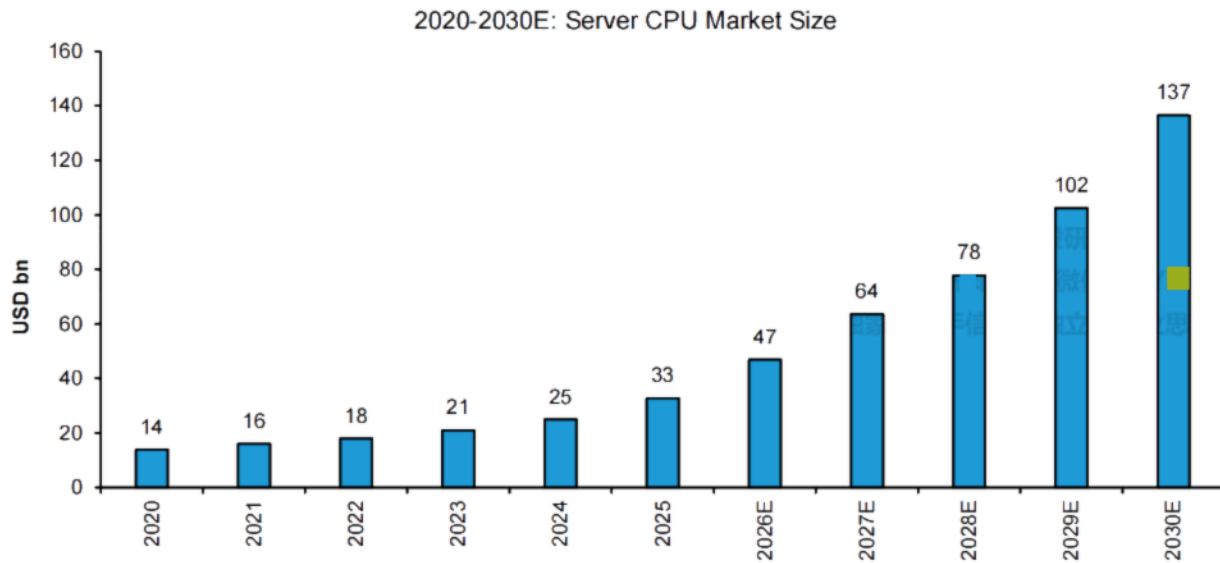
Source: Company disclosures, Mercury, Bernstein estimates and analysis.

EXHIBIT 2: Total ABF Substrate Demand: New vs. Old



Source: Company disclosures, Mercury, Bernstein estimates and analysis.

EXHIBIT 3: We expect the server CPU market to increase from US\$33bn in 2025 to US\$137bn in 2030, accelerating at a 34% CAGR, driven by Agentic AI adoption.



Source: Mercury, Company reports, Bernstein analysis and estimates.

EXHIBIT 4: Intel Server CPU: Substrate Size

	Socket	Launch Time	Pin Count	Width (mm)	Height (mm)	Size (sqcm)
Diamond Rapids	LGA 9324	Mid-2027	9,324	107.5	77	82.8
Clearwater Forest	LGA 7529	Mid-2026	7,529	92.5	66	61.1
Granite Rapids	LGA 7529	Sep-24	7,529	92.5	66	61.1
Sierra Forest	LGA 7529	Jun-24	7,529	92.5	66	61.1
Emerald Rapids	LGA 4677	Dec-23	4,677	81	61	49.4
Sapphire Rapids	LGA 4677	Jan-23	4,677	81	61	49.4
Ice Lake	LGA 4189	Apr-21	4,189	77.5	56.5	43.8
Cooper Lake	LGA 4189	Jun-20	4,189	77.5	56.5	43.8
Skylake	LGA 3647	Jul-17	3,647	76	56.5	42.9

Data of Clearwater Forest and Diamond Rapids are estimated by Bernstein.

Source: Company disclosures, Bernstein estimates and analysis.

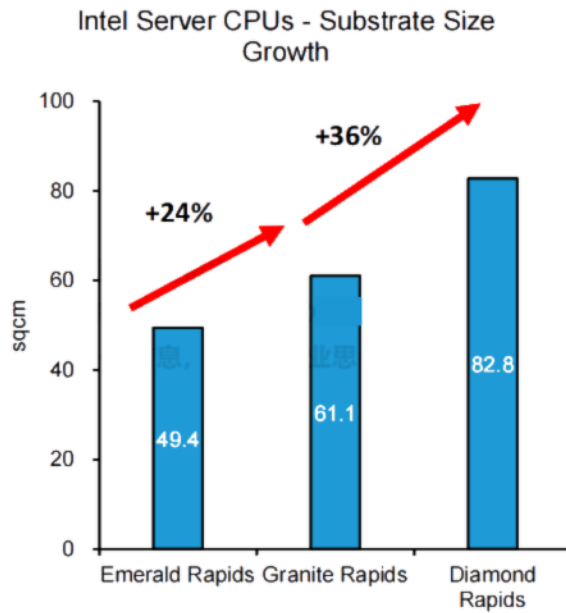
EXHIBIT 5: AMD Server CPU: Substrate Size

	Socket	Debut Time	Pin Count	Width (mm)	Height (mm)	Size (sqcm)
Venice	SP7	Late 2026	9,324	78	78.1	60.9
Turin	SP5	Oct-24	6,096	72	75.4	54.3
Siena	SP6	Sep-23	4,844	58.5	75.4	44.1
Bergamo	SP5	Jun-23	6,096	72	75.4	54.3
Genoa	SP5	Nov-22	6,096	72	75.4	54.3
Milan	SP3	Mar-21	4,094	58.5	75.4	44.1
Rome	SP3	Aug-19	4,094	58.5	75.4	44.1
Naples	SP3	Jun-17	4,094	58.5	75.4	44.1

Data of Venice are estimated by Bernstein.

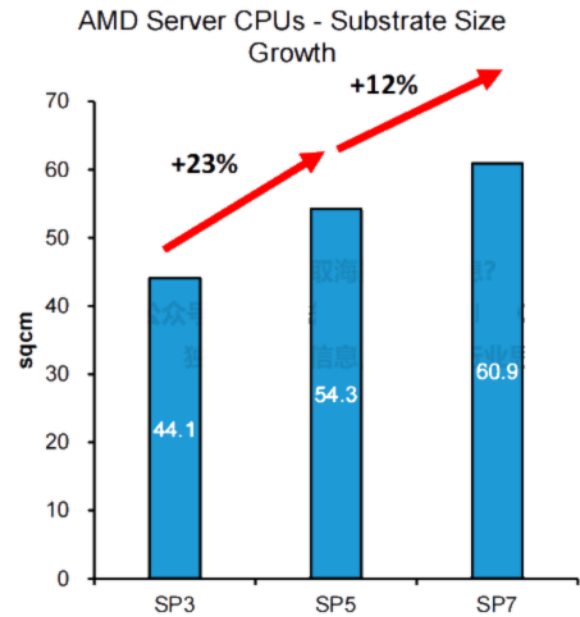
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 6: Intel Server CPUs - Substrate Size Growth



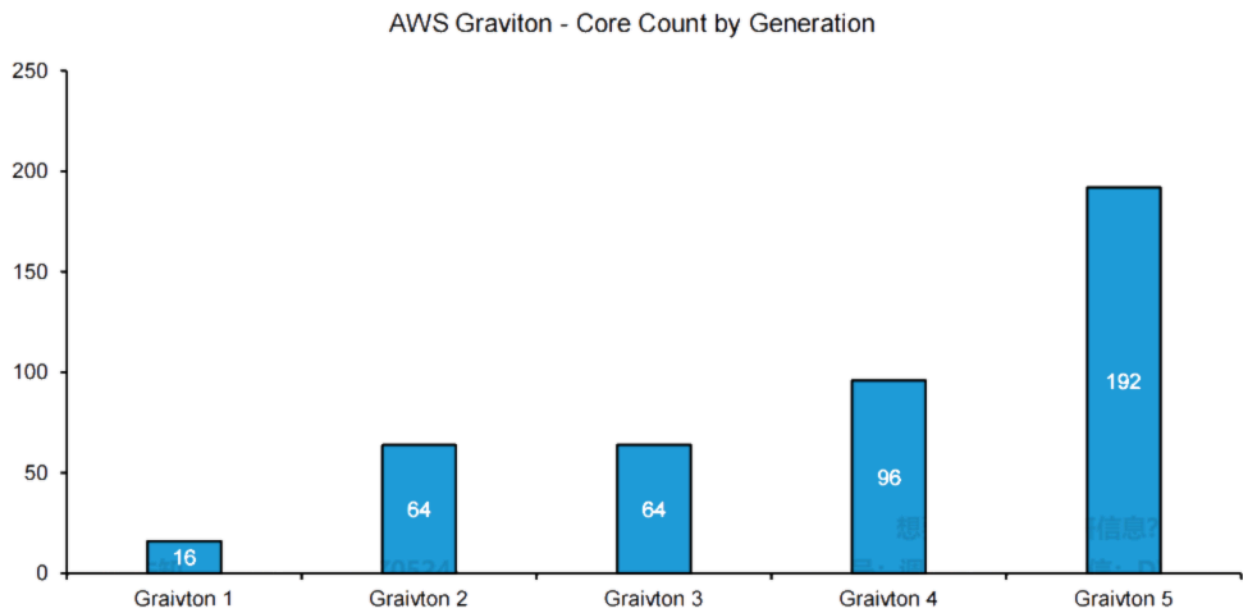
Data of Diamond Rapids are estimated by Bernstein.
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 7: AMD Server CPUs - Substrate Size Growth



Data of SP7 are estimated by Bernstein.
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 8: AWS Graviton CPUs: Core Count by Generation

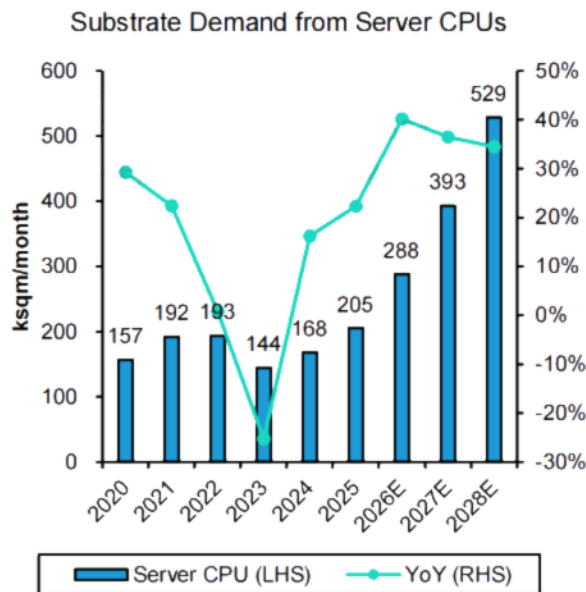


Source: Company disclosures, Bernstein analysis.

Driven by volume growth and larger chip sizes of server CPUs (37% CAGR) (Exhibit 9-Exhibit 10), we forecast total CPU substrate area demand to increase by 19% CAGR over 2025-2028 (Exhibit 11-Exhibit 12), although we do not expect any growth in PC CPUs. Meanwhile, demand for GPU and ASIC accelerators remains robust. Our view that ABF content value per chip doubles with each generation remains unchanged (Exhibit 13-Exhibit 15). We expect GPU/ASIC substrate area demand increasing by 33% CAGR over 2025-2028.

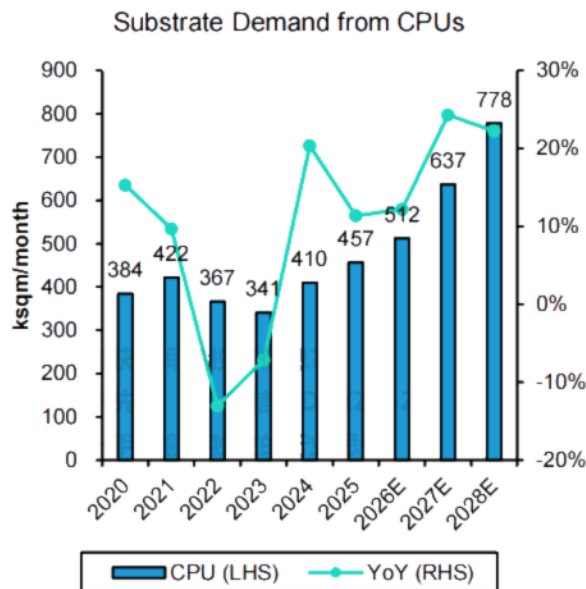
Based on our CPU and GPU/ASIC assumptions, we now forecast total ABF substrate area demand to grow by 22% CAGR over 2025-2028 (Exhibit 16). This outlook is driven by continued demand growth across both CPUs and GPUs/ASICs. In addition, our current estimate likely remains conservative, as it does not yet incorporate lower yields associated with larger and more complex substrates.

EXHIBIT 9: 2020-2028E: Substrate Demand driven by Server CPUs



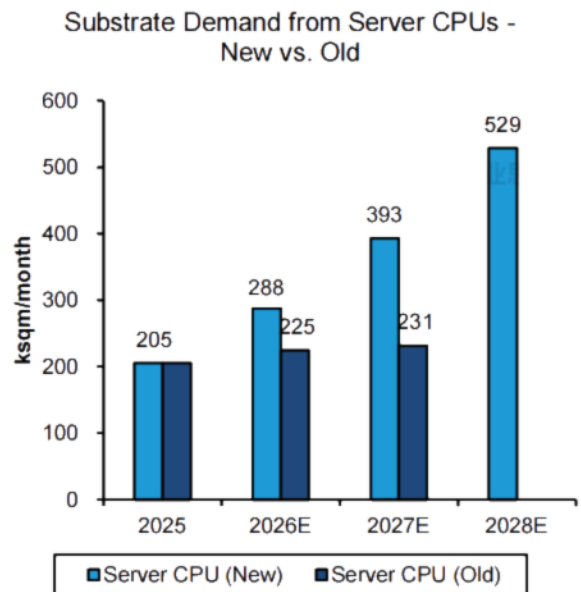
Source: Company disclosures, Mercury, Bernstein estimates and analysis.

EXHIBIT 11: 2020-2028E: Substrate Demand driven by Total CPUs



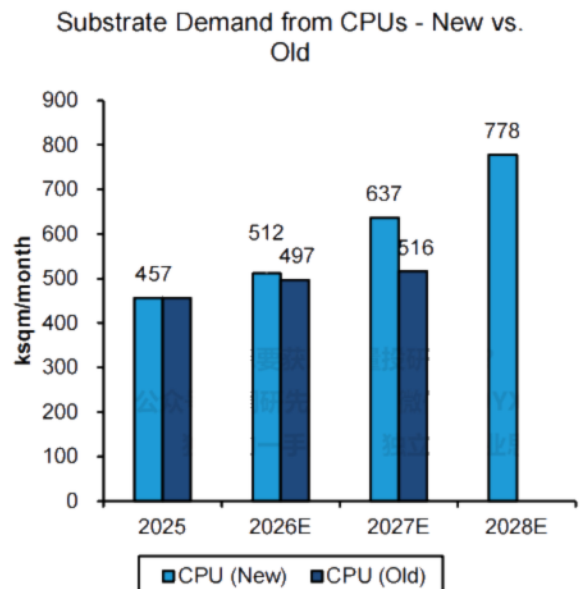
Source: Company disclosures, Mercury, Bernstein estimates and analysis.

EXHIBIT 10: Substrate Demand driven by Server CPUs: New vs. Old

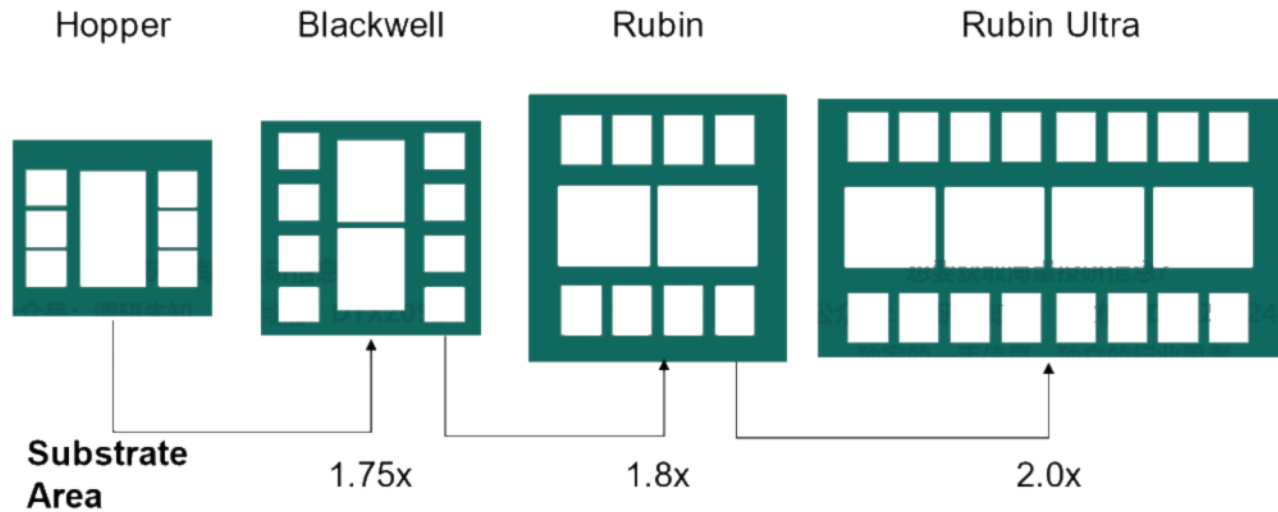


Source: Company disclosures, Mercury, Bernstein estimates and analysis.

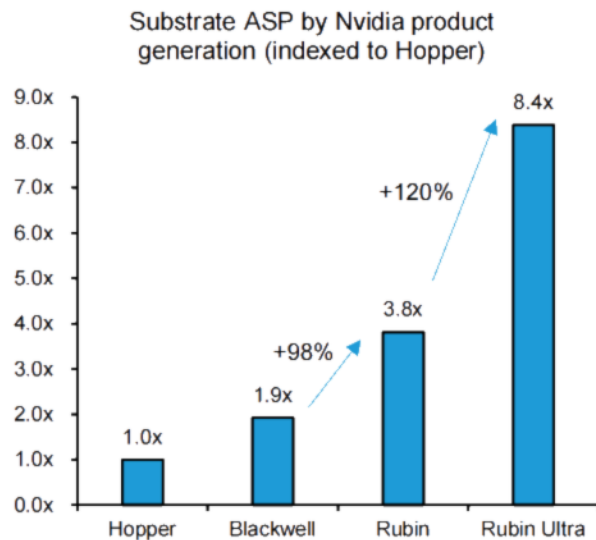
EXHIBIT 12: Substrate Demand driven by Total CPUs: New vs. Old



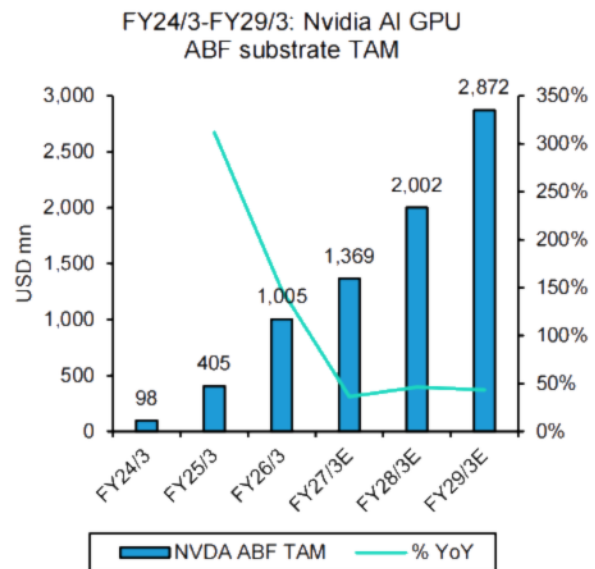
Source: Company disclosures, Mercury, Bernstein estimates and analysis.

EXHIBIT 13: **We estimate total substrate area to grow 80-100% by generation for Nvidia AI GPUs.**

Source: Nvidia, Bernstein estimates and analysis.

EXHIBIT 14: **We expect significant ASP increase for substrates as generation migrates.**

Source: Bernstein estimates and analysis.

EXHIBIT 15: **We expect ABF substrate TAM for Nvidia AI GPUs to continue strong growth of ~40% over the next 2 years.**

Source: Bernstein estimates and analysis.

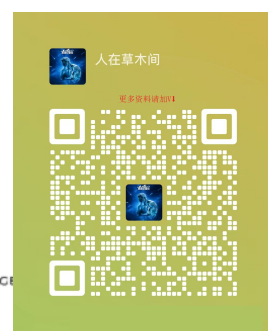
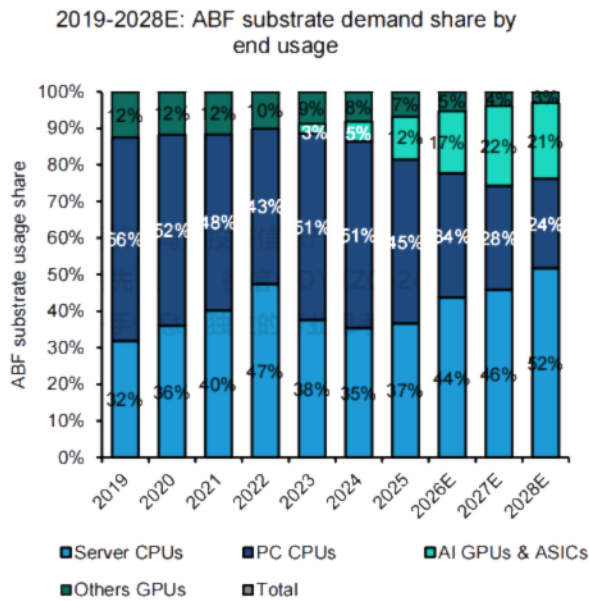


EXHIBIT 16: **2019-2028E: ABF substrate demand share by end usage**



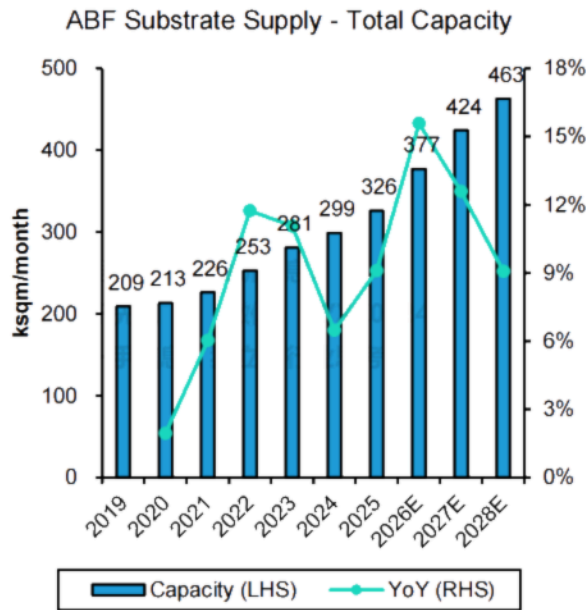
Source: Company disclosures, Mercury, Bernstein estimates and analysis.

ABF SUPPLY IS FAR FROM CATCHING UP WITH DEMAND GROWTH

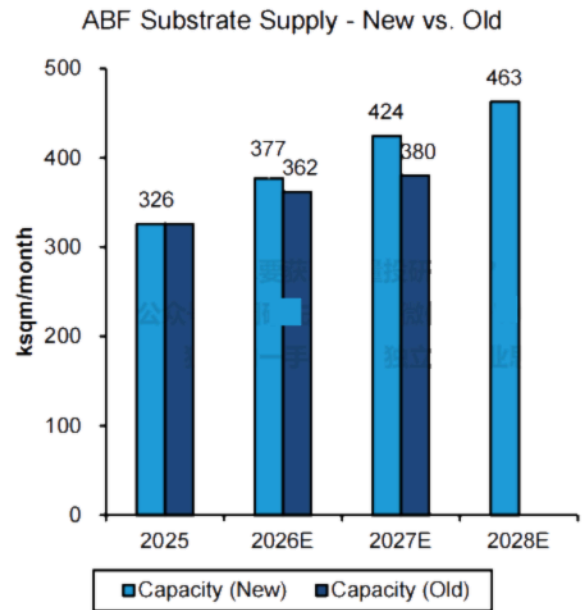
At the same time, suppliers have stepped up capacity investment, but supply growth remains well short of demand growth. We forecast industry supply to grow at a 12% CAGR over 2025-2028 (Exhibit 17-Exhibit 18). Among the major ABF suppliers, Ibiden and Unimicron appear to be the most aggressive in expanding capacity as they have the best customer exposure, supported in part by customer prepayments (or customers' end-customers such as hyperscalers).

Ibiden announced its ¥500bn capex over FY27/3E-29/3E in February 2026 (Exhibit 19). The capex is spent on two major projects: (1) ¥280bn on Ono fab, which we believe is for major GPU customer; (2) ¥220bn on Gama fab, which we believe is dedicated to EMIB-T. Based on our understanding, both fabs will have the most advanced technology and high ASP, and hence high return of investment. In May 2026, Ibiden also guided FY27/3E capex of ¥210bn, representing 40%+ of its ¥500bn three-year capex plan for the substrates business over FY27/3E-FY29/3E. The higher-than-expected capex commitment suggests management has growing conviction in the demand outlook vs. 3 months ago, in our view.

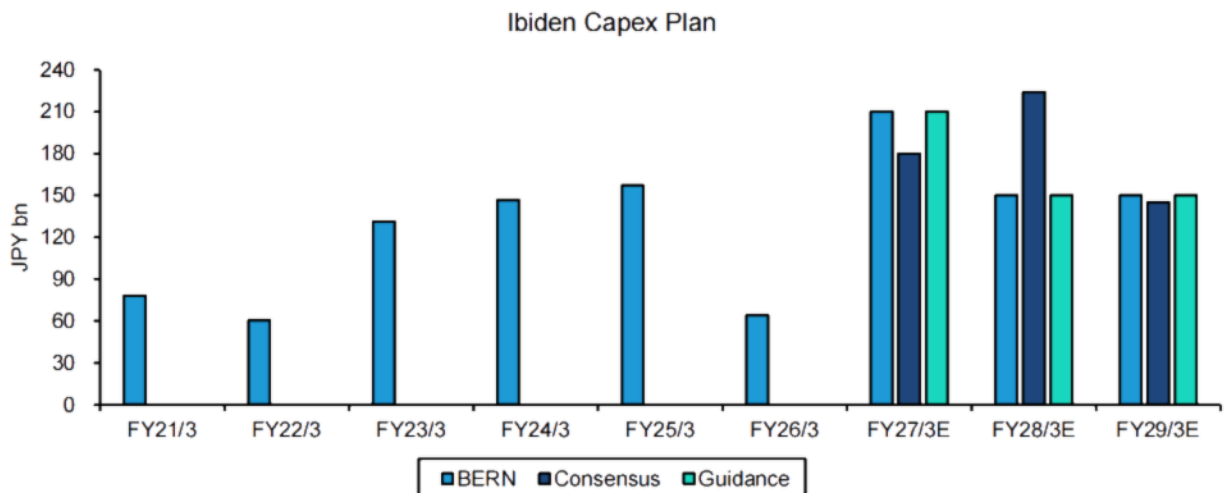
Unimicron guided NT\$34bn capex for 2026, with long-term equipment purchase order of NT\$14.1bn. Management has guided to increase ABF substrate capacity by 40% Yoy in end-2026 though across different sites, and ramp up 2nd site in KF and 2nd site in Yangmei in 2H27 and 2028 respectively.

EXHIBIT 17: **ABF Substrate Supply - Total Capacity**

Source: Company disclosures, Prismark, Bernstein estimates and analysis.

EXHIBIT 18: **ABF Substrate Supply - New vs. Old**

Source: Company disclosures, Prismark, Bernstein estimates and analysis.

EXHIBIT 19: **Ibiden's Capex Plan vs. Bernstein and Consensus Estimates**

1. Ibiden announced JPY500bn capex over FY27/3E-FY29/3E, assuming FY28/3E-FY29/3E capex spent evenly.

2. BERN FY21/3-FY26/3 represent historical data.

Source: Company disclosures, Bloomberg, Bernstein estimates and analysis.

ABF SHORTAGE AT FULL SWING FROM 2027

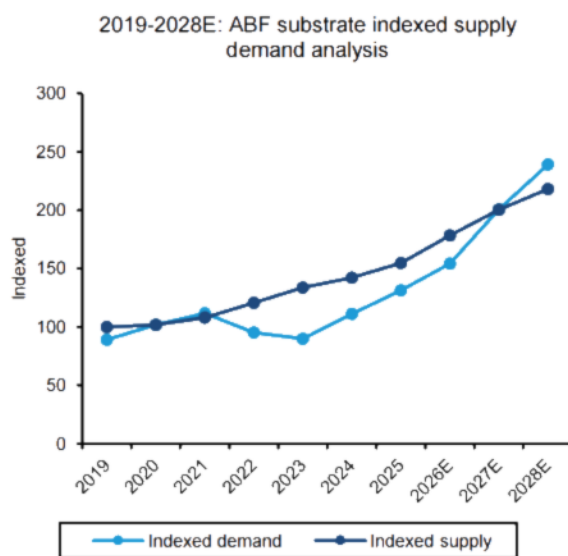
Based on the above supply and demand analysis, we forecast the ABF market to enter an industry-wide shortage from 2027, with demand officially surpassing supply, and the imbalance worsening further in 2028 (Exhibit 20). The industry utilization is rapidly surpassing 100% in 2027, from 80-85% in 2025. Fundamentally, demand is growing at 22% CAGR over 2025-28, while supply is only growing at 12% CAGR, so supply shortage is just a matter of time.

We see this shortage to play out in three steps:

1. Upstream material bottleneck is happening now: While ABF supply has been tight, the key bottleneck to date has largely been upstream materials, particularly T-glass. Major suppliers such as Ibiden are still operating at relatively healthy utilization levels of above 90% (excluding Intel which is at lower utilization). That said, the shortage is set to broaden from 2027 as demand begins to exceed effective industry supply.
2. High-end shortage: Pockets of tightness are already emerging in the high-end segment and will get worse through 2026, and we are seeing some price hikes from certain suppliers in selected products.
3. Broad-based shortage: the supply tightness in the high end is likely to broaden into the overall ABF industry in 2027, before becoming more severe in 2028. As a result, we would expect further price hikes from suppliers.

At the end of the day, the ABF substrate industry remains relatively small at around \$10bn, which leaves room for additional pricing upside. Relative to the combined CPU and GPU market, ABF represents ~1% of total AI server cost, suggesting that there is still room for further price hike.

EXHIBIT 20: 2019-2028E: ABF substrate indexed supply demand analysis



Source: Company disclosures, Mercury, Prismark, Bernstein estimates and analysis.

AJINOMOTO'S ABF FILM PRODUCTION CAPACITY IS UNLIKELY TO BE A BOTTLENECK

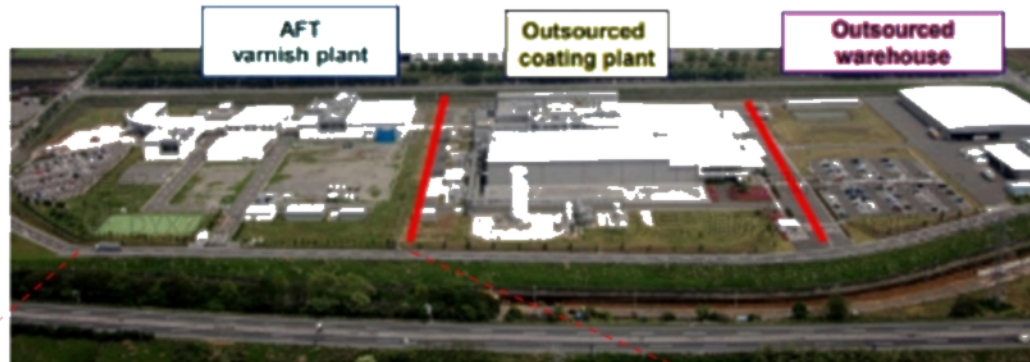
Ajinomoto has sufficient ABF Film production capacity to meet demand over the medium term.

The company commissioned a c. 50% expansion of their Gunma site in mid 2025 (Exhibit 21), raising overall installed capacity by c. 25%, by our estimates. In addition to filling this installed capacity, management have flagged scope to double the current shift pattern from 1x 8hs shift, 5 days a week to 2 shifts daily and also to additional weekend shifts as required.

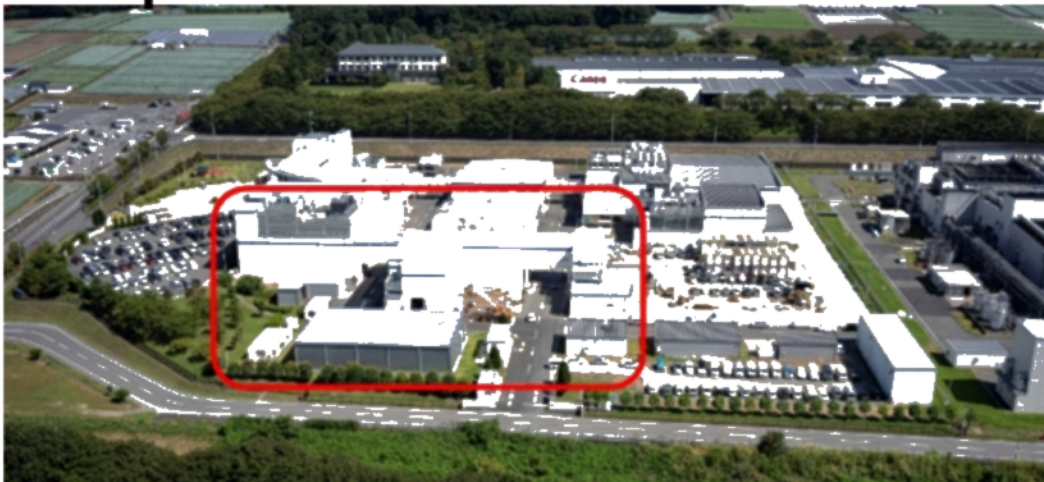
The company has guided to ¥25b of annual ABF related capex, covering both maintenance and incremental initiatives to increase yields.

EXHIBIT 21: **Ajinomoto's 2025 Gunma site expansion increased ABF production capacity by c. 25% by our estimates**

June 2023



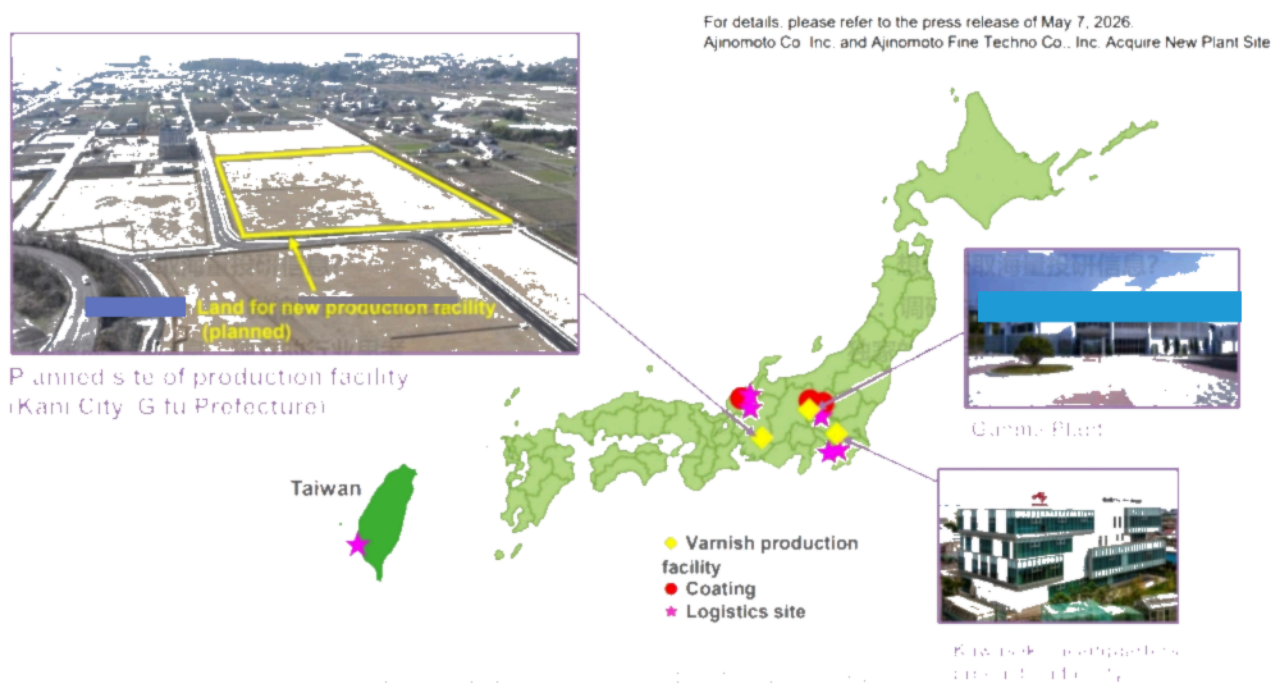
Opened in March 2025



Source: Company presentation, Bernstein photo and analysis.

In order to secure medium term supply, the company recently acquired land in Gifu Prefecture where they plan to build a third AFB production site (Exhibit 22). Commissioning is currently planned for 2032, but management see scope to bring this forward to 2030, if required.

EXHIBIT 22: Ajinomoto's Gifu ABF production capacity is scheduled to come online in 2032, with scope to bring this forward to 2030 as required



Source: Company presentation.

WE RAISE IBIDEN FORECASTS AND PT TO ¥23,900 AND MAINTAIN OP

In light of the anticipated ABF substrate supply shortage in 2027-28, driven by robust server CPU demand and the company's updated mid-term guidance, we revise up Ibiden's revenue by 3-13% for FY27/3E and FY28/3E (Exhibit 23).

Given the tightening supply backdrop alongside rising input costs, coupled with product spec upgrades, we expect Ibiden to implement price hikes over this period. Our current estimates are baked in a 4-6% price increase across FY27/3E and FY28/3E, though this largely reflects product mix shift rather than outright pricing hike (Exhibit 24). FY29/3 price is forecasted to rise more sharply by 12%, as shortage likely exacerbates and product upgrades (especially EMIB-T) accelerates. Any shortage is likely to result in further upside to Ibiden's ASP, in our view.

Our sensitivity analysis suggests that every 5% price hike would translate into a 10-13% increase in operating profit for FY28/3E and FY29/3E, respectively (Exhibit 25-Exhibit 26).

Our operating profit forecast in FY29/3 is ¥289bn, as we consider the company guidance of ¥300bn yen OP in FY31/3 as being too conservative.

We raise our price target to **¥23,900**, based on 35x FY29/3E EPS. We believe the improved demand visibility and stronger earnings growth trajectory justify the higher target multiple (35x vs. 30x previously). We also believe investors are increasingly looking through to FY29/3E, as EMIB-T revenue is expected to ramp meaningfully during the period, consistent with Ibiden's capex plan (as highlighted in [Ibiden: Big investment shows customer commitment. Outperform](#) and [Global Semis: Can Intel challenge TSMC with EMIB-T? And who benefits in the supply chain?](#)). While we understand that the stock is trading at a high multiple, we would look for more upside in pricing before taking profit on the name. We reiterate our **Outperform** rating on Ibiden.

Our updated Ibiden model can be downloaded [here](#).

EXHIBIT 23: **Ibiden: Summary of Estimate Changes**

Ibiden: summary of estimate changes	FY26/3	1Q27/3E	2Q27/3E	3Q27/3E	4Q27/3E	FY27/3E	FY28/3E	FY29/3E
Revenue (JPY bn)								
Bernstein - Old	422.0	118.8	122.9	131.9	135.9	509.5	595.7	
Growth YoY	14.2%	21.9%	25.4%	27.9%	15.6%	20.7%	16.9%	
Bernstein - New	416.2	115.5	123.2	131.0	157.0	526.7	674.2	863.2
Growth YoY	12.7%	18.6%	25.6%	27.0%	33.5%	26.5%	28.0%	28.0%
Consensus	416.7	117.2	121.0	128.4	134.6	503.4	597.2	752.2
Growth YoY	12.8%	20.3%	23.4%	24.5%	14.5%	20.8%	18.6%	26.0%
New vs. old	-1.4%	-2.7%	0.2%	-0.7%	15.5%	3.4%	13.2%	
Bernstein vs. consensus	-0.1%	-1.4%	1.8%	2.0%	16.6%	4.6%	12.9%	14.8%
Operating profit (JPY bn)								
Bernstein - Old	61.9	19.1	21.4	25.3	27.6	93.4	129.0	
Growth YoY	30.0%	8.1%	43.3%	111.9%	57.8%	50.8%	38.1%	
Margin	14.7%	16.1%	17.4%	19.2%	20.3%	18.3%	21.7%	
Bernstein - New	62.0	20.8	24.1	24.2	34.8	103.9	174.1	289.4
Growth YoY	164.6%	17.7%	61.3%	102.2%	99.0%	67.4%	67.7%	66.2%
Margin	14.9%	18.0%	19.6%	18.5%	22.2%	19.7%	25.8%	33.5%
Consensus	62.0	19.4	21.6	23.5	25.6	89.7	122.1	199.6
Growth YoY	41.1%	10.2%	44.8%	96.3%	46.3%	44.8%	36.1%	63.5%
Margin	14.9%	16.6%	17.9%	18.3%	19.0%	17.8%	20.4%	26.5%
New vs. old	0.2%	8.9%	12.6%	-4.6%	26.1%	11.2%	35.0%	
Bernstein vs. consensus	0.1%	6.8%	11.4%	3.0%	36.0%	15.8%	42.6%	44.9%
EPS (JPY)								
Bernstein - Old	151.5	48.7	54.7	64.8	70.7	238.9	330.7	
Growth YoY	34.0%	13.5%	74.4%	97.4%	-34.4%	57.7%	38.4%	
Bernstein - New	214.9	52.2	59.9	60.0	87.5	259.6	411.2	682.3
Growth YoY	240.7%	21.7%	90.8%	82.9%	-18.8%	20.8%	58.4%	65.9%
Consensus	192.6	48.0	53.1	57.4	64.0	223.9	302.8	490.6
Growth YoY	78.6%	11.9%	69.1%	74.7%	-40.6%	16.2%	35.3%	62.0%
New vs. old	41.8%	7.2%	9.4%	-7.3%	23.8%	8.7%	24.3%	
Bernstein vs. consensus	11.6%	8.7%	12.9%	4.7%	36.7%	16.0%	35.8%	39.1%

Source: Company disclosures, Bloomberg, Bernstein estimates and analysis.

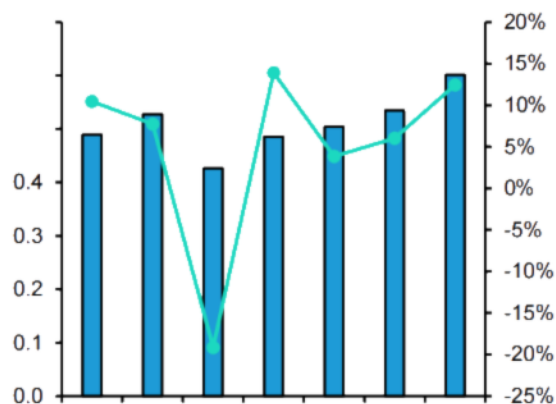
EXHIBIT 24: **Ibiden - ASP for FC Packages**

EXHIBIT 25: **Ibiden: ABF Substrate Price Hike Sensitivity (FY28/3E)**

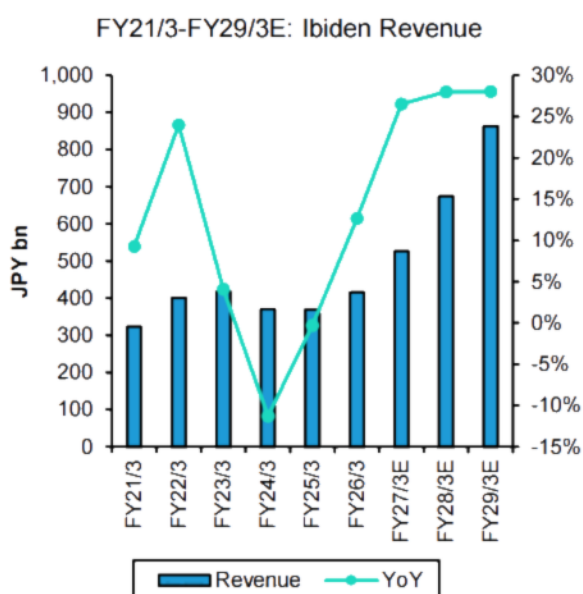
Sensitivity Analysis on FY28/3E Financials					
Base Case					
Price Hike	16.0%	11.0%	6.0%	1.0%	-4.0%
Revenue (JPYbn)	719	697	674	652	630
Vs. Base	6.6%	3.3%	0.0%	-3.3%	-6.6%
Operating Profits (JPY bn)	219	196	174	152	130
Vs. Base	25.6%	12.8%	0.0%	-12.8%	-25.6%
Operating Margin	30.4%	28.2%	25.8%	23.3%	20.6%
Vs. Base	4.6%	2.4%	0.0%	-2.5%	-5.2%

Source: Company disclosures, Bernstein estimates and analysis.

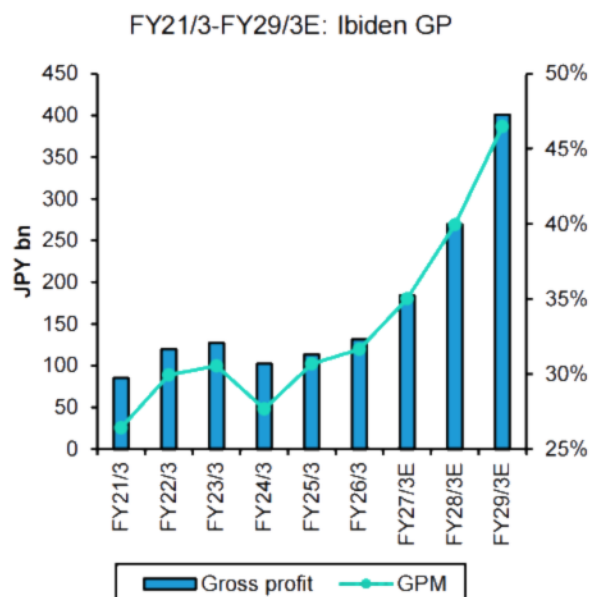
EXHIBIT 26: **Ibiden: ABF Substrate Price Hike Sensitivity (FY29/3E)**

Sensitivity Analysis on FY29/3E Financials					
Base Case					
Price Hike	22.4%	17.4%	12.4%	7.4%	2.4%
Revenue (JPYbn)	921	892	863	834	805
Vs. Base	6.7%	3.4%	0.0%	-3.4%	-6.7%
Operating Profits (JPY bn)	347	318	289	260	231
Vs. Base	20.0%	10.0%	0.0%	-10.0%	-20.0%
Operating Margin	37.7%	35.7%	33.5%	31.2%	28.7%
Vs. Base	4.2%	2.2%	0.0%	-2.3%	-4.8%

Source: Company disclosures, Bernstein estimates and analysis.

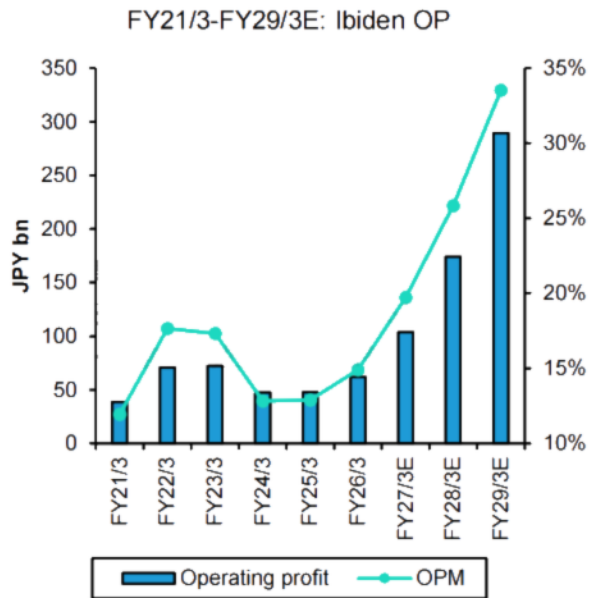
EXHIBIT 27: **FY21/3-FY28/3E: Ibiden Revenue**

Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 28: **FY21/3-FY28/3E: Ibiden Gross Profit**

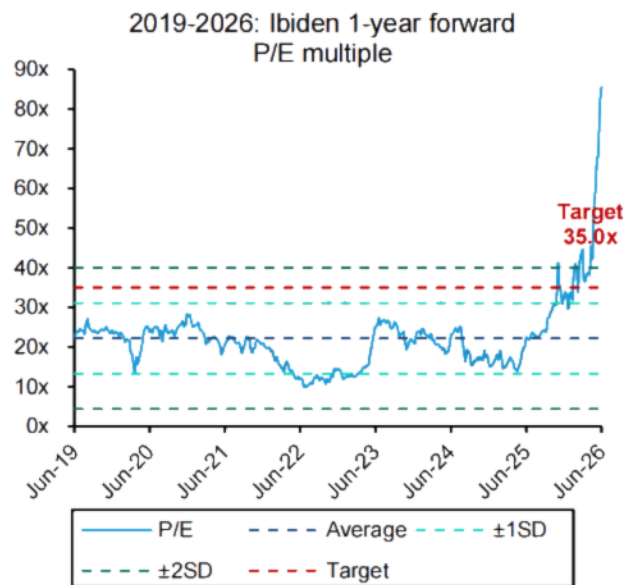
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 29: FY21/3-FY28/3E: Ibsiden Operating Profit



Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 30: Ibsiden: Forward P/E Band



Source: Bloomberg, Bernstein estimates and analysis.

APPENDIX - FINANCIAL FORECASTS

EXHIBIT 31: Ibiden: Income Statement

JPY bn	FY26/3	1Q27E	2Q27E	3Q27E	4Q27E	FY27/3E	FY28/3E	FY29/3E
Revenue contribution								
Electronics	243.3	73.9	81.9	85.6	110.3	351.7	483.2	663.0
Ceramics	82.6	19.3	19.8	20.6	21.6	81.2	91.0	96.5
Others	90.3	22.4	21.5	24.8	25.1	93.7	100.1	103.8
Revenue	416.2	115.5	123.2	131.0	157.0	526.7	674.2	863.2
OP contribution								
Electronics	45.2	17.0	20.2	19.7	30.0	86.8	155.0	269.3
Ceramics	7.6	1.6	1.9	2.2	2.5	8.2	9.1	9.6
Others	9.0	2.1	2.0	2.4	2.4	8.9	10.0	10.4
Operating profit	62.0	20.8	24.1	24.2	34.8	103.9	174.1	289.4
Revenue	416.2	115.5	123.2	131.0	157.0	526.7	674.2	863.2
Gross profit	131.7	39.0	43.2	44.0	58.2	184.4	269.4	401.2
Research and development	20.0	4.9	5.2	5.5	6.3	21.8	24.9	28.9
Sales & marketing expenses	49.6	13.4	14.0	14.3	17.1	58.7	70.3	82.9
Operating profit	62.0	20.8	24.1	24.2	34.8	103.9	174.1	289.4
EBITDA	128.3	38.6	42.9	46.2	58.3	186.0	265.1	380.4
Non-operating income	-1.2	2.0	2.0	2.0	2.0	8.0	3.4	5.7
Ordinary profit	60.8	22.8	26.1	26.2	36.8	111.9	177.5	295.1
Profit before tax	24.3	22.8	26.1	26.2	36.8	111.9	177.5	295.1
Income tax expense	26.9	6.8	7.8	7.9	11.0	33.6	53.3	88.5
Net income	-2.7	15.9	18.3	18.3	25.8	78.3	124.3	206.5
Net profit attributable to SHs	63.7	15.8	18.2	18.2	26.6	78.8	124.8	207.0
Diluted EPS (JPY)	214.9	52.2	59.9	60.0	87.5	259.6	411.2	682.3
Margins								
Gross profit	31.6%	33.7%	35.1%	33.6%	37.1%	35.0%	39.9%	46.5%
Operating profit	14.9%	18.0%	19.6%	18.5%	22.2%	19.7%	25.8%	33.5%
EBITDA	30.8%	33.4%	34.9%	35.3%	37.2%	35.3%	39.3%	44.1%
Profit before tax	5.8%	19.7%	21.2%	20.0%	23.5%	21.2%	26.3%	34.2%
Net income	15.3%	13.7%	14.8%	13.9%	16.9%	15.0%	18.5%	24.0%
Growth YoY								
Revenue	12.7%	18.6%	25.6%	27.0%	33.5%	26.5%	28.0%	28.0%
Gross profit	16.2%	11.2%	31.6%	56.6%	63.1%	40.0%	46.1%	48.9%
Operating profit	30.3%	17.7%	61.3%	102.2%	99.0%	67.4%	67.7%	66.2%
EBITDA	26.0%	31.7%	49.6%	48.8%	48.6%	45.0%	42.5%	43.5%
Profit before tax	-38.3%	275.3%	330.4%	331.6%	507.4%	361.2%	58.7%	66.2%
Net income	89.0%	24.4%	94.5%	104.0%	-18.8%	23.6%	58.4%	65.9%

Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 32: Ibiden: Balance Sheet

JPY bn	FY24/3	FY25/3	FY26/3	FY27/3E	FY28/3E	FY29/3E
Cash and cash equivalents	443.6	390.7	295.7	360.3	551.4	816.4
Inventories	65.3	67.2	71.0	85.4	101.0	115.2
Prepayments, receivables and other assets	91.9	91.7	98.9	120.7	149.8	187.1
Total current assets	600.8	549.6	465.5	566.3	802.2	1,118.7
Property, plant and equipment, net	408.8	460.1	437.7	585.9	644.9	703.9
Intangible assets	4.6	4.3	4.4	4.4	4.4	4.4
Investments and other assets	115.8	67.7	52.8	37.8	22.9	7.9
Total assets	1,130.0	1,081.7	960.4	1,194.5	1,474.4	1,835.0
Trade and other payables	107.1	112.3	80.7	97.1	114.8	131.0
Short term borrowing	90.0	90.0	15.0	15.0	15.0	15.0
Other current liabilities	161.3	125.4	126.0	276.0	426.0	576.0
Total current liabilities	358.4	327.7	221.6	388.0	555.8	722.0
Long-term debt	253.5	253.0	177.5	177.5	177.5	177.5
Other long-term liabilities	16.4	3.7	3.9	3.9	3.9	3.9
Total liabilities	628.2	584.4	403.0	569.4	737.1	903.3
Shareholders' equity	501.8	497.3	557.4	625.1	737.2	931.6
Total liabilities & shareholders' equity	1,130.0	1,081.7	960.4	1,194.5	1,474.4	1,835.0

Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 33: **Ibiden: Cash Flow Statement**

JPY bn	FY24/3	FY25/3	FY26/3	FY27/3E	FY28/3E	FY29/3E
Profit before tax	47.4	51.5	91.1	111.9	177.5	295.1
Depreciation & amortization and others	43.5	44.4	131.6	82.2	91.0	91.0
Changes in working capital	75.9	0.6	-15.7	130.2	123.0	114.7
Taxes, other adjustments	-21.6	20.3	-13.0	-33.6	-53.3	-88.5
Cash flow from operations	145.2	116.8	194.0	290.7	338.3	412.2
Capex	-85.5	-197.5	-106.1	-210.0	-150.0	-150.0
Other	8.2	33.3	53.7	14.9	14.9	14.9
Cash flow from investments	-77.3	-164.2	-52.4	-195.1	-135.1	-135.1
Cash flow from financing	67.5	-7.1	-157.5	-31.0	-12.1	-12.1
Net effect of exchange rate changes	5.7	-0.5	5.8	0.0	0.0	0.0
Net change in cash	141.2	-55.0	-10.1	64.6	191.1	265.0

Source: Company disclosures, Bernstein estimates and analysis.

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