BERNSTEIN
SOCIETE GENERALE GROUP

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Japan Semiconductors

Japan Semi: Mask Blanks - The Unsung Hero Behind Proliferating AI ASIC Designs

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We forecast the EUV mask blank market growth to accelerate to 25% CAGR over 2025-28E, driven by both increasing volume and continued ASP expansion as mask complexity rises. The proliferation of ASIC designs drives increasing usage of EUV mask blanks; every CSP and AI company is making their own GPU, CPU, and AI accelerators, and each design needs multiple sets of expensive EUV masks and mask blanks. The total # of chip designs using advanced logic nodes continue to grow at 21% CAGR (2025-2028). This is also evident from TSMC's announcement that its 2nm node has accumulated ~4x tape-outs vs. 3nm at a comparable stage, highlighting both stronger customer adoption and a broader design ecosystem. The increase of EUV layers, from low 20s in 2nm to ~30 in 1nm, also drives further volume growth. We forecast EUV mask blank volumes to grow at a 19% CAGR over 2025-28E, increasing from 17.5k units in 2025 to 30k units in 2028E. Our **Photomask industry model** is available for download ***here***.

Mask blanks ASP continues to increase with new technologies. EUV mask blanks are high complexity, high value essential material; each piece of glass is worth half a million $. Even at such price, the technology continues to evolve especially beyond 2nm. Majority of current EUV masks are binary masks, where light is either reflected or absorbed. As feature sizes shrink, interference between adjacent reflected light waves reduces pattern contrast, creating patterning challenges. To address this, the industry is beginning to adopt **phase-shift masks** (PSMs) starting from the 2nm node, and adoption doubles at 1.4nm. Compared with conventional binary EUV masks, PSMs are significantly more complex and are estimated to carry **20-30% higher ASP**. High-NA EUV adds another growth leg: High-NA requires a new generation of EUV masks with a new absorber layer material and design, higher specifications, greater complexity and higher manufacturing requirements, leading to higher ASP vs. PSMs. Looking further ahead, anamorphic High-NA EUV masks could become another step-function increase in value, with **ASP potentially more than 2x.** Driven by the upgrade to phase-shift masks and the upcoming adoption of High-NA EUV, we forecast **EUV mask blank ASP to grow at an MSD % CAGR over 2025-28E.**

Raising Hoya PT to ¥35,500 as the dominant EUV mask blank supplier. Hoya captures 70%+ share in EUV mask blanks against AGC, the duopoly in this market. Going forward, we expect Hoya to gain share in this market given its technology leadership in PSM and High-NA mask blanks, and may increase its penetration in Intel. We raise Hoya's EUV mask blank growth to 28% CAGR FY26/3-29/3E (vs. 21% previously). Total revenue is raised by 4%-5% and OP estimate by 4%-7% on Hoya over FY28/3E-FY29/3E. With an unchanged target multiple of 35X Q5-Q8 P/E, our price target is set at **¥35,500** (vs. ¥34,800 previously).

Lasertec benefits from EUV mask and mask blank inspection. Lasertec is the sole supplier of ABICS, the industry's leading mask blank inspection system, and has launched the E120 and E320 platforms to support advanced-node and future High-NA EUV requirements. In EUV patterned mask inspection, it's also the sole supplier with ACTIS, the actinic inspection tool. We continue to see major upside from Lasertec's patterned mask inspection platforms, and expect gradual upward revision of its conservative guidance.

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BERNSTEIN TICKER TABLE

			26 Aug 2026		TTM	Reported EPS				Reported P/E (x)		
Ticker	Rating	Cur	Closing Price	Price Target	Rel. Perf.	Cur	2025A	2026E	2027E	2025A	2026E	2027E
7741.JP (Hoya)	O	JPY	24,965	**35,500**	(5.5)%	JPY	744.42	**829.63**	**977.78**	33.5	30.1	25.5
OLD				34,800				832.21	966.52			
6920.JP (Lasertec)	O	JPY	34,620	54,000	86.2%	JPY	863.65	1,185.31	1,348.53	40.1	29.2	25.7
JPL			2,654.97									

PRICE TARGET CHANGE / ESTIMATE CHANGE IN BOLD

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

6920.JP base year is 2026;

Source: Bloomberg, Bernstein estimates and analysis.

INVESTMENT IMPLICATIONS

We rate Hoya **Outperform** with PT = **¥35,500**.

We rate Lasertec **Outperform** with PT = **¥54,000**.

DETAILS

EUV MASK BLANKS: HIGH BARRIER HIGH GROWTH ESSENTIAL MATERIAL

Wafer mask blanks are essential materials for the semiconductor lithography process. As technology migrated from DUV to EUV several years ago, EUV mask has been adopted. At first, it was small volume for R&D, and gradually it was shifted to mass production. Today, the EUV mask blanks market has surpassed the DUV mask blanks in size, and contributes to ~2/3 of total mask blanks market.

We forecast the EUV mask blanks market growth to accelerate to 25% CAGR from 2025-2028, driven by the increase of chip designs due to AI ASIC trend, increase of # of EUV layers in leading edge nodes, and higher penetration of higher value mask blanks. Beyond 2028, we believe the structural volume growth is to continue, and adoption of High-NA masks to become a new driver (see ASML: High-NA EUV cost deep dive - lifting PT to €2300 on rising litho intensity). Putting EUV and DUV together, we forecast the mask blanks market to grow strongly at 19% CAGR from $1.33bn in 2025 to $2.23bn in 2028 (Exhibit 1).

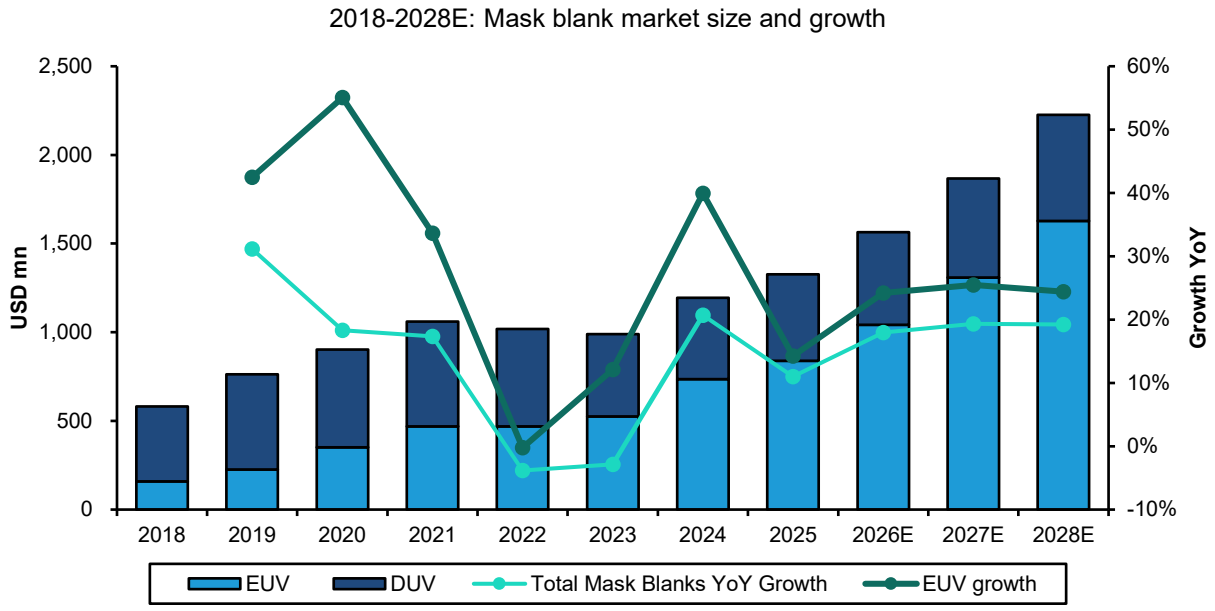
EUV mask blanks volume increases by more designs and more EUV layers

EUV mask blank volume grows proportionately with the # of chip designs. In today's world, every CSP and AI company want to develop their own chips (from GPU/AI ASIC and CPU), and a diversification in AI accelerators (from GPUs to LPUs, WSE, etc.). The total number of chip designs using advanced logic nodes continue to grow at 21% CAGR (2025-2028) for this reason (Exhibit 2). This is also evident from TSMC's announcement that its 2nm node has accumulated approximately 4x tape-outs vs. 3nm at a comparable stage, while just 6 months ago, in Dec 2025, the number was only 2x. This highlighted both stronger customer adoption and a broader design ecosystem (Exhibit 3).

In addition to that, the EUV layer count continues to increase in leading-edge process nodes as well. With the exception of TSMC's 3nm to 2nm not adding EUV layers due to the transition to GAA, the EUV layer count continues to rise, from the current low 20s to ~30 at A10 (1nm) (Exhibit 4).

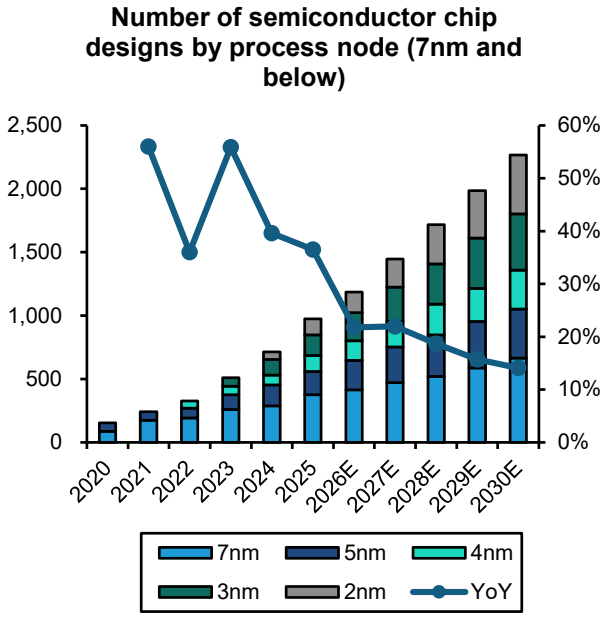
We forecast EUV mask blank volumes to grow at a 19% CAGR over 2025-28E, increasing from 17.5k units in 2025 to 30k units in 2028E, driven by both reasons above (Exhibit 5).

EXHIBIT 1: **The mask blank market totaled USD1.3mn in 2025, and is expected to grow at 19% CAGR to USD2.2mn in 2028E (or 25% CAGR for EUV mask blanks).**



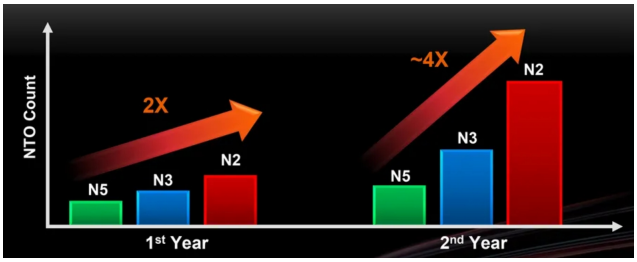
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 2: **Number of semiconductor chip designs by process node (7nm and below)**



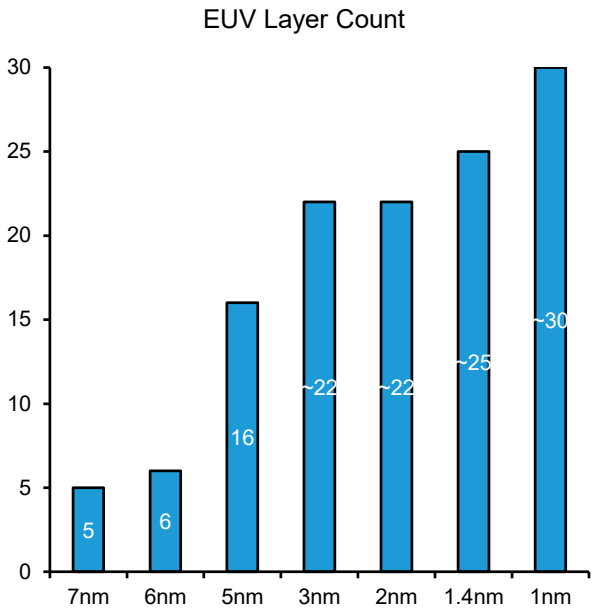
Source: IBS, Trekscend

EXHIBIT 3: **In Dec 25, TSMC's N2 tape outs was 2x N3 tape outs in year 2; by Jun 26, it became 4x of N3, suggesting an increase in leading edge chip designs**



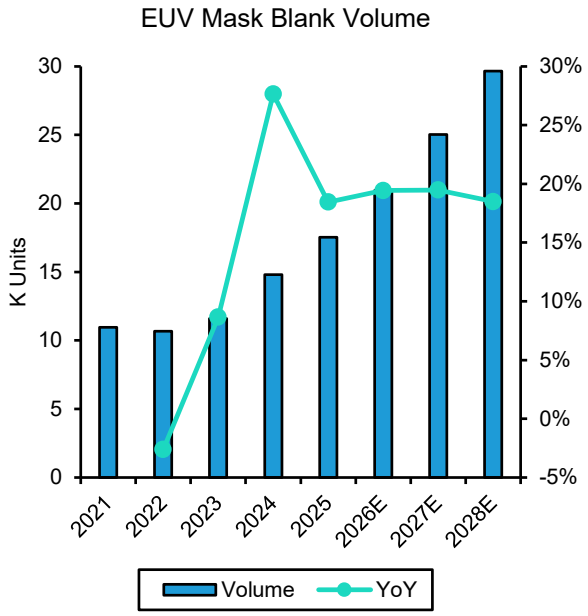
Source: TSMC

EXHIBIT 4: **EUV Mask Layer Count**



Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 5: **Market Shipment Volume for EUV Mask Blanks**



Source: Company disclosures, Bernstein estimates and analysis.

EUV MASK BLANK TECHNOLOGY CONTINUES TO MIGRATE TO HIGHER VALUE

EUV mask blank ASP uplift from phase-shift masks (PSM)

The EUV mask blanks are high value items; We calculated the ASP is almost half a million US$. This is much more expensive (100x) than the DUV mask blanks at around $500 ASP. The reason is due to much more complex design of an EUV mask blanks: Unlike DUV lithography, which relies on refractive optics (lenses), EUV systems use reflective optics (mirrors) due to the extremely short wavelength of EUV light. As a result, EUV mask blanks require a sophisticated multilayer mirror structure, consisting of roughly 50 layers of coatings designed to enable high reflectivity (Exhibit 6). The underlying principle is governed by **Bragg's Law**, where peak reflectivity occurs when partial reflections from each layer interface interfere constructively. This is governed by the layer pair thickness spacing (period $\Lambda \approx 7$ nm) matching half the wavelength of the incident light. The manufacturing complexity, stringent defect requirements, and advanced coating process make EUV mask blanks substantially more difficult and expensive to produce vs. DUV mask blanks (Exhibit 7).

The technology migration doesn't stop here, as EUV mask technology continues to evolve with leading-edge logic moves to 2nm and beyond. Before 2nm, the EUV masks are **binary masks**, where light is either reflected or absorbed. As feature sizes shrink, interference between adjacent reflected light waves reduces pattern contrast, creating patterning challenges. To address this, the industry is beginning to adopt **phase-shift masks** at the 2nm node. Phase-shift masks introduce additional phase-shift layers that alter the phase of reflected EUV light by 180 degrees, improving image contrast and pattern fidelity. Although there seems to be only few additional layers, the phase shift mask blanks are extremely difficult to make as the height of phase shift layers must be precise to nanometers in order to shift the phase properly. 2nm processes may require ~5 phase-shift layers, potentially rising to ~10 layers at the 1.4nm node (Exhibit 8).

Compared with conventional binary EUV masks, phase-shift masks are significantly more complex and are estimated to carry **ASPs that are 20-30% higher.** Importantly, phase-shift masks are already beginning to enter production alongside the ramp of 2nm manufacturing, creating a near-term tailwind for mask blank suppliers.

Driven by the upgrade to phase-shift masks and the upcoming adoption of High-NA EUV, we forecast **EUV mask blank ASPs to grow at a HSD % CAGR over 2025-28E** (Exhibit 9).

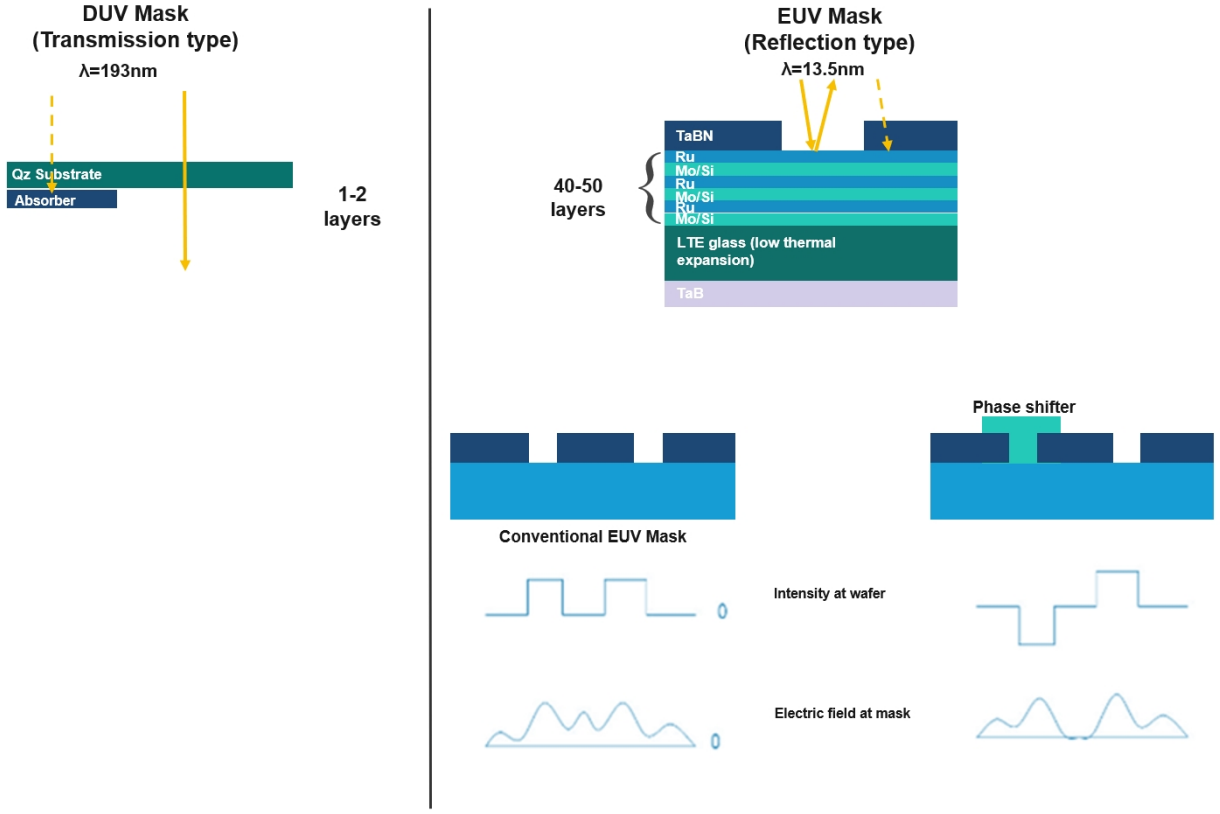
High-NA EUV further raises the complexity and ASP

As semiconductor geometries continue to shrink, deviations from an ideal mask increasingly impact the final wafer pattern. As a result, mask-related challenges such as mask 3D effects, defect control and pattern fidelity are becoming more important at advanced nodes. These challenges are expected to intensify with the introduction of High-NA EUV and future anamorphic lithography, driving tighter specifications for EUV masks and mask blanks.

Beyond phase-shift masks, the next major technology transition is expected to be High-NA EUV (0.55NA vs. 0.33NA currently), likely over 2027-29 to support DRAM and cutting edge logic nodes. By increasing numerical aperture, High-NA EUV improves resolution by roughly 70%, enabling finer features with fewer patterning steps and supporting continued logic scaling. For mask suppliers, the transition requires a **new absorb layer material and design**, as well as tighter defect control, higher mask accuracy and more sophisticated multilayer deposition processes, raising both technological barriers and product value. High-NA requires a new generation of EUV masks with higher specifications, greater complexity and higher manufacturing requirements, leading to higher ASPs vs. phase-shift masks.

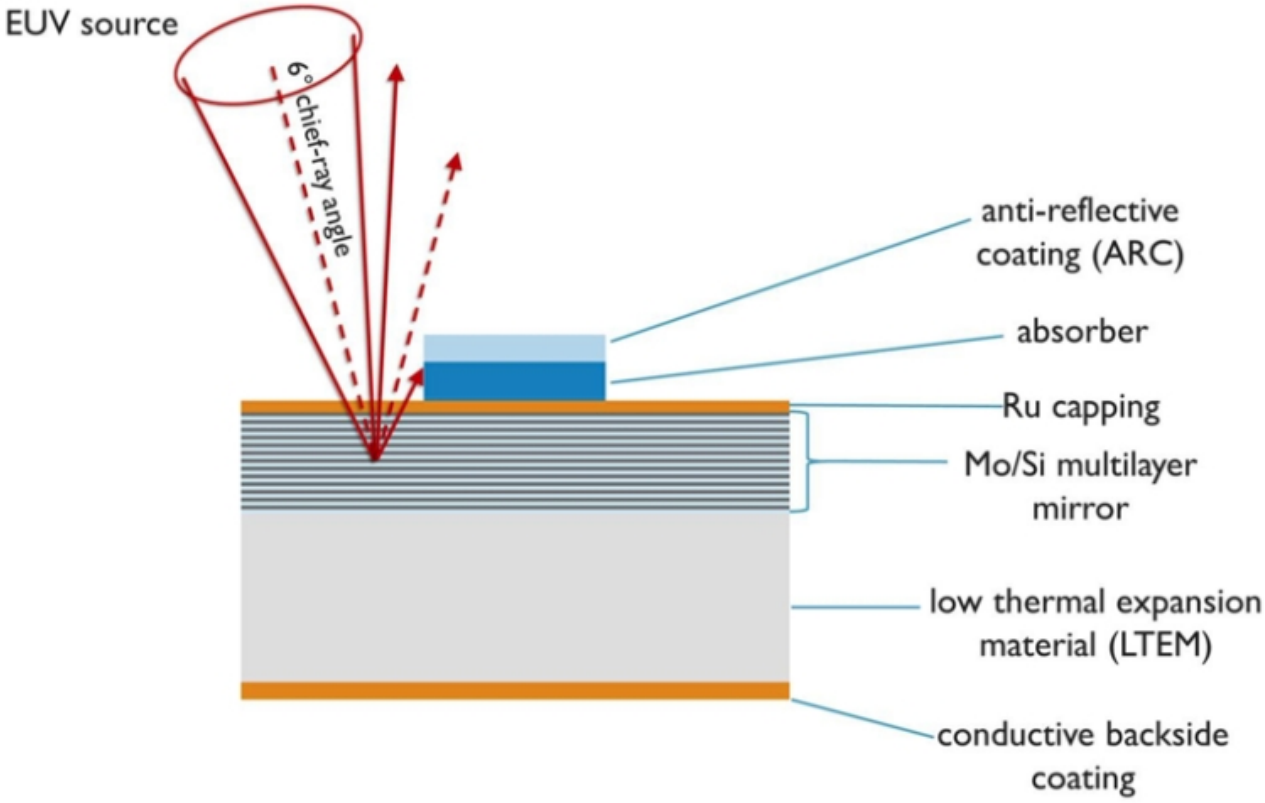
Looking further ahead, anamorphic High-NA EUV masks (those with 12x6 inch in size, vs. the current ones at 6x6 inch) could become another step-function increase in value, with **ASPs potentially more than 2x** current mask blanks**.**

EXHIBIT 6: **EUV mask is much more difficult to make than DUV mask, and future shifts to High-NA and phase-shift EUV masks will further boost the mask blank market**



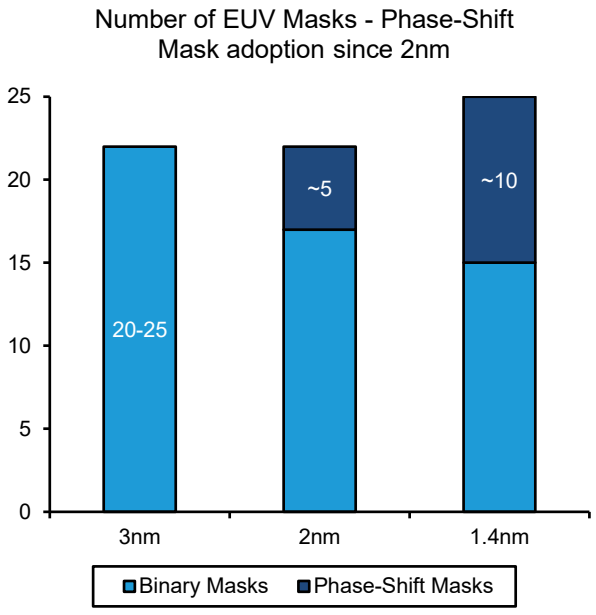
Source: Hoya, Bernstein analysis.

EXHIBIT 7: **Structure of an EUV mask**



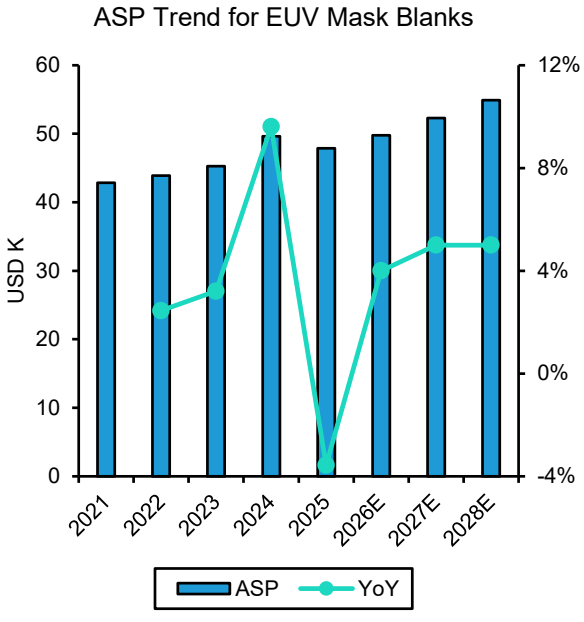
Source: Luong, V., Philipsen, V., Hendrickx, E., Opsomer, K., Detavernier, C., Laubis, C., Scholze, F., Heyns, M., "Ni-Al alloys as alternative EUV mask absorber," Appl. Sci. (8), 521 (2018). (Imec, KU Leuven, Ghent University, PTB)

EXHIBIT 8: **Number of EUV Masks - Phase-Shift Mask adoption since 2nm**



Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 9: **ASP Trend for EUV Mask Blanks**



Source: Company disclosures, Bernstein estimates and analysis.

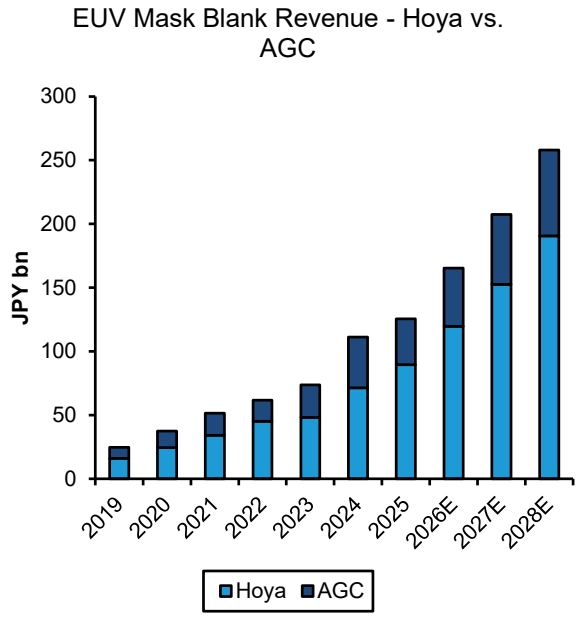
HOYA DOMINATES IN EUV MASK BLANKS

The EUV mask blanks market is a duopoly of Hoya (70%+ share) and AGC. We estimate Hoya has the lion's share at TSMC, Samsung (covered by Mark Li) and SK hynix (covered by Mark Li), while AGC (not covered) has historically been dominating at Intel (covered by Stacy A. Rasgon). However, the technology roadmap is increasingly favoring Hoya. We believe Hoya has a stronger position in next-generation technologies, including phase-shift masks and High-NA EUV masks, where manufacturing complexity rises materially. As these products become a larger portion of the market, we expect Hoya to gain share further, including at Intel. As a result, we forecast Hoya's EUV mask blank revenue to grow at a 26.2% CAGR over 2025-28E, outpacing overall market growth (Exhibit 10-Exhibit 11).

DUV mask blanks remain a positive but less important growth driver

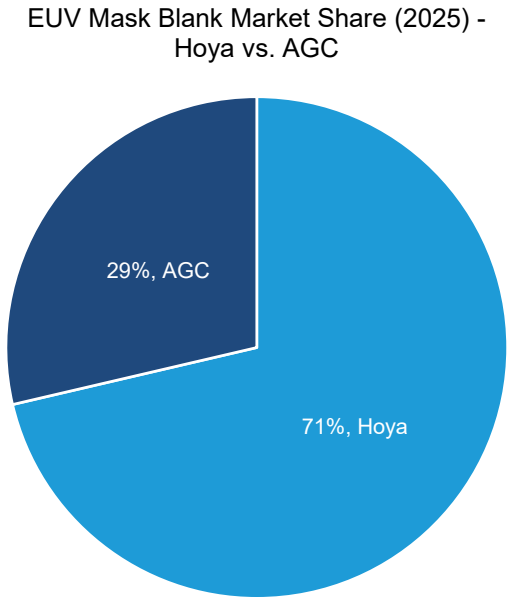
While the DUV mask blank market continues to grow, Hoya is primarily positioned to benefit from ASP expansion rather than volume growth, given its capacity constraints. We expect DUV mask blank ASPs to increase by MSD %, supported by ongoing technology upgrades and tighter industry supply. That said, DUV is becoming a smaller contributor to the growth story. With ~65% of Hoya's mask blank revenue already derived from EUV-related products, overall mask blank growth should increasingly track the faster-growing EUV market.

EXHIBIT 10: **EUV Mask Blank Revenue - Hoya vs. AGC**



Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 11: **EUV Mask Blank Market Share (2025) - Hoya vs. AGC**



Source: Company disclosures, Bernstein estimates and analysis.

RAISING HOYA'S PT TO ¥35,500

Hoya is a major beneficiary of the growing mask blanks market. Mask blanks contribute 40% of its IT business revenue and 51% of IT profit in FY26/3 (and 33% of its overall profit in FY26/3). As the mask blanks business is growing faster than other business and enjoys higher margins, we forecast that the profit contribution grows to 55% in IT segment in FY29/3E.

Hoya captures 70%+ share in EUV mask blanks against AGC, the duopoly in this market. Going forward, we expect Hoya to gain share in this market given its technology leadership in PSM and HNA mask blanks, and may increase its penetration in Intel. We raise Hoya's EUV mask blank growth to 28% CAGR FY26/3-29/3E (vs. 21% previously). Total revenue is raised by 4%-5% and OP estimate by 4%-7% on Hoya over FY28/3E-FY29/3E.

With an unchanged target multiple of 35X Q5-Q8 P/E, our price target is set at **¥35,500** (vs. ¥34,800 previously). We reiterate our **Outperform** rating on the stock.

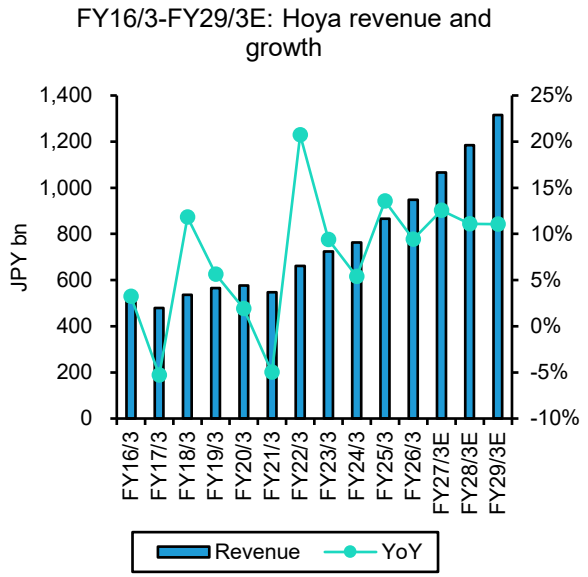
*Our updated model for Hoya can be found **here**.*

EXHIBIT 12: **Hoya: Summary of Estimate Changes**

Hoya: summary of estimate changes	FY26/3	1Q27/3	2Q27/3E	3Q27/3E	4Q27/3E	FY27/3E	FY28/3E	FY29/3E
Revenue (JPY bn)								
Bernstein - Old	**947.8**	**255.7**	**265.7**	**271.9**	**270.5**	**1,063.8**	**1,139.1**	**1,249.1**
Growth YoY	9.4%	16.0%	13.3%	11.1%	11.9%	12.2%	7.1%	9.7%
Bernstein - New			**268.4**	**270.9**	**271.8**	**1,066.8**	**1,185.0**	**1,315.9**
Growth YoY			14.5%	10.7%	9.5%	12.6%	11.1%	11.0%
Consensus			**258.6**	**265.6**	**266.9**	**1,039.0**	**1,115.6**	**1,201.3**
Growth YoY			10.3%	8.5%	7.6%	10.6%	7.4%	7.7%
New vs. old			**1.0%**	**-0.4%**	**0.5%**	**0.3%**	**4.0%**	**5.3%**
Bernstein vs. consensus			**3.8%**	**2.0%**	**1.8%**	**2.7%**	**6.2%**	**9.5%**
Operating profit (JPY bn)								
Bernstein - Old	**280.4**	**79.2**	**83.4**	**88.7**	**89.4**	**340.7**	**384.4**	**438.8**
Growth YoY	12.4%	20.1%	22.7%	21.7%	22.4%	21.5%	12.8%	14.2%
Margin	29.6%	31.0%	31.4%	32.6%	33.0%	32.0%	33.7%	35.1%
Bernstein - New			**85.7**	**88.1**	**90.1**	**343.1**	**399.6**	**467.6**
Growth YoY			26.0%	20.9%	22.4%	22.4%	16.5%	17.0%
Margin			31.9%	32.5%	33.2%	32.2%	33.7%	35.5%
Consensus			**83.2**	**87.0**	**87.7**	**337.6**	**377.7**	**418.8**
Growth YoY			22.4%	-16.4%	20.5%	17.5%	11.9%	10.9%
Margin			32.2%	32.8%	32.8%	32.5%	33.9%	34.9%
New vs. old			**2.8%**	**-0.6%**	**0.8%**	**0.7%**	**4.0%**	**6.6%**
Bernstein vs. consensus			**3.0%**	**1.2%**	**2.8%**	**1.6%**	**5.8%**	**11.7%**
EPS (JPY)								
Bernstein - Old	**744.4**	**195.6**	**201.6**	**215.8**	**219.3**	**832.2**	**966.5**	**1,080.3**
Growth YoY	28.0%	29.3%	24.5%	-20.2%	25.4%	11.8%	16.1%	11.8%
Bernstein - New			**204.2**	**211.6**	**218.2**	**829.6**	**977.8**	**1,120.4**
Growth YoY			26.1%	-21.8%	35.7%	11.4%	17.9%	14.6%
Consensus			**192.7**	**209.9**	**222.1**	**824.0**	**920.7**	**1,027.8**
Growth YoY			19.0%	-22.4%	37.9%	11.9%	11.7%	11.6%
New vs. old			**1.3%**	**-1.9%**	**-0.5%**	**-0.3%**	**1.2%**	**3.7%**
Bernstein vs. consensus			**6.0%**	**0.8%**	**-1.8%**	**0.7%**	**6.2%**	**9.0%**

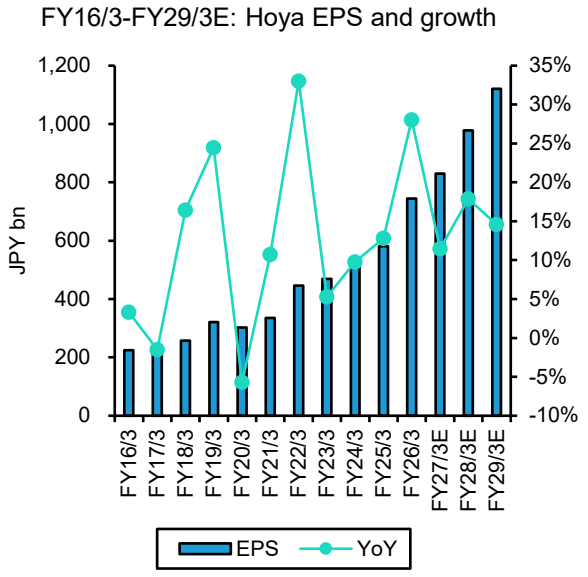
Source: Company disclosures, Bloomberg, Bernstein estimates and analysis.

EXHIBIT 13: **2015-2028E: Hoya Revenue**



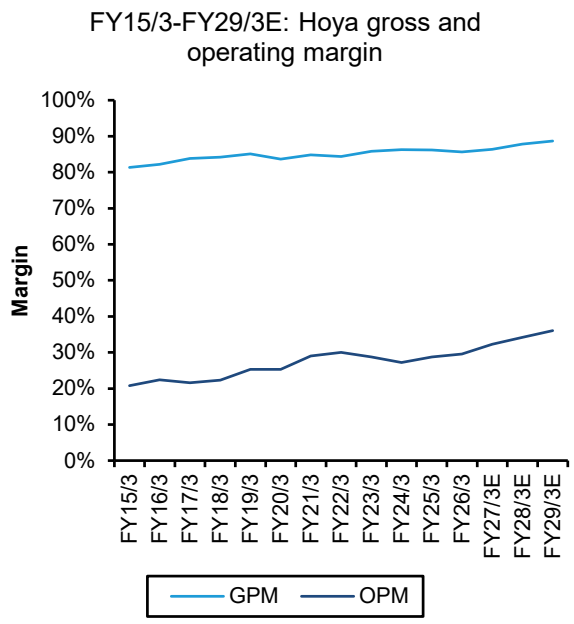
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 14: **2015-2028E: Hoya EPS**



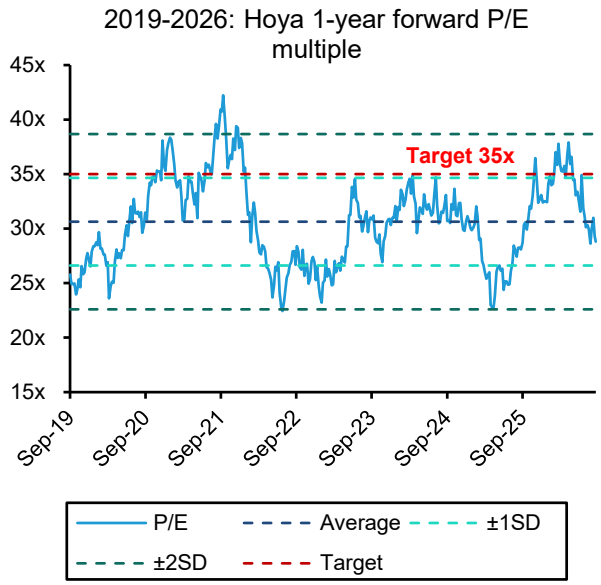
Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 15: **FY15/3-FY29/3E: Hoya Gross and Operating Margins**



Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 16: **2019-2026: Hoya 1-year forward P/E multiple**



Source: Bloomberg, Bernstein analysis.

LASERTEC ALSO BENEFITS FROM GROWING EUV MASK INSPECTION

Lasertec is the sole supplier of ABICS, the industry's leading mask blank inspection system, and has launched the E120 and E320 platforms to support advanced-node and future High-NA EUV requirements. As EUV mask complexity continues to increase, inspection requirements are also becoming more stringent, supporting long-term demand for mask blank inspection tools. That said, the revenue contribution from EUV mask inspection remains limited. We continue to see the main upside coming from ACTIS and MATRICS, the company's patterned mask inspection platforms.

APPENDIX - FINANCIAL FORECASTS

EXHIBIT 17: **Hoya: Income Statement**

JPY bn	FY26/3	1Q27/3	2Q27/3E	3Q27/3E	4Q27/3E	FY27/3E	FY28/3E	FY29/3E
Revenue contribution								
Life care	590.7	154.8	162.6	160.2	160.7	638.2	679.4	709.8
IT	354.8	101.0	105.1	110.1	110.4	426.6	503.6	604.1
Others	2.3	0.0	0.7	0.7	0.7	2.0	2.0	2.0
Revenue	**947.8**	**255.7**	**268.4**	**270.9**	**271.8**	**1,066.8**	**1,185.0**	**1,315.9**
OP contribution								
Life care	107.0	30.0	31.1	31.0	31.7	123.8	132.5	140.0
IT	186.3	55.6	56.8	59.3	60.7	232.4	277.0	337.5
Others	-12.9	-6.4	-2.2	-2.2	-2.2	-13.0	-9.8	-9.8
Operating profit	**280.4**	**79.2**	**85.7**	**88.1**	**90.1**	**343.1**	**399.6**	**467.6**
Revenue	**947.8**	**255.7**	**268.4**	**270.9**	**271.8**	**1,066.8**	**1,185.0**	**1,315.9**
Gross profit	**811.8**	**217.4**	**231.7**	**235.5**	**235.9**	**920.4**	**1,035.0**	**1,160.0**
Depreciation & amortization	**58.2**	**16.0**	**16.8**	**17.0**	**17.0**	**66.8**	**74.2**	**82.4**
Sales & marketing expenses	306.2	81.2	86.1	86.0	84.7	338.1	369.6	397.3
Research and development	36.3	9.4	9.9	10.0	9.8	39.1	43.4	48.2
Other opex	130.7	31.6	33.2	34.4	34.2	133.4	148.2	164.5
Operating profit	**280.4**	**79.2**	**85.7**	**88.1**	**90.1**	**343.1**	**399.6**	**467.6**
EBITDA	338.6	95.2	102.5	105.1	107.1	409.9	473.8	550.0
Non-operating income	47.2	6.8	1.2	1.2	1.2	10.4	17.8	10.7
Profit from ordinary operating activities	**285.2**	**82.4**	**85.7**	**88.1**	**90.1**	**346.3**	**399.6**	**467.6**
Profit before tax	327.7	86.0	86.9	89.3	91.3	353.5	417.4	478.3
Income tax expense	76.2	20.2	18.7	19.2	19.6	77.7	91.7	105.1
Net income	251.5	65.8	68.2	70.1	71.7	275.8	325.7	373.2
Net profit attributable to SHs	**253.1**	**65.8**	**68.2**	**70.1**	**71.6**	**275.7**	**324.9**	**372.3**
Diluted EPS (JPY)	**744.4**	**195.6**	**204.2**	**211.6**	**218.2**	**829.6**	**977.8**	**1,120.4**
Margins								
Gross profit	85.7%	85.0%	86.3%	86.9%	86.8%	86.3%	87.3%	88.2%
Operating profit	29.6%	31.0%	31.9%	32.5%	33.2%	32.2%	33.7%	35.5%
EBITDA	35.7%	37.2%	38.2%	38.8%	39.4%	38.4%	40.0%	41.8%
Profit before tax	34.6%	33.6%	32.4%	33.0%	33.6%	33.1%	35.2%	36.3%
Net income	26.7%	25.7%	25.4%	25.9%	26.4%	25.8%	27.4%	28.3%
Growth YoY								
Revenue	9.4%	16.0%	14.5%	10.7%	9.5%	12.6%	11.1%	11.0%
Gross profit	8.8%	14.5%	14.8%	11.6%	12.7%	13.4%	12.4%	12.1%
Operating profit	12.4%	20.1%	26.0%	20.9%	22.4%	22.4%	16.5%	17.0%
EBITDA	13.7%	21.2%	25.0%	19.4%	18.9%	21.0%	15.6%	16.1%
Profit before tax	26.0%	27.7%	20.8%	-19.4%	17.7%	7.9%	18.1%	14.6%
Net income	25.2%	26.9%	23.0%	-23.5%	32.1%	8.9%	17.9%	14.6%

Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 18: **Hoya: Balance Sheet**

JPY bn	FY24/3	FY25/3	FY26/3	FY27/3E	FY28/3E	FY29/3E
Cash and cash equivalents	525.2	534.0	574.1	496.0	658.6	845.5
Accounts receivable	152.6	177.1	209.6	225.5	250.5	278.2
Inventories	119.1	124.6	132.5	127.8	131.0	136.1
Prepayments, receivables and other assets	59.8	44.1	44.6	47.0	47.0	47.0
Total current assets	**856.6**	**879.7**	**960.8**	**896.4**	**1,087.1**	**1,306.7**
Property, plant and equipment, net	198.2	210.9	235.7	249.7	218.1	224.9
Long-term investments	48.4	51.4	11.6	11.4	11.4	11.4
Investments and other assets	100.4	92.3	92.9	96.2	96.2	96.2
Total assets	**1,203.6**	**1,234.3**	**1,300.9**	**1,253.6**	**1,412.8**	**1,639.2**
Accounts payable and accrued expenses	91.1	97.1	111.1	92.6	94.9	98.6
Debt and capital lease obligations-current	8.6	9.3	10.7	11.4	11.4	11.4
Other current liabilities	69.2	73.1	77.9	83.5	83.5	83.5
Total current liabilities	**169.0**	**179.5**	**199.7**	**187.5**	**189.8**	**193.5**
Debt and capital lease obligations-non-current	20.6	28.0	31.5	34.0	34.0	34.0
Other non-current liabilities	51.8	55.1	34.7	43.4	43.4	43.4
Total liabilities	**241.4**	**262.6**	**265.9**	**264.9**	**267.2**	**270.9**
Shareholders' equity	**962.3**	**971.6**	**1,035.0**	**988.7**	**1,145.6**	**1,368.3**
Total liabilities & shareholders' equity	**1,203.6**	**1,234.3**	**1,300.9**	**1,253.6**	**1,412.8**	**1,639.2**

Source: Company disclosures, Bernstein estimates and analysis.

EXHIBIT 19: **Hoya: Cash Flow Statement**

JPY bn	FY24/3	FY25/3	FY26/3	FY27/3E	FY28/3E	FY29/3E
Profit before tax	**181.4**	**202.1**	**253.1**	**275.7**	**324.9**	**372.3**
Depreciation & amortization and others	47.2	48.6	58.2	58.0	58.1	58.2
Changes in working capital	-0.9	-4.9	-19.2	-8.7	-25.9	-29.1
Taxes, other adjustments	15.6	-5.0	22.1	-16.7	0.0	0.0
Cash flow from operations	**222.8**	**235.1**	**278.4**	**311.0**	**357.1**	**401.4**
Capex	-41.1	-47.9	-56.6	-60.0	-65.0	-65.0
Other	3.6	14.7	49.0	4.2	0.0	0.0
Cash flow from investments	**-35.8**	**-33.2**	**-7.6**	**-55.8**	**-65.0**	**-65.0**
Cash flow from financing	**-110.9**	**-190.4**	**-261.3**	**-341.6**	**-129.6**	**-147.9**
Net effect of exchange rate changes	43.2	-2.8	63.5	6.7	0.0	0.0
Net change in cash	**119.3**	**11.6**	**9.6**	**-86.5**	**162.5**	**188.5**

Source: Company disclosures, Bernstein estimates and analysis.

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VALUATION METHODOLOGY

Hoya Corp

We set a ¥35,500 target price using a P/E multiple of 35x against our forward Q5-Q8 EPS estimate of ¥1,013.

Lasertec Corp

We set a ¥54,000 price target using a P/E multiple of 40x against our Q5-Q8 EPS estimate.

RISKS

Hoya Corp

There are a number of downside risks to our Hoya target price: (1) Slower technology migration impacting the demand of EUV mask blanks and changes in competitive landscape; (2) Changes in the demand of HDD as is a cyclical sector; (3) Unfavorable exchange rate fluctuation impacts posing a downside risk to its revenue.

Lasertec Corp

Downside risks to our Lasertec target price: (1) Slower adoption of actinic inspection by TSMC in wafer fabs, (2) Weaker-than-expected demand for EUV lithography, (3) Delay in market entry from competitors, (4) Unfavorable exchange rate fluctuation with downside risk to its revenue and margin.

RATINGS DEFINITIONS, BENCHMARKS AND DISTRIBUTION

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

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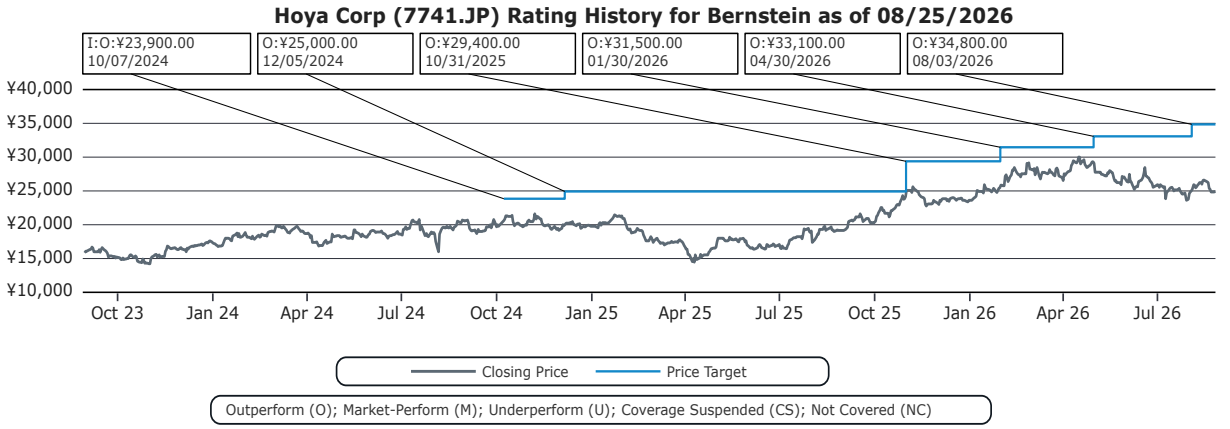

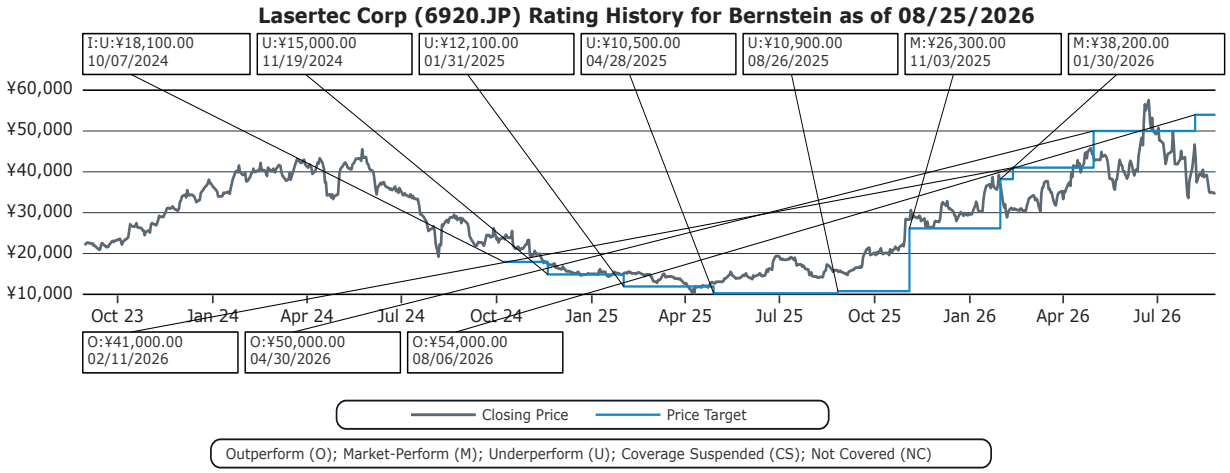

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