Morgan Stanley | RESEARCH

IDEA

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Semiconductors | North America

Microprocessors strengthening - but memory remains our favorite way to play that trend

MORGAN STANLEY & CO. LLC
Joseph Moore
Equity Analyst
Joseph.Moore@morganstanley.com +1 212 761-7516
Mason Wayne
Research Associate
Mason.Wayne@morganstanley.com +1 212 761-6012
Shane Brett
Equity Analyst
Shane.Brett@morganstanley.com +1 212 761-1022
Nicole Kozhukhov
Research Associate
Nicole.Kozhukhov@morganstanley.com +1 212 761-1636
Ella Tulchinsky
Research Associate
Ella.Tulchinsky@morganstanley.com +1 212 761-2222

WHAT'S CHANGED

Intel Corporation (INTC.O)	From	To
Price Target	$41.00	**$56.00**

SEMICONDUCTORS

North America	
Industry View	**Attractive**

Investing in CPU strength remains tricky, as the primary beneficiaries in our coverage INTC and AMD are EPS beneficiaries but P/E multiples are driven by other things; prefer MU/SNDK over INTC/AMD.

Key Takeaways

- Since September we have been talking about stronger CPUs driven by agentic, which we highlight in today's global insight.
- Should we buy Intel on that trend? Will be a good 2q, but server roadmap is weak, and we remain foundry skeptics
- Should we buy AMD on that trend? We tried that last qtr, and it didn't work; primary thesis remains MI455
- Meanwhile MU and SNDK trade at 5.7x and 11.5x our CY26, with clear upside and remain a clear beneficiary of this trend, as well as multiple other trends

It has been clear for a while that CPUs are becoming a more substantive part of the AI surge, as real time agents built by AI are running on CPU. It has been a challenging trend to assess, as supply has simultaneously been an aspect of shortages (our total CPU forecast for CY26 has come *down* in the last 6 months, mostly because of Intel's lack of supply). Our global team has landed on a longer term growth rate of ~30-40%, which seems in the ballpark - much higher than historic rates, but still below the expectations for GPU.

The obvious beneficiaries from stronger CPU, Intel and AMD, are somewhat complicated by the fact that while servers are central to earnings prospects for both, the primary thesis has not been server. Between the two, we have preference for AMD, but see significantly better risk/reward in US memory stocks at this point.

Intel is up 62% since the last earnings report, mostly amid enthusiasm for better server. That makes sense directionally, given high exposure to data center (35% of revenues), and if anything more ability to raise like-for-like server prices than AMD, which needs to balance the desire to use CPU allocations to broaden the foundation of the AI business.

That said, the Intel roadmap in server continues to have near term challenges, as the commentary around Diamond Rapids' shortcomings have come directly from the

CEO, vs. AMD's Venice, which is a clear major step forward. The notion that the company can gain share because they have fabs seems unlikely; AMD's new products are on N2, which is not particularly tight. So we model for price increases, and higher volumes, but not share gains.

Further, we would maintain the view that the broader investment hypothesis on Intel is around foundry, where we remain skeptical. We do expect some initial indications of interest, but prospects for a positive DCF foundry business remain remote, in our view. That said, we are somewhat intrigued by the Terafab relationship, and are curious to see what the economics of that partnership may look like.

We are raising INTC estimates, and PT: We are raising estimates as part of the preview, bringing our CY27 EPS up from $0.97 to $1.34; primary difference is higher like-for-like pricing given observed increases in server, but also higher server volumes for the next several quarters. We are tempering that enthusiasm given that 1) the company is likely to continue to lag on performance vs. competitor AMD through the forecast horizon, and the belief that they will gain share because of AMD supply constraints seems overly optimistic, and 2) we are offsetting with incremental weakness in the client markets. Our PT remains 42x our now higher CY27 earnings estimates of $1.34, a premium to the group based mostly on high leverage potential given low margins through the forecast horizon.

Exhibit 1: MS vs Cons

MS vs. Consensus

Figures in $ MMs	F1Q26E		F2Q26E		2026E		2027E	
	MS	Cons.	MS	Cons.	MS	Cons.	MS	Cons.
Revs.	12,699	12,433	13,258	13,122	54,286	54,498	59,607	58,634
Q/Q Change	*-7.1%*	*-9.1%*	*4.4%*	*5.5%*				
GMs	*34.9%*	34.8%	*37.8%*	35.8%	*39.1%*	36.9%	*43.4%*	40.9%
EPS	$0.03	$0.02	$0.13	$0.09	$0.68	$0.55	$1.34	$1.03

Source: Factset, Morgan Stanley

Meanwhile, AMD is likely a bigger beneficiary of server strength given product leadership, but there are near term caveats to consider. Last quarter, we named AMD in our "conviction into earnings" report expecting strong 4q results/1q outlook in server. We got good results in server, and GPU results which could have been "good enough" in a different environment, but the stock sold off sharply. Given that the significant majority of 2030 revenue targets comes from GPU, it remains our sense that GPU improvement is likely the bigger driver.

We would also point out that management has sounded somewhat conservative on gross margins beyond 1q, even with increases in server like-for-like pricing, given the importance of using CPU allocations to drive GPU adoption. While we have corroborated press reports of some AMD price increases, we are thinking that there may be some idiosyncratic discounts to drive GPU adoption.

That said, we do forecast strong market share position for AMD in general purpose CPU, and expect Venice to be another move forward. But we expect the stock to trade on upside from general purpose servers.

Given these nuances, our favorite way to play CPU strength is through memory stocks - Micron and Sandisk. Memory stocks have been held back by a somewhat mixed spot price environment, and a lack of clarity on long term agreements.

In terms of spot, we have argued that looking for a "canary in the coal mine" that might have been relevant in prior cycles is not likely to prove helpful here, given checks that in real time hyperscalers are unable to fulfill demand through at least all of 2027. Weakness in some marginal markets, for example retail aftermarket modules, can have impact to spot, but we would largely dismiss those concerns. The home built PC market has to struggle, given the premium for components at retail, but that situation has nothing to do with the shortages that we currently see in data center, which are at a very early stage.

In terms of long term agreements, it is our sense that memory suppliers are hearing some reluctance from their customers about disclosing details, but we expect to see clear evidence over the course of this year of material cash inflows, offset by deferred revenue obligations, that should make it clear that these agreements are playing out - and that they aren't the "take or pay" penalties of the past, Prepaid revenue deals would be much harder to renegotiate than penalties. Our view is not based on the contracts themselves, but based on evidence that hyperscaler customers are thinking differently.

To summarize, we are very much in agreement that agentic demand will drive higher CPU growth, but simply see memory as providing the best risk reward.

Preview to earnings

Focus KPI	Focus KPI Surprise	Likely impact to consensus EPS*
Intel Corporation INTC.O		
June Q Rev Quide	⬆ Likely upside surprise	⬆ Modest revision higher

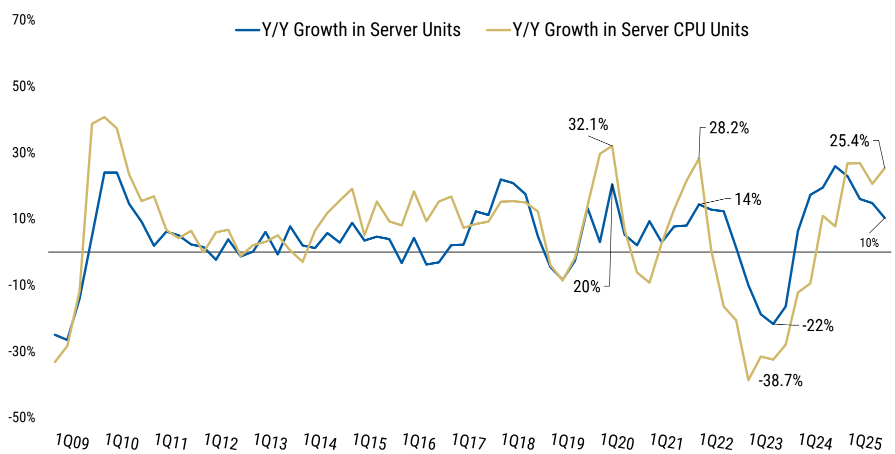
*Likely impact to consensus EPS is for the next 12 months
Source: Company data, Morgan Stanley Research

Details on Changes to Intel Estimates

Raising Intel EPS estimates by 8% for 2026, and 38% for 2027, and are now ~20% above consensus in both years. Mostly a function of a better volume, growth outlook in server. For 2026 our DCAI number comes up by $2.5bn, to $21.8bn representing roughly 30% y/y growth. That's underpinned by server unit growth of 14% and ASP growth of 20%, given estimates for server market growth in low to mid teens in 2026 (and a CPU market that should outperform in an upcycle) that estimate is likely reflect continued share loss at Intel. The level of which will depend on AMD's ability to get incremental CPU supply and Intel's manufacturing execution.

We model growth of 17.5% for DCAI in 2027 vs our prior estimate of 4.9%. Our DCAI revenue estimates are now 12%/19% above consensus for '26/27. However for the CCG segment in 2026 we lower our growth expectations from down 4% to down 8% y/y in 2026, about a $1.3bn reduction, which offsets about half of the upward revision to DCAI. Hence the much lower upward revision to 2026 vs 2027 numbers, much of the remainder is attributable to lowering our NCI estimates due to Intel's decision to buy back their stake in Intel Ireland. We had modeled $1.25bn in 2026 and $2.4bn in 2027; lowered now to $1.11bn and $1.75bn in 2027.

Exhibit 2: In upcycles the server CPU TAM should meaningfully outgrow server units

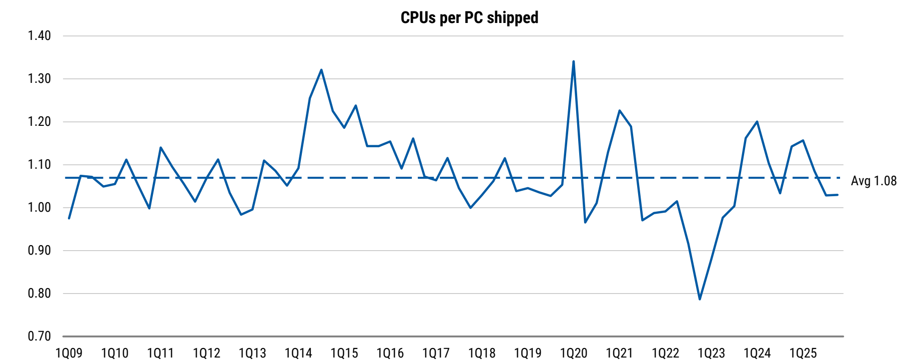


Source: Mercury Research, IDC, Morgan Stanley

But growth in server is somewhat offset by a weaker market in PCs. Due to memory pricing headwinds expectations for PC unit growth are in the range of -10% y/y in 2026, we would expect desktop to be worse as there will be some consumer trade down for lower priced notebooks as well a the DIY segment, which is also contending with GPU price hikes. AMD has also gained significant share in that space at Intel's expense, something that likely continues in 2026. We now model desktop revenue down 16% y/y for Intel in 2026 and flat in 2027, only a small reduction from our prior estimates for down 15% in 2026 and up 2% in 2027.

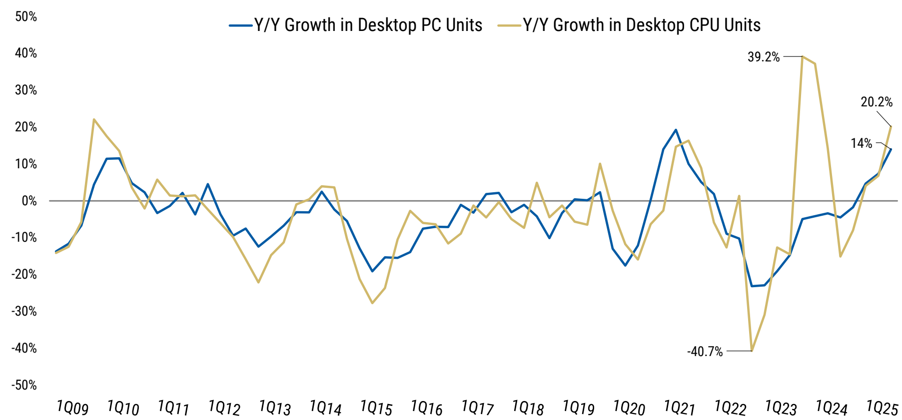
We also lower for notebook estimates slightly, with units down 11% in 2026 but offset somewhat by higher pricing as Intel shift towards server units and the ramp of Panther Lake on 18A allows them to better manage their mix and push through ASP increases to OEMs. Overall we now model the segment down 8% y/y in 2026, vs down 4% prior.

Exhibit 3: PC CPUs vs the PC TAM suggests some room for OEMs to build inventory



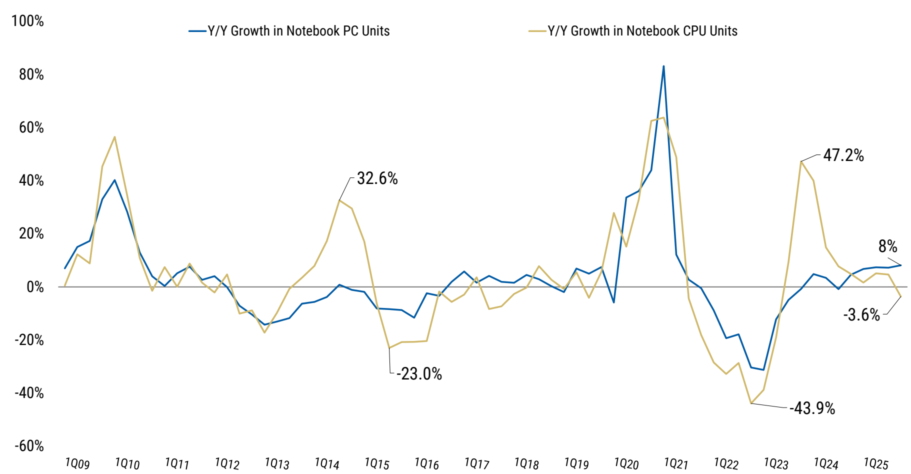
Source: Mercury Research, IDC, Morgan Stanley

Exhibit 4: Desktop CPUs only modestly tracking above growth in end market units



Source: Mercury Research, IDC, Morgan Stanley

Exhibit 5: However in notebook growth is tracking somewhat below



Source: Mercury Research, IDC, Morgan Stanley

Risk Reward – Advanced Micro Devices (AMD.O)

EW as high AI expectations leave limited room for upside

PRICE TARGET $255.00

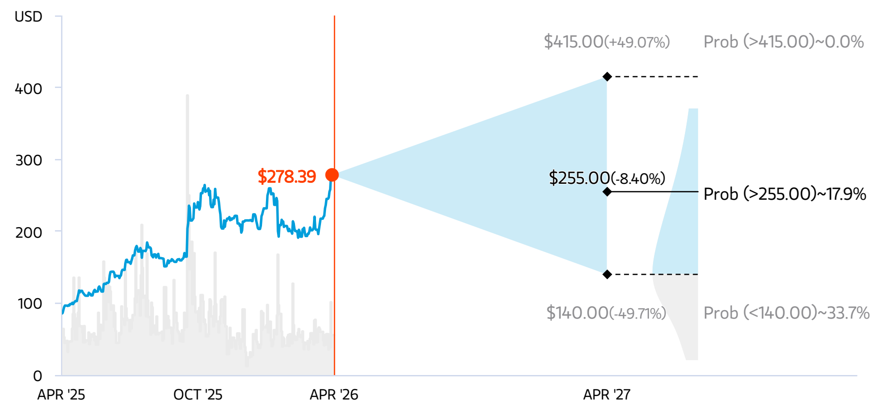
Our $255 PT for AMD equals ~27x base case FY2027e MWEPS of $9.46, reflecting further share gains at the expense of Intel, and 43% y/y growth in datacenter (~80% in AI)

Consensus Price Target Distribution $134.20 $280.52 MS PT $365.00

Mean | Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



Key: Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 17 Apr 2026. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology here

EQUAL-WEIGHT THESIS

We see continued share gains in notebook and server processors in 2026 and 2027 as AMD continues to execute on its product roadmap. AMD's AI story should gain momentum later this year with MI400 products, but performance leadership will be key. An area where AMD will need to prove they can deliver competitive ROI vs incumbents

Consensus Rating Distribution

76% Overweight
● 22% Equal-weight
2% Underweight

● MS Rating

Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

New Data Era: *Positive*
Secular Growth: *Positive*

View descriptions of Risk Rewards Themes here

BULL CASE $415.00

~37x bull case FY2025e MW EPS of $10.94

Bull case assumes further execution for AMD. In computing and graphics, AMD continues to gain material market share, while both CPU and GPU markets remain healthier than forecasted. AMD solidifies a #2 position in the datacenter GPU market

BASE CASE $255.00

~27x base case FY2027e MW EPS of $9.46

Further share gains for AMD in server compute and notebook continue to drive growth, further supported by a strengthening AI story

BEAR CASE $140.00

~20x bear case FY2027e MW EPS of $7.00

AMD loses momentum in AI, and Intel shows signs it's beginning to regain its footing in server. The multiple compresses as they are unable to drive meaningful revenues in AI markets beyond one or two customers

Risk Reward – Advanced Micro Devices (AMD.O)

KEY EARNINGS INPUTS

Drivers	2025	2026e	2027e	2028e
GAAP Revenue ($, mm)	34,639	45,430	59,078	77,579
Non-GAAP Gross Margin (%)	52.4	54.3	56.7	56.9
Non-GAAP EPS ($)	4.23	6.38	10.31	14.99
Inventory ($, mm)	7,920	13,068	13,449	16,648
DOI	165.3	218.8	184.5	178.2

INVESTMENT DRIVERS

- AMD continues to execute to its product roadmaps, enabling it to gain share on a smaller R&D budget than INTC
- AI ecosystem adoption takes time, and we see AMD's early success as more of a testament to the strength of the overall market thus far

GLOBAL REVENUE EXPOSURE

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

MS ALPHA MODELS

5/5 BEST	24 Month Horizon	5/5 MOST	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Datacenter GPU outperforms expectations, closing the gap with Nvidia
- PC and server share gain accelerates; Intel's competitive response is less impressive than expected
- Server refresh drives datacenter revenue above expectations

RISKS TO DOWNSIDE

- Intel's server CPUs in 2027 stifle AMD's momentum and allow it to regain share
- AMD loses graphics share to NVIDIA
- Datacenter GPU underperforms expectations

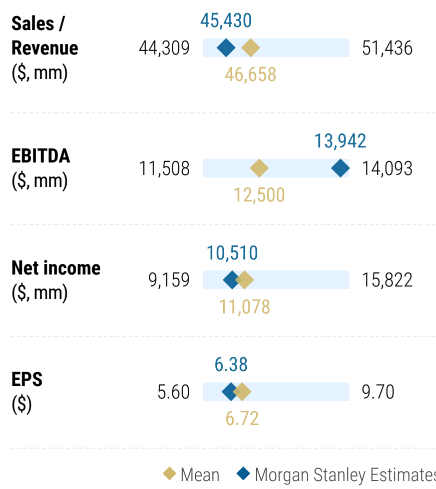
OWNERSHIP POSITIONING

Inst. Owners, % Active	44.4%
HF Sector Long/Short Ratio	2.1x
HF Sector Net Exposure	25.2%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2026e



Source: Refinitiv, Morgan Stanley Research

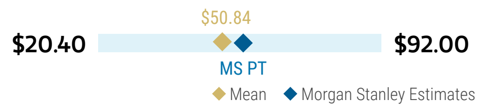
Risk Reward – Intel Corporation (INTC.O)

EW as CPU roadmap and foundry strategy remain uncertain

PRICE TARGET $56.00

~42x EPS CY2027 EPS of $1.34, 42x is above the high end of the large cap logic semi peer group, reflecting high leverage potential on numbers that are still depressed, and foundry optionality, despite our longer term skepticism

Consensus Price Target Distribution

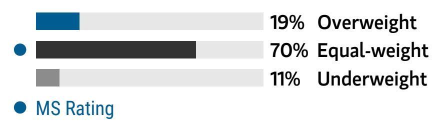


Source: Refinitiv, Morgan Stanley Research

EQUAL-WEIGHT THESIS

We are skeptical on the reasons the stock has rerated (USG involvement, Nvidia partnership) but remain convinced execution can unlock value in the core business. But for us to get more constructive we need (1) clarity on strategic direction given foundry uncertainty and (2) evidence that Intel can regain performance leadership in servers

Consensus Rating Distribution



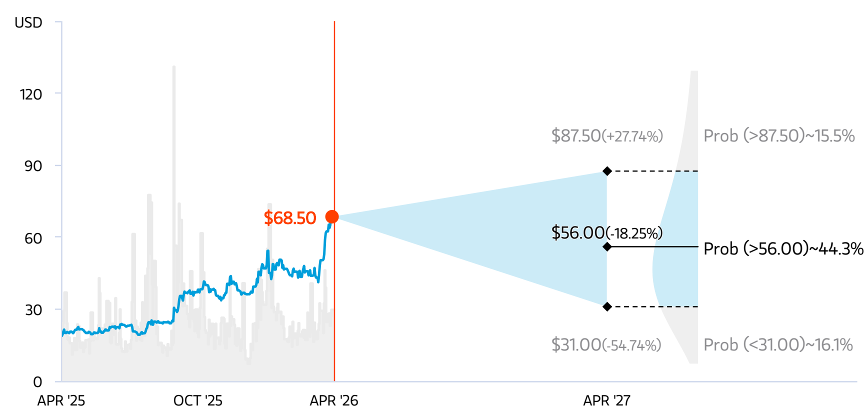
Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

New Data Era: *Positive*
Self-help: *Positive*

View descriptions of Risk Rewards Themes here

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



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BULL CASE $87.50

50x CY2027 EPS of $1.75

Intel clearly addresses issues with the pipeline and roadmap delivers competitive performance that stabilizes share

- Management executes on product roadmaps helping investor sentiment and the multiple

- Revenues reach $64bn in CY27, with 45% gross margins

BASE CASE $56.00

~42x CY2027 EPS of $1.34

Server CPU shortages prove to be manageable, and AMD continues to be in a share gain position.

Given Intel's historic roadmap issues in server; even the foundry successes could prove a distraction relative to the purer goal of making the world's best microprocessors. For us to turn more constructive we would need to see evidence that Intel can regain performance leadership in servers.

BEAR CASE $31.00

1.5x Tangible book value

PC TAM shrinks in 2026, Intel share losses continue. Data-centric revenue underwhelms due to lackluster product roadmap.

- AMD continues to take share in consumer and cloud segments, with delays in the Intel product portfolio that create risk of erosion in the previously protected enterprise space

- Multiple compresses as Intel is not able to secure meaningful foundry relationships

Risk Reward – Intel Corporation (INTC.O)

KEY EARNINGS INPUTS

Drivers	2025	2026e	2027e	2028e
GAAP Revenue ($, mm)	52,853	54,286	59,607	63,601
MW Gross Margin (%)	36.7	39.1	43.4	44.1
MW EPS ($)	(0.05)	0.21	1.01	1.19
Inventory ($, mm)	11,618	10,428	10,880	11,099
DOI	123.0	112.0	114.5	111.0

INVESTMENT DRIVERS

- PC and server units and ASPs
- AMD competition in server
- End market growth in data centers, particularly the cloud, enterprise & government, and telco segments

GLOBAL REVENUE EXPOSURE

- 10-20% Europe ex UK
- 10-20% North America
- 20-30% Mainland China
- 30-40% APAC, ex Japan, Mainland China and India

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

MS ALPHA MODELS

5/5 BEST	24 Month Horizon	5/5 MOST	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Foundry partnerships de-risk the story and further improve the multiple
- The company regains lost share in desktop and server following CPU shortages

RISKS TO DOWNSIDE

- AMD competition increasingly becomes more significant, which could lead to further share losses in processors and pressure on ASPs
- Minimal success in foundry leads to an inflated cost structure

OWNERSHIP POSITIONING

Inst. Owners, % Active	42%
HF Sector Long/Short Ratio	2.1x
HF Sector Net Exposure	25.2%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2026e

Sales / Revenue ($, mm)
54,286
Note: There are not sufficient brokers supplying consensus data for this metric

EBITDA ($, mm)
17,716
Note: There are not sufficient brokers supplying consensus data for this metric

Net income ($, mm)
(63)
Note: There are not sufficient brokers supplying consensus data for this metric

EPS ($)
0.68
Note: There are not sufficient brokers supplying consensus data for this metric

Mean ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

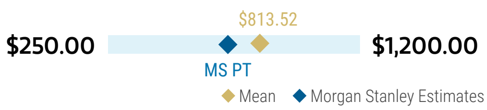
Risk Reward – SanDisk Corporation. (SNDK.O)

NAND improving quickly on the back of accelerating cloud demand

PRICE TARGET $690.00

We assume 23x through-cycle EPS of $30.00 (vs. our estimate of the trailing 9-year average of $6.33). As improving industry dynamics as well as eSSD demand lead to higher levels of profitability than we have seen over the last few years, 23x is a discount to our through-cycle multiple target for MU (25x) as the lower AI exposure is offset by historically higher FCF conversion

Consensus Price Target Distribution

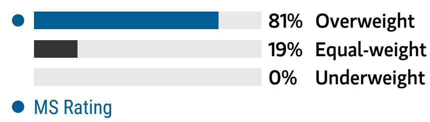


Source: Refinitiv, Morgan Stanley Research

OVERWEIGHT THESIS

AI demand is in the process of transforming the NAND market, and driving peak cycle EPS to multiples of what we have seen in the past. With still minimal new investment in capacity and evolving AI demand drivers we see a long runway for upward revisions.

Consensus Rating Distribution



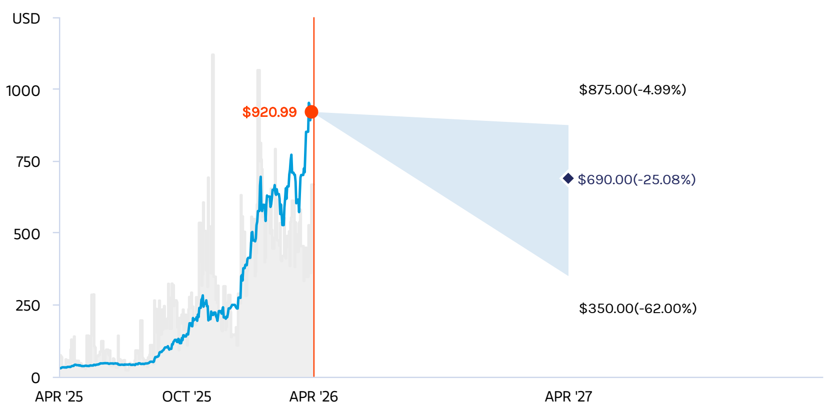
Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

Secular Growth: *Positive*

View descriptions of Risk Rewards Themes here

RISK REWARD CHART



Key: Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research

BULL CASE $875.00

25x through-cycle EPS of $35

Our bull case of $800 per share represents 25x a higher through-cycle EPS of $32.00. Here earnings sustain above to prior peak cycles ($20+ per share) and more like the current environment. As well as with more mild downturns, higher levels of profitability supporting a higher multiple.

BASE CASE $690.00

23x through-cycle EPS of $30.00

Our base case of $690 is based on 23x through-cycle EPS of $30.00 (vs our estimate of the trailing 9-year average of $6.33). As improving industry dynamics as well as eSSD demand lead to higher levels of profitability than we have seen over the last few years, 23x is a discount to our through-cycle multiple target for MU (25x) as the lack of direct AI is offset by historically higher FCF conversion.

BEAR CASE $350.00

~16x through-cycle EPS of $22.

We think Sandisk can avoid much of the pain of the last downturn ($13 per share loss), and with a better upcycle, with the multiple at the low end of the semis group where more capital-intensive cyclical companies tend to trade.

Risk Reward – SanDisk Corporation. (SNDK.O)

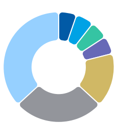
KEY EARNINGS INPUTS

Drivers	2025	2026e	2027e	2028e
GAAP Revenue ($, mm)	7,355	15,499	24,989	24,456
Non-GAAP Gross Margin (%)	30.3	60.2	73.4	70.8
Non-GAAP EPS ($)	2.74	41.09	82.73	71.92
Inventory ($, mm)	2,079	1,991	2,182	2,335
DOI	145.5	115.9	117.7	117.5

INVESTMENT DRIVERS

- Improved pricing and demand strength drive earnings growth
- Position in DC SSD market improves

GLOBAL REVENUE EXPOSURE



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MS ALPHA MODELS

5/5 **BEST**	24 Month Horizon	4/5 **MOST**	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Higher NAND content growth from edge AI applications
- Quicker eSSD penetration in the datacenter
- Sandisk's investments in advanced memory technologies such as HBF (high Bandwidth Flash) pay dividends

RISKS TO DOWNSIDE

- NAND industry growth disappoints
- Capex growth returns as industry participants invest to gain share
- Sandisk loses market share as they fail to gain traction in datacenter
- China continues to gain share

OWNERSHIP POSITIONING

Inst. Owners, % Active	53.3%
HF Sector Long/Short Ratio	2.1x
HF Sector Net Exposure	25.2%

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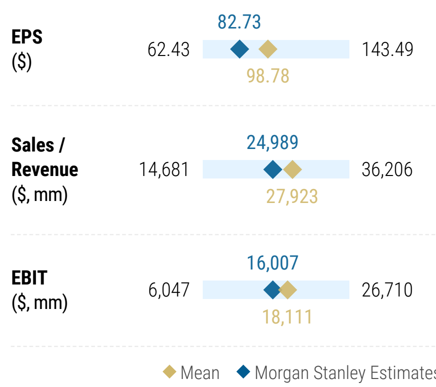
MS ESTIMATES VS. CONSENSUS

FY Jun 2027e



Source: Refinitiv, Morgan Stanley Research

Risk Reward – Micron Technology Inc. (MU.O)

See multiple quarters of upward revisions, with AI driving a higher multiple

PRICE TARGET $520.00

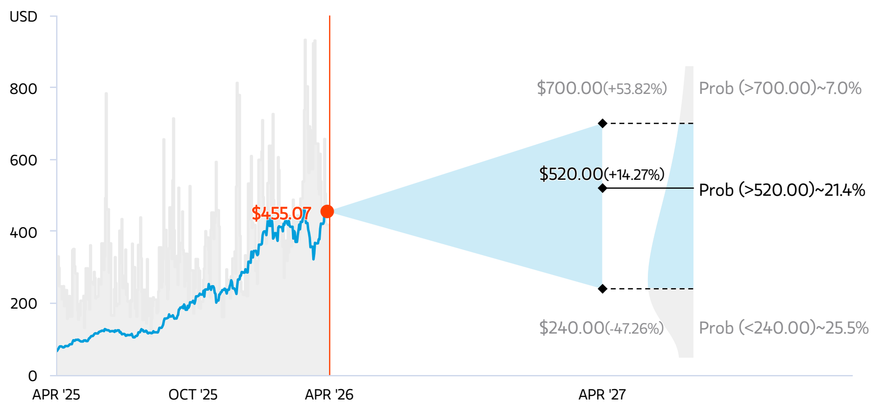
~25x through-cycle earnings of US $21.00, a premium to history reflecting new opportunities in AI, At the high end of broader semis.

Consensus Price Target Distribution $125.00 — $520.42 — MS PT — $750.00

◆ Mean ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



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Source: Refinitiv, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 17 Apr 2026. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology here

OVERWEIGHT THESIS

- DRAM fundamentals are in uncharted territory, and should continue to improve as datacenter/AI continue their upward trajectory
- Execution on AI is underappreciated, and we expect Micron to maintain share in CY26 vs the competition. Supporting margins and driving a higher multiple than prior cycles
- Cycle longevity will be key, and S/D may stay tight for 2-3 more years

Consensus Rating Distribution

93%	Overweight
5%	Equal-weight
2%	Underweight

● MS Rating

Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

New Data Era: *Positive*
Secular Growth: *Positive*

View descriptions of Risk Rewards Themes here

BULL CASE $700.00

28x through-cycle earnings of US$25.00

Gross margin improvement continues, driven by scale, AI mix, and cost improvements in new products. Pricing pressure alleviates as demand sustainably moves above supply driven by HBM's wafer intensity, a product category where MU cements performance leadership on future products.

BASE CASE $520.00

~25x through-cycle earnings of US$21.00

Our through-cycle earnings estimate of US$21.00 is a premium to average earnings over the last 8 years due mostly to AI. Our 25x multiple reflects the market's enthusiasm for the AI opportunity, and at the midpoint of the semis group

BEAR CASE $240.00

16x through-cycle earnings of US$15.00

Memory begins to enter a downturn in early 2027. As the strength attributed to demand in the early part of the year ended up being inventory build at customers. Multiple compresses severely after an underwhelming peak

Risk Reward – Micron Technology Inc. (MU.O)

KEY EARNINGS INPUTS

Drivers	2025	2026e	2027e	2028e
GAAP Revenue ($, mm)	37,378	110,489	150,620	138,790
Non Gaap Gross Margin (%)	40.9	77.8	82.3	78.8
Non-GAAP EPS ($)	8.29	59.36	81.36	72.32
Inventory ($, mm)	8,355	8,564	9,100	10,164
DOI	133.7	123.5	120.6	122.4

INVESTMENT DRIVERS

- Improved pricing and demand strength drive earnings growth

GLOBAL REVENUE EXPOSURE

0-10%	APAC, ex Japan, Mainland China and India
0-10%	India
0-10%	Japan
0-10%	MEA
0-10%	Mainland China
0-10%	UK
10-20%	Europe ex UK
40-50%	North America

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

MS ALPHA MODELS

5/5 **BEST**	24 Month Horizon	3/5 **MOST**	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Customers continue to demonstrate an appetite to take on inventory around macroeconomic uncertainty
- Additional wafer intensity of HBM further improves overall supply and demand
- MIcron's HBM share surpasses expectations

RISKS TO DOWNSIDE

- Pricing can turn quickly; a falter in end demand with inventories elevated could lead to a swift price reduction
- HBM demand falters and competition intensifies, pressuring pricing

OWNERSHIP POSITIONING

Inst. Owners, % Active	50.1%
HF Sector Long/Short Ratio	2.1x
HF Sector Net Exposure	25.2%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Oct 2026e

	Low	Morgan Stanley Estimates	Mean	High
Sales / Revenue ($, mm)	81,813	110,489	108,554	116,930
EBITDA ($, mm)	58,763	88,885	87,218	95,857
Net income ($, mm)	44,520	68,321	65,849	73,949
EPS ($)	37.54	59.36	57.30	64.37

◆ Mean ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

Risk Reward Reference links

1. View explanation of Options Probabilities methodology - Options_Probabilities_Exhibit_Link.pdf

2. View descriptions of Risk Rewards Themes - RR_Themes_Exhibit_Link.pdf

3. View explanation of regional hierarchies - GEG_Exhibit_Link.pdf

4. View explanation of Theme/Exposure methodology - ESG_Sustainable_Solutions_External_Link.pdf

5. View explanation of HERS methodology - ESG_HERS_External_Link.pdf

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Global Stock Ratings Distribution

(as of March 31, 2026)

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	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1534	42%	461	50%	30%	698	43%
Equal-weight/Hold	1573	43%	372	40%	24%	716	44%
Not-Rated/Hold	4	0%	1	0%	25%	1	0%
Underweight/Sell	568	15%	89	10%	16%	209	13%
Total	3,679		923			1624	

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

Analyst Stock Ratings

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

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

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

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

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

Analyst Industry Views

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

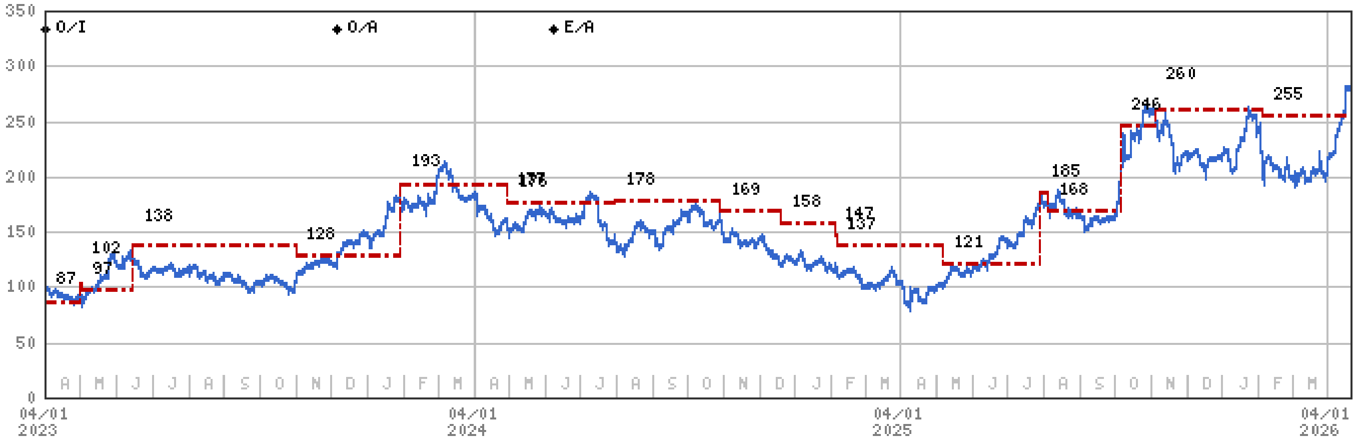
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

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

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

Stock Price, Price Target and Rating History (See Rating Definitions)

Advanced Micro Devices (AMD.O) - As of 04/20/26 GMT in USD
Industry : Semiconductors



Stock Rating History: 4/1/21 : NA/I; 4/7/21 : NA/I; 6/22/22 : O/I; 12/7/23 : O/A; 6/9/24 : E/A

Price Target History: 3/10/21 : NA; 4/7/21 : NA; 6/22/22 : 103; 8/1/22 : 101; 8/3/22 : 102; 9/23/22 : 95; 10/6/22 : 86; 10/31/22 : 77; 1/31/23 : 87; 5/1/23 : 102; 5/2/23 : 97; 6/15/23 : 138; 11/1/23 : 128; 1/29/24 : 193; 4/29/24 : 177; 4/30/24 : 176; 7/30/24 : 178; 10/29/24 : 169; 12/19/24 : 158; 2/3/25 : 147; 2/5/25 : 137; 5/7/25 : 121; 7/29/25 : 185; 8/5/25 : 168; 10/6/25 : 246; 11/4/25 : 260; 2/4/26 : 255

Source: Morgan Stanley Research   Date Format : MM/DD/YY   Price Target   No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst)   Stock Price (Covered by Current Analyst)
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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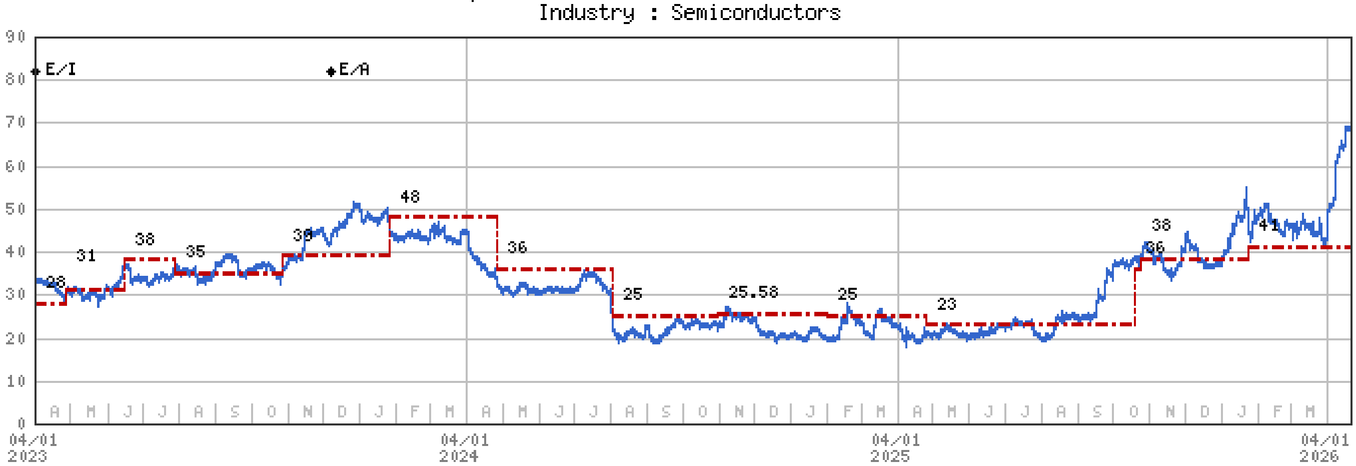
Intel Corporation (INTC.O) - As of 04/20/26 GMT in USD
Industry : Semiconductors



Stock Rating History: 4/1/21 : O/I; 10/22/21 : E/I; 3/3/22 : U/I; 2/22/23 : E/I; 12/7/23 : E/A

Price Target History: 1/22/21 : 72; 7/23/21 : 70; 10/5/21 : 67; 10/22/21 : 55; 3/3/22 : 47; 4/28/22 : 46; 7/28/22 : 36; 10/27/22 : 29.5; 2/22/23 : 28; 4/27/23 : 31; 6/15/23 : 38; 7/28/23 : 35; 10/27/23 : 39; 1/26/24 : 48; 4/26/24 : 36; 8/2/24 : 25; 10/31/24 : 25.58; 1/31/25 : 25; 4/25/25 : 23; 10/20/25 : 36; 10/24/25 : 38; 1/23/26 : 41

Source: Morgan Stanley Research   Date Format : MM/DD/YY   Price Target   No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst)   Stock Price (Covered by Current Analyst)
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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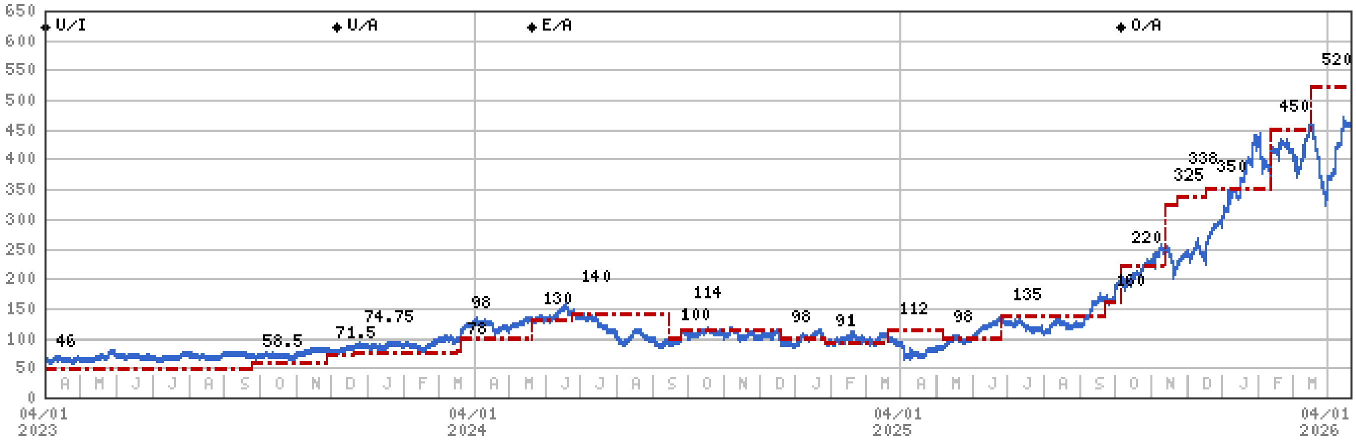
Micron Technology Inc. (MU.O) - As of 04/20/26 GMT in USD
Industry : Semiconductors



Stock Rating History: 4/1/21 : O/I; 8/12/21 : E/I; 7/21/22 : U/I; 12/7/23 : U/A; 5/20/24 : E/A; 10/6/25 : O/A

Price Target History: 3/1/21 : 105; 8/12/21 : 75; 12/20/21 : 77; 3/29/22 : 83; 6/21/22 : 56; 9/30/22 : 49; 12/21/22 : 46; 9/24/23 : 58.5; 11/27/23 : 71.5; 12/20/23 : 74.75; 3/18/24 : 78; 3/21/24 : 98; 5/20/24 : 130; 6/23/24 : 140; 9/15/24 : 100; 9/26/24 : 114; 12/19/24 : 98; 1/27/25 : 91; 3/21/25 : 112; 5/7/25 : 98; 6/26/25 : 135; 9/22/25 : 160; 10/6/25 : 220; 11/12/25 : 325; 11/23/25 : 338; 12/17/25 : 350; 2/10/26 : 450; 3/18/26 : 520

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) Stock Price (Covered by Current Analyst)
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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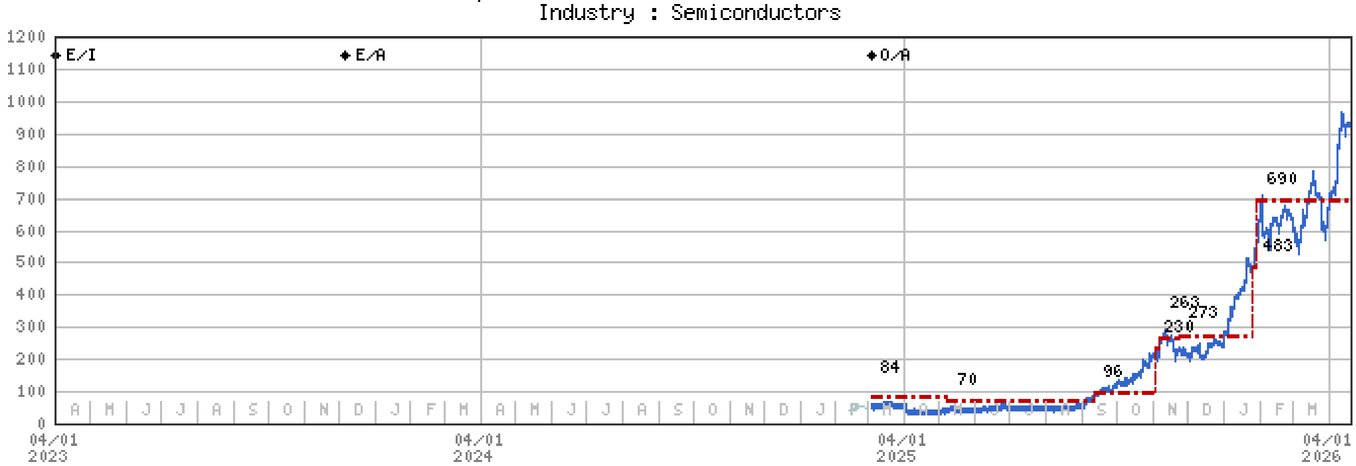
SanDisk Corporation. (SNDK.O) - As of 04/20/26 GMT in USD
Industry : Semiconductors



Stock Rating History: 4/1/21 : E/I; 12/7/23 : E/A; 3/3/25 : O/A

Price Target History: 3/3/25 : 84; 5/7/25 : 70; 9/11/25 : 96; 11/2/25 : 230; 11/7/25 : 263; 11/23/25 : 273; 1/26/26 : 483; 1/29/26 : 690

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) Stock Price (Covered by Current Analyst)
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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INDUSTRY COVERAGE: Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (04/17/2026)
Joseph Moore		
Advanced Micro Devices (AMD.O)	E (06/09/2024)	$278.39

Aeva Technologies Inc (AEVA.O)	E (07/19/2021)	$15.73
Allegro Microsystems Inc (ALGM.O)	O (02/13/2026)	$40.00
Ambarella Inc (AMBA.O)	O (03/29/2016)	$58.23
Amkor Technology Inc (AMKR.O)	E (11/08/2023)	$67.37
Analog Devices Inc. (ADI.O)	O (11/16/2023)	$371.45
Astera Labs Inc (ALAB.O)	O (05/11/2025)	$174.05
Broadcom Inc. (AVGO.O)	O (06/09/2024)	$406.54
GlobalFoundries Inc (GFS.O)	E (10/28/2024)	$54.75
Intel Corporation (INTC.O)	E (02/22/2023)	$68.50
IonQ Inc (IONQ.N)	E (04/25/2023)	$46.09
Marvell Technology Group Ltd (MRVL.O)	E (09/14/2015)	$139.69
Microchip Technology Inc. (MCHP.O)	E (07/10/2024)	$78.76
Micron Technology Inc. (MU.O)	O (10/06/2025)	$455.07
Navitas Semiconductor Corp (NVTS.O)	U (04/06/2025)	$12.32
NVIDIA Corp. (NVDA.O)	O (03/16/2023)	$201.68
NXP Semiconductor NV (NXPI.O)	O (02/11/2025)	$216.03
ON Semiconductor Corp. (ON.O)	E (05/11/2025)	$83.01
Qorvo Inc (QRVO.O)	E (10/28/2025)	$81.90
Qualcomm Inc. (QCOM.O)	U (02/10/2026)	$136.20
SanDisk Corporation. (SNDK.O)	O (03/03/2025)	$920.99
Semtech Corp. (SMTC.O)	E (04/06/2025)	$107.71
Silicon Laboratories Inc. (SLAB.O)	E (01/19/2021)	$212.89
Skyworks Solutions Inc (SWKS.O)	E (11/28/2018)	$58.99
Texas Instruments (TXN.O)	U (04/13/2020)	$229.82
Wolfspeed, INC (WOLF.N)	NR (04/06/2025)	$25.56
Lee Simpson		
Arm Holdings plc (ARM.O)	E (04/07/2026)	$166.73
Cadence Design Systems Inc (CDNS.O)	O (02/14/2024)	$311.03
Synopsys Inc. (SNPS.O)	E (02/27/2026)	$449.58

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* Historical prices are not split adjusted.