

U.S. Semiconductors & Semiconductor Capital Equipment

NVDA's Vision Coming to Life: \$2T and Counting

When tracking AI capacity additions over the LTM, AI TAMs don't seem so outlandish anymore and NVDA looks like the most interesting name in our group.

When Jensen first forecast a \$1T industry by the end of the decade, we admittedly balked. With the wave of announcements that have come over the last 6-9mo, we now estimate over \$2T of planned spend at ~40GW of power in total. Within that, we attribute ~65-70% to compute & networking with more deals likely in the pipeline, which starts to make the updated guidance of \$3-4T look much more real. Given the variation of data available for each project, we used both the conversion of 1GW=\$50-60B of total spend and used the more recent 1M GPU per 2GW associated with the OpenAI deal announced last week. When summed, this equates to \$1.5T of compute & networking spend and 19M GPUs, which we acknowledge isn't perfectly pro-forma. We also acknowledge that some of these dollars will go towards custom silicon but in the tracked announcements thus far there is little reference to any specific programs. We introduce an AI capacity tracker that aggregates announced compute deployments, power, and chips that we will update real time and offer to clients. We see this as a positive for all accelerator names (AVGO + AMD) but we see this largely flowing into the NVDA P&L over the next 5+ years, moving numbers materially higher and making this the most attractive name in our space. We move our price target to \$240.

See our tracker below our colleagues' commentary. Please reach out if you would like to receive this in excel.

NVDA: Quarterly and Annual EPS (USD)

	2025	2026			2027			Change y/y	
FY Jan	Actual	Old	New	Cons	Old	New	Cons	2026	2027
Q1	0.61A	0.81A	0.81A	0.96A	1.53E	1.53E	1.47E	33%	89%
Q2	0.68A	1.05A	1.05A	1.05A	1.66E	1.66E	1.55E	54%	58%
Q3	0.81A	1.24E	1.24E	1.24E	1.80E	1.80E	1.63E	53%	45%
Q4	0.89A	1.42E	1.42E	1.41E	1.94E	1.94E	1.72E	60%	37%
Year	3.00A	4.52E	4.52E	4.51E	6.93E	6.93E	6.39E	51%	53%
P/E	59.1		39.2			25.5			

Consensus numbers are from Bloomberg received on 24-Sep-2025; 12:50 GMT
Source: Barclays Research

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Please see analyst certifications and important disclosures beginning on page 8.

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NVDA

OVERWEIGHT

Unchanged

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Equipment

NEUTRAL

Unchanged

Price Target

USD 240.00

raised 20% from USD 200.00

Price (24-Sep-25)

USD 176.97

Potential Upside/Downside

+35.6%

Source: Bloomberg, Barclays Research

Market Cap (USD mn)

4300371

Shares Outstanding (mn)

24300.00

Free Float (%)

96.10

52 Wk Avg Daily Volume (mn)

232.4

Dividend Yield (%)

0.02

Return on Equity TTM (%)

109.42

Current BVPS (USD)

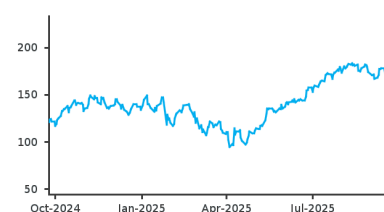
4.11

Source: Bloomberg

Price Performance

Exchange-Nasdaq

52 Week range

USD 184.55-86.62


Source: IDC

[Link to Barclays Live for interactive charting](#)
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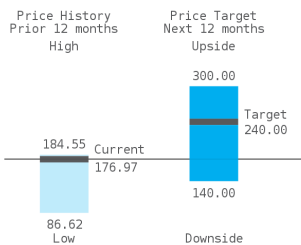
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U.S. Semiconductors & Semiconductor Capital Equipment

NEUTRAL

NVIDIA Corp. (NVDA)

OVERWEIGHT

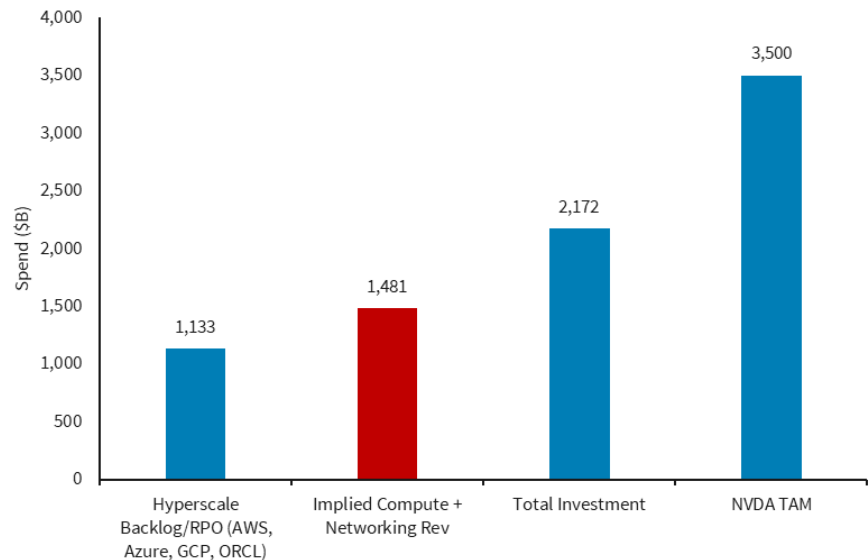
Income statement (\$mn)	2025A	2026E	2027E	2028E	CAGR	Price (24-Sep-2025)	USD 176.97
Revenue	130,497	205,780	290,276	N/A	N/A	Price Target	USD 240.00
EBITDA (adj)	88,652	133,062	202,014	N/A	N/A	Why OVERWEIGHT? We are OW as the company has long-term sustainable growth led by a large lead in GPUs for AI in DC, with further Edge opportunities (Autos, robots, etc.) and a competitive moat around a large portion of the market.	
EBIT (adj)	86,788	130,447	199,342	N/A	N/A		
Pre-tax income (adj)	88,338	132,440	201,442	N/A	N/A		
Net income (adj)	74,266	110,625	167,197	N/A	N/A		
EPS (adj) (\$)	3.00	4.52	6.93	N/A	N/A		
Diluted shares (mn)	24,805	24,492	24,122	N/A	N/A		
DPS (\$)	0.03	0.04	0.04	N/A	N/A		
Margin and return data	2025A	2026E	2027E	2028E	Average	Upside case	USD 300.00
EBITDA (adj) margin (%)	67.9	64.7	69.6	N/A	67.4	Upside case Our upside case of \$300 is based upon 38x our upside CY26E non-GAAP EPS of \$8.00, which assumes larger TAM for AI in the DC, higher Networking attach, and higher GMs.	
EBIT (adj) margin (%)	66.5	63.4	68.7	N/A	66.2		
Pre-tax (adj) margin (%)	67.7	64.4	69.4	N/A	67.2		
Net (adj) margin (%)	56.9	53.8	57.6	N/A	56.1		
ROA (%)	113.0	99.1	94.3	N/A	102.2		
ROE (%)	172.8	139.5	122.3	N/A	144.9	Downside case Our downside case of \$140 is based upon 23x our downside CY26E non-GAAP EPS of \$6.00, which assumes a correction of AI spending in the DC, a slower Auto ramp and pricing/share pressure.	
Balance sheet and cash flow (\$mn)	2025A	2026E	2027E	2028E	CAGR		
Tangible fixed assets	6,283	11,005	13,533	N/A	N/A	Upside/Downside scenarios 	
Intangible fixed assets	5,188	5,755	5,755	N/A	N/A		
Cash and equivalents	43,210	92,236	186,294	N/A	N/A		
Total assets	111,601	177,217	286,010	N/A	N/A		
Short and long-term debt	8,463	8,466	8,466	N/A	N/A		
Other long-term liabilities	4,245	6,055	6,055	N/A	N/A		
Total liabilities	32,274	40,543	42,163	N/A	N/A		
Net debt/(funds)	-34,747	-83,770	-177,828	N/A	N/A		
Shareholders' equity	79,327	136,674	243,846	N/A	N/A		
Change in working capital	28,365	53,025	104,161	N/A	N/A		
Cash flow from operations	64,091	105,608	157,615	N/A	N/A		
Capital expenditure	-3,236	-6,321	-5,200	N/A	N/A		
Free cash flow	60,855	99,287	152,415	N/A	N/A		

Note: FY End Jan

Source: Company data, Bloomberg, Barclays Research

In Figure 1 below, we show how estimated compute and networking revenue already dwarfs hyperscaler RPO and the total announced programs are already trending towards the 2030 NVDA TAM.

FIGURE 1. Implied Compute and Networking Revenue Already Overtakes Hyperscaler RPO



Note: Hyperscale backlog/RPO as of CQ2 25; NVDA TAM is midpoint of \$3-4T range
Source: Barclays Research, Company Reports

U.S. Internet

When we compare these numbers to cloud/AI capex, it's very clear that numbers need to move higher. Consensus shows 22% growth in 2026E and 12% in 2027E for the 4 major hyperscalers (AMZN, MSFT, GOOGL, ORCL) plus META. These estimates have been creeping higher with each quarter for the past three years, and we expect more of the same on the back of OpenAI's recent announcements around Stargate expansion and the Nvidia funding. Perhaps a better proxy for the coming AI wave is the growth rate for the 4 major hyperscalers' backlog. This figure was trending in the 30% range for the past year and popped to 86% coming off of this last quarter (crossing to north of \$1T for the first time ever), mostly a result of ORCL's backlog spike. In terms of AI adoption, ChatGPT message volumes are up 482% Y/Y in June 2025 and users (WAU) are up 250%+ per recent disclosures, a decent proxy for overall usage of AI (see: ["How We Are Using AI Three Years In"](#)).

IT Hardware and Communications Equipment

The surge in compute demand is cascading across the hardware ecosystem, with switching and EMS players poised to benefit the most. Cloud capex spend has moved up significantly with our model estimating over 20% Y/Y growth for 2026 following over 50% growth in 2024 and 2025. As demand for advanced backend networks solution has skyrocketed, switching vendor ANET has emerged as a winner here and we expect that to continue. In addition, CLS is a dominant whitebox player and counts GOOG, AWS and META as major customers, with OpenAI entering on the compute side. The AI theme creates a tailwind for the EMS space given the need for outsourcing liquid cooling, optical transceivers manufacturing, and services such as rack assembly in the data center. Although this is a positive, we note EMS companies have high customer concentration risk. As for server, overall revenues move higher for companies like DELL and SMCI, but earnings growth is limited given the low-margin nature of the business.

U.S. Software

From a software perspective, the hyperscalers serve as Nvidia's largest customers in this AI buildout, and the feasibility of this production is of the utmost importance for the hundreds of billions of dollars of compute expected to be spent in the coming years. Microsoft, Oracle, and CoreWeave, among others, underpin the vast levels of investment being seen today with the large AI training clusters built on top of the data center infrastructure they provide. Incredible demand here is represented by the hundreds of billions of dollars of AI-related RPO contracted with these vendors (see table above), leading to raised top-line expectations and higher valuation multiples. Now, these vendors need to deliver on the AI infrastructure capacity to fill these contracts, which will serve as a critical aspect of the investment cases for these companies. Over time, this impact will broaden as more workloads move to inference, with software application vendors (among others) needing to successfully implement GenAI workloads into their offerings to deliver the end-user value that justifies all the investment.

Thematic Investing

Whoever wins the energy race likely wins the AI race. From our thematic perspective, there are already signs of an emerging power wall that could slow data center development, as we outlined in [Powering AI: Bring Your Own Power \('BYOP'\) as AI Party Continues - Data Center Insights v3.0](#). According to [DC Byte](#), global data center capacity under construction has plateaued over the past year despite a growing pipeline of projects due to power constraints and permitting issues. [CBRE](#) recently reported that data center capacity under construction in primary North American markets fell in 1H25 vs. 2H24 due to limited powered land availability and elevated build costs. Meta's new electricity use disclosure has raised the question of whether or not some of Meta's data center projects are behind schedule amid reports that Meta is using tents to temporarily house servers, as detailed in [Powering AI: Meta's energy disclosure signals no slowing down](#). Furthermore, policy makers and regulators are increasingly pushing for data centers to bring their own power (e.g., Texas Senate Bill 6, West Virginia House Bill 2014) to help alleviate grid strain. There is also a growing list of data centers being powered by grid-independent microgrids, including xAI's Colossus 1 and 2 in Tennessee and Meta's 1-GW Prometheus data center in Ohio, due to a lack of grid power. We also worry that a lack of skilled labor, especially electricians, could weigh on data center development, as we outlined in [Will Electrician Shortage Stunt the Digital & Energy Transitions?](#). We compile ~150 companies exposed to the 'Powering AI' theme across various tech, industrial, and energy subcategories in [Powering AI: Insights across Economics, Securitized Credit, Industrials, Tech & Energy](#).

U.S. Power & Utilities

Power Sector Is Just Trying to Keep Up: Regulated New Build Coming... Still Need Higher Power Prices to Incentivize Spec Gen. With the power industry overall operating in a flat to declining load environment the last two decades, the shift to a mid single-digit power demand outlook across the US is creating a structural shift in the utility business model. We have noticed ~400 GWs of reported backlog across our coverage universe of opportunity vs. ~70 GWs of signed contracts for time to power in the early 2030s, whereas we continue to see companies pursue an all-of-the-above approach – pushing out coal retirements, remaining committed to current renewables spending, and accelerating as much gas CCGT / CT build as possible into the late decade. As much of this is in the regulated environment, it's subject to regulatory approvals, unique tariff structures, siting, and processes which lead to longer lead times. For jurisdictions that are long capacity with tariff frameworks already in place, we expect to see more of a near-term acceleration as industry CapEx prospects are clearly higher than anticipated out of 2Q conference calls. This includes **ETR** (Meta Hyperion), **WEC** (OpenAI/ORCL/MSFT/Vantage DC), **SO** (QTS). We are also expecting meaningful announcements in the Midwest which could benefit **EVRG**, **AEE**, **NI**, and **LNT** among other names. Valuations for the regulated sector are not demanding at a 16.5x consensus FY27E P/E, a 15% discount to the S&P 500. We

are worried that due to the current high cost of new gas generation (\$2,000–2,500/kw at \$80–\$105/MWh LCOE) as new capacity additions trail baseload demand ramps in the late decade, power prices could see upward revisions. Comparing to strip prices in the mid \$40–55/MWh range across the country, we do not see executives pursuing speculative generation anytime soon, which is disincentivizing new build. We have seen non-regulated DC momentum in both ERCOT and PJM; our preferred ways to play this theme are **NRG** & **TLN**.

FIGURE 2. AI Investment Tracker

Date Announced	Companies/Entity	Location	\$B Investment	Notes	Timeframe	GPU / System Type	Millions of GPUs	Power (GW)
Total			\$2,172.1				18.6	40.6
12/4/2024	Meta		<u>\$110.0</u>			NVDA	1.3	2.00
1/7/2025	Amazon	US	\$11.0				<u>0.09</u>	<u>0.20</u>
1/21/2025	OpenAI, Softbank, Oracle (Stargate)	US	\$500.0		4 years		<u>4.50</u>	<u>10.00</u>
2/10/2025	Fluidstack	France	<u>\$55.0</u>	Expand beyond 1GW starting in 2028	2026		0.5	1.00
2/11/2025	DataVolt	Saudi Arabia	<u>\$82.5</u>		300MW by 2028		<u>0.68</u>	1.50
2/20/2025	South Korea/ Fir Hills Inc	South Korea	<u>\$165.0</u>		2028		<u>1.35</u>	3.00
3/19/2025	BlackRock, Microsoft, MGX, NVDA, xAI	Global	\$100.0				<u>0.82</u>	<u>1.82</u>
5/14/2025	CoreWeave	US	\$21.5		2025		<u>0.18</u>	<u>0.39</u>
5/15/2025	G42, OpenAI, Oracle, NVDA, Cisco, SoftBank	Abu Dhabi	<u>\$275.0</u>			NVDA GB300	<u>2.25</u>	5.00
5/19/2025	NVDA, MGX, Bpifrance SACA, Mistral AI, Bouygues SA	France	<u>\$77.0</u>		First phase operational 2028		<u>0.63</u>	1.40
5/24/2025	South Korea	South Korea	\$1.0		2025		0.01	<u>0.02</u>
5/24/2025	Oracle	US	\$40.0	(included in OAI/Softbank/ORCL \$500B announcement)		NVDA GB200	0.4	<u>0.73</u>
5/30/2025	Google	US	\$7.0		First building completed in 2026		<u>0.06</u>	<u>0.13</u>
6/4/2025	Amazon	US	\$10.0				<u>0.08</u>	<u>0.18</u>
6/5/2025	Amazon	Taiwan	\$5.0				<u>0.04</u>	<u>0.09</u>

Note: blue/underlines represent Barclays estimates, see below for methodology
Source: Barclays Research, Company Reports

FIGURE 3. AI Investment Tracker Cont.

Date Announced	Companies/Entity	Location	\$B Investment	Notes	Timeframe	GPU / System Type	Millions of GPUs	Power (GW)
6/9/2025	UK	UK	\$1.4		2030		<u>0.01</u>	<u>0.02</u>
6/9/2025	NVDA, Nscale	UK	<u>\$1.2</u>		by end of 2026	NVDA Blackwell GPU	0.01	<u>0.02</u>
6/9/2025	NVDA, Nebius	UK	<u>\$0.5</u>		by end of 2026	NVDA Blackwell GPU	0.004	<u>0.01</u>
6/9/2025	Amazon	US	\$20.0				<u>0.16</u>	<u>0.36</u>
6/14/2025	Amazon	Australia	\$13.0		2025-2029		<u>0.11</u>	<u>0.24</u>
6/26/2025	Ark Data Centres, Nebius	UK	\$10.0			NVDA B300	0.009	<u>0.18</u>
7/15/2025	CoreWeave	US	\$6.0				<u>0.14</u>	0.30
7/15/2025	Oracle	Netherlands	\$1.0		5 years		<u>0.01</u>	<u>0.02</u>
8/14/2025	Google	US	\$9.0	over next 2 years			<u>0.07</u>	<u>0.16</u>
8/27/2025	Google	US	\$9.0				<u>0.07</u>	<u>0.16</u>
9/16/2025	NVDA, Nscale	Global	<u>\$44.0</u>			NVDA Grace Blackwell GPUs	0.36	<u>0.80</u>
9/16/2025	NVDA, Nscale, CoreWeave, Microsoft, OpenAI	UK	\$15.0	"+ cost of GPUs"	end of 2026	NVDA Blackwell GPUs	0.12	<u>0.27</u>
9/16/2025	BlackRock, Digital Gravity Partners, NVDA	UK	\$0.7				<u>0.01</u>	<u>0.01</u>
9/16/2025	Microsoft	UK	\$30.0	(includes \$15B of above investment with Nscale)	2025-2028	NVDA GPUs	<u>0.25</u>	<u>0.55</u>
9/16/2025	Google	UK	\$6.8		2 years		<u>0.06</u>	<u>0.12</u>
9/18/2025	Microsoft	US	<u>\$49.5</u>		2027	GB200	<u>0.41</u>	0.90
9/22/2025	NVDA, OpenAI		<u>\$550.0</u>		first GW deployed in 2H26	NVDA Vera Rubin	4.5	10.00

Note: blue/underlines represent Barclays estimates, see below for methodology
Source: Barclays Research, Company Reports

Methodology

In the table above, where we do not have data for either investment size, number of GPUs, or GW, we use the following two ratios per recent NVDA commentary:

- 1GW = \$50-60B total cost.
- 10GW = 4-5M GPUs.

For example, if we have the GW of the project, we use the 1GW = \$50-60B ratio and 10GW=4-5M GPUs ratio to calculate the \$ investment and the GPUs required. If we do not have the GW (which is the case for many projects), we simply divide the \$ investment by \$55B to calculate GWs and then GPUs. We note that this likely leads to a lower / more conservative figure if the \$ investment is only part of the total cost (i.e. only part of the compute/construction costs). We also don't have a conversion ratio for custom silicon but will add this data as deals come out.

Changes to Estimates

Our price target of \$240 is based upon 35x our CY26E non-GAAP EPS of \$6.93. Our price target would be 30x an implied EPS of ~\$7.85 if you add in \$35B in revenue for the recent OpenAI announcement.

Our prior price target of \$200 was based upon 29x our CY26E non-GAAP EPS of \$6.93. We raise our multiple to reflect potential upside from continued AI momentum and DC builds.

Analyst(s) Certification(s):

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