

US Semiconductors

State of the union: the “bubble” ... in AI doom headlines, we stay alert but positive

Industry Overview

What to watch .. when you expect AI bubble to burst?

Large-scale infrastructure rollouts inherently carry some risk of overbuilding. It's challenging to perfectly match capacity to future demand, and there's often an arms race to build and protect existing moats (search, social, e-commerce) or establish new revenue streams. We discuss four potential metrics to gauge whether the current AI buildout is a “bubble”: 1) AI capacity utilization (anecdotal), 2) Cloud capex intentions, 3) Valuations of AI stock leaders, and 4) Financing environment, especially US Fed rates direction. Overall, we remain vigilant but optimistic on AI chip leaders NVDA (top pick), AVGO, AMD, CRDO and their semicap, memory, optical and foundry peers.

Different this time: no dark fiber, no rate rise, val'n lower

Four key differences between ongoing AI build, and prior dotcom bust: 1) No “dark compute.” High utilization of AI computing power (CSP constantly seeking capacity, high util of 3+ yr. old NVDA Hopper) structurally different from the underused “dark fiber” of the Mar'2000 dotcom bust. AI adoption frictionless as no last mile upgrades required, OpenAI will reach 1bn users in ~3yrs compared to 8/13yrs. required by Facebook/Google. 2) Capex intentions of top CSP solidly on track, supported by operating cash flows (25% capex intensity vs. by 30%+ average cash flow from operations) unlike debt-driven financing during dotcom days. 3) US Fed more likely to lower than raise rates, recall prior market crashes (incl. Mar'00, Global Fin Crisis) coincided with rising interest-rates. 4) Valuation of top AI leader NVDA (29x CY26 PE, well below EPS growth-rate) starkly different from 100x+ PE of dotcom leaders (such as Cisco, Nortel, Yahoo).

Power, space considerations will likely limit overbuild

Practical considerations (power, data center space, water) will be a bigger limiter to AI infra build than the desires/prognostications of disruptive AI companies, in our view. None of the AI chip stocks are reflecting anything even remotely close to the \$3-4 Trillion in NVDA's CY30 data center TAM (CY30 consensus/our sales for NVDA are only 10-20% of that TAM at <\$400bn/\$600bn), much less the \$12 Trillion+ implied by OpenAI's more ambitious 250 GW by CY2033 rollout ambitions. While OpenAI is the most disruptive of AI customers, we believe it will be one of multiple CSP ecosystems that are all vying for the same resources – power, space, water, and often leading-edge chips and developer attention – which in our opinion will likely pace AI buildouts.

China risk: lowest AI, medium analog, highest EDA/WFE

There is yet another bout of raised tariff tensions between US and China. China is threatening to use its dominance in rare-earth materials, though Taiwan's Economic Affairs ministry minimized the risk level, given it sources rare-earth inputs ex-China. Separately commentary from the US White House also seemed to downplay the 100% tariff rate threat, though final rates remain unknown. Re direct relative risk: 1) Lowest (<10% China exposure) for AI vendors NVDA (prior restrictions), smartphone RF and connectivity chips (low China Android), 2) Medium (China 20-25% of sales) for analog vendors (less leading-edge exposure), and 3) Highest for EDA/IP (China 10%-14% though high impact if completely restricted) and semicap vendors (China 30% of sales.)

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Refer to important disclosures on page 4 to 8. Analyst Certification on page 3. Price Objective Basis/Risk on page 2.

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Timestamp: 13 October 2025 03:45AM EDT

13 October 2025

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Glossary

AMD: Advanced Micro Devices
AVGO: Broadcom
bn: billion
CRDO: Credo
CSP: Cloud Service Provider
EDA: Electronic Design Automation
GW: Gigawatts
IP: Intellectual Property
NVDA: Nvidia
RF: Radio Frequency
TAM: Total Addressable Market
Tn: Trillion
Val'n: Valuation
WFE: Wafer Fab Equipment
Yr: Year

Exhibit 1: Highest relative upside potential for NVDA (top pick), followed by AVGO, CRDO and AMD, highest exposure to AI buildout

QRQ ratings for key stocks mentioned in this report

	QRQ	Price	PO	Upside
NVDA	C-1-7	\$183.16	\$235.00	28.3%
AVGO	C-1-7	\$324.63	\$400.00	23.2%
AMD	C-1-9	\$214.90	\$250.00	16.3%
CRDO	C-1-9	\$138.83	\$165.00	18.9%

Source: Bloomberg, BofA Global Research Estimates

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Price objective basis & risk

Advanced Micro Devices, Inc (AMD)

Our \$250 PO is based on 33x our 2027E non-GAAP EPS, which is towards the middle of AMD's historical 14x-55x range, justified by AI growth and CPU share gains offset by slower growth in cyclical embedded/console markets.

Downside risks: 1) Execution on first rack-scale product (MI400 Series), 2) Timing/Magnitude of Middle East AI Projects, 3) Lumpy nature of consumer and enterprise spending that could create delays in acceptance and success of new products, 4) High reliance on one outsourced manufacturing partner, 5) Maturity of current game console cycle.

Upside risks are greater share gain potential in the PC and server processor market against competitors

Broadcom Inc (AVGO)

Our \$400 price objective for Broadcom is based on 37x CY26E P/E, at the upper end of its 10x-38x historical range, still in-line with 1x-2x PEG framework for high-growth compute vendors, and justified given double-digit EPS growth and best-in-semis profitability, FCF generation, and returns.

Downside risks to our price objective are: 1) semiconductor cycle risks, including sensitivity to fundamental or sentiment shifts in AI theme, 2) high exposure to Apple and Google with potential design out risks, 3) competitive risks in networking, smartphone, storage, enterprise software markets, including rising NVDA competition in networking, 4) frequent acquirer of assets, which increases financial and integration risks, and 5) large \$60bn net-debt.

Credo Technology (CRDO)

Our \$165 PO is based on 70x CY26E P/E, within the range of similar high-growth compute/optical semiconductor peers trading 21x-78x and also in-line with 1x-2x PEG framework.

Downside risks to our PO are: (1) increased competition from large cap peers Marvell/Broadcom, (2) delayed adoption of active electrical cable (AEC) products, (3) downturn in spending across hyperscalers and network operators, (4) Inability for CRDO to scale and meet demand from products beginning to ramp, (5) supply chain headwinds limiting available capacity.

Upside risks are: (1) unforeseen, accelerated AEC engagements, (2) sudden rebound in



ramp for higher margin optical DSP products, (3) prudent opex/margin management to support EPS in downcycle.

NVIDIA Corporation (NVDA)

Our \$235 PO is based on 37x CY26E PE ex cash, in the middle of NVDA's historical 25x-56x forward year PE range, which we believe is justified by NVDA's leading share in fast-growing AI compute/networking markets, offset by lumpiness in global AI projects, cyclical gaming market, and concerns around access to power.

Downside risks are: 1) weakness in consumer driven gaming market, 2) Competition with major public firms, internal cloud projects and other private companies in AI and accelerated computing markets, 3) Larger than expected impact from restrictions on compute shipments to China, or additional restrictions placed on activity in the region, 4) Lumpy and unpredictable sales in new enterprise, data center, and autos markets, 5) Potential for decelerating capital returns, and 5) Enhanced government scrutiny of NVDA's dominant market position in AI chips.

Analyst Certification

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US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster

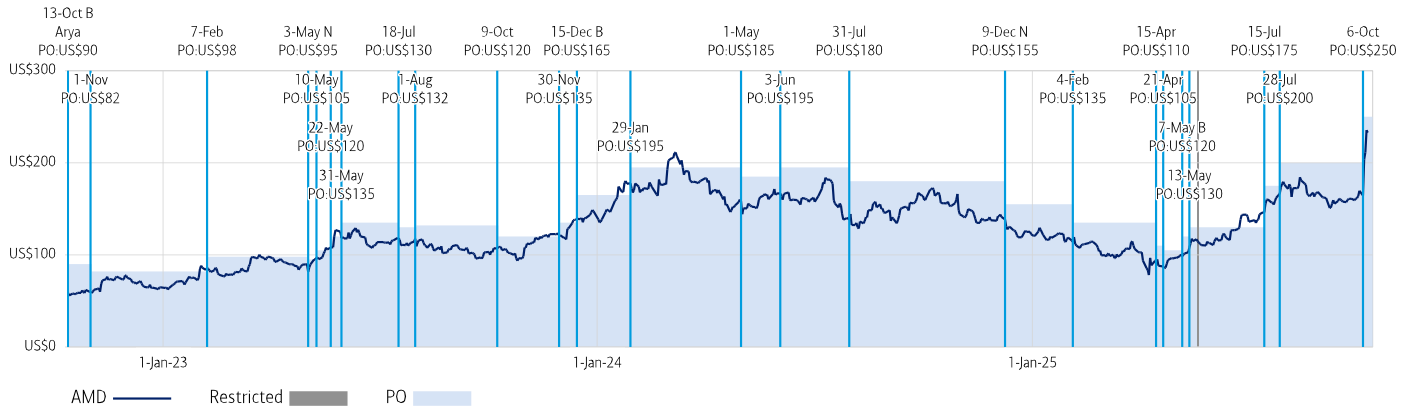
Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Advanced Energy Industries	AEIS	AEIS US	Duksan Jang
	Advanced Micro Devices, Inc	AMD	AMD US	Vivek Arya
	Allegro Microsystems	ALGM	ALGM US	Vivek Arya
	Analog Devices Inc.	ADI	ADI US	Vivek Arya
	Arm Holdings	ARM	ARM US	Vivek Arya
	Broadcom Inc	AVGO	AVGO US	Vivek Arya
	Cadence	CDNS	CDNS US	Vivek Arya
	Credo Technology	CRDO	CRDO US	Vivek Arya
	KLA Corporation	KLAC	KLAC US	Vivek Arya
	Lam Research Corp.	LRCX	LRCX US	Vivek Arya
	M/A-Com	MTSI	MTSI US	Vivek Arya
	MKS Instruments	MKSI	MKSI US	Michael Mani
	Nova	NVMI	NVMI US	Michael Mani
	NVIDIA Corporation	NVDA	NVDA US	Vivek Arya
	NXP Semiconductors NV	NXPI	NXPI US	Vivek Arya
NEUTRAL				
	Ambarella	AMBA	AMBA US	Vivek Arya
	Ambiq Micro, Inc.	AMBQ	AMBQ US	Vivek Arya
	Applied Materials, Inc.	AMAT	AMAT US	Vivek Arya
	Astera Labs Inc	ALAB	ALAB US	Vivek Arya
	Axcelis Technologies	ACLS	ACLS US	Duksan Jang
	Camtek	CAMT	CAMT US	Michael Mani
	Coherent Corp	COHR	COHR US	Vivek Arya
	GlobalFoundries	GFS	GFS US	Vivek Arya
	Intel	INTC	INTC US	Vivek Arya
	Lumentum Holdings	LITE	LITE US	Vivek Arya
	Marvell Technology, Inc.	MRVL	MRVL US	Vivek Arya
	Microchip	MCHP	MCHP US	Vivek Arya
	Micron Technology, Inc	MU	MU US	Vivek Arya
	onsemi	ON	ON US	Vivek Arya
	Texas Instruments Inc.	TXN	TXN US	Vivek Arya
UNDERPERFORM				
	Lattice Semiconductor	LSCC	LSCC US	Duksan Jang
	Qorvo Inc.	QRVO	QRVO US	Vivek Arya
	Skyworks Solutions, Inc.	SWKS	SWKS US	Vivek Arya
	Synopsys	SNPS	SNPS US	Vivek Arya
	Teradyne	TER	TER US	Vivek Arya
RSTR				
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya

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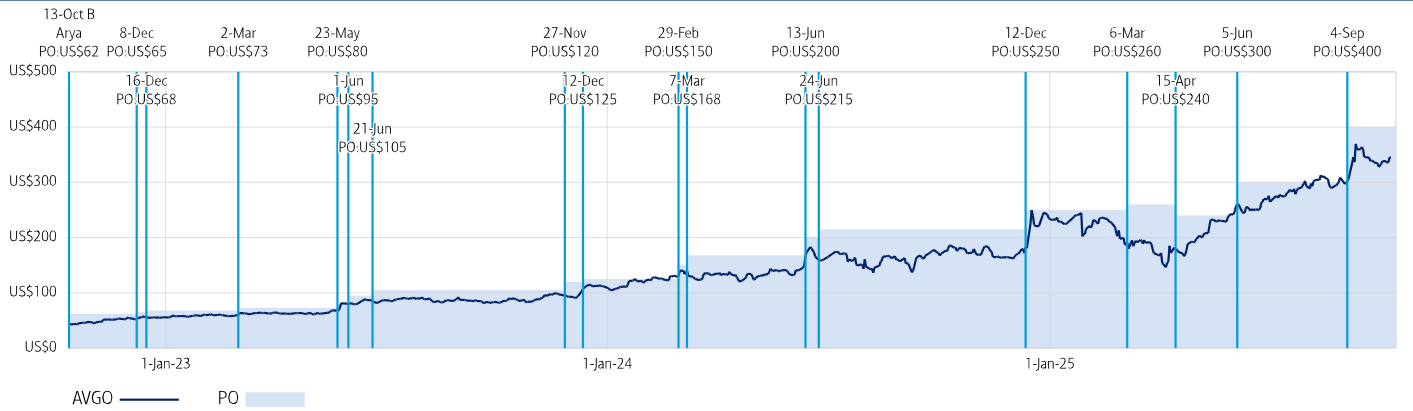
Advanced Micro (AMD) Price Chart



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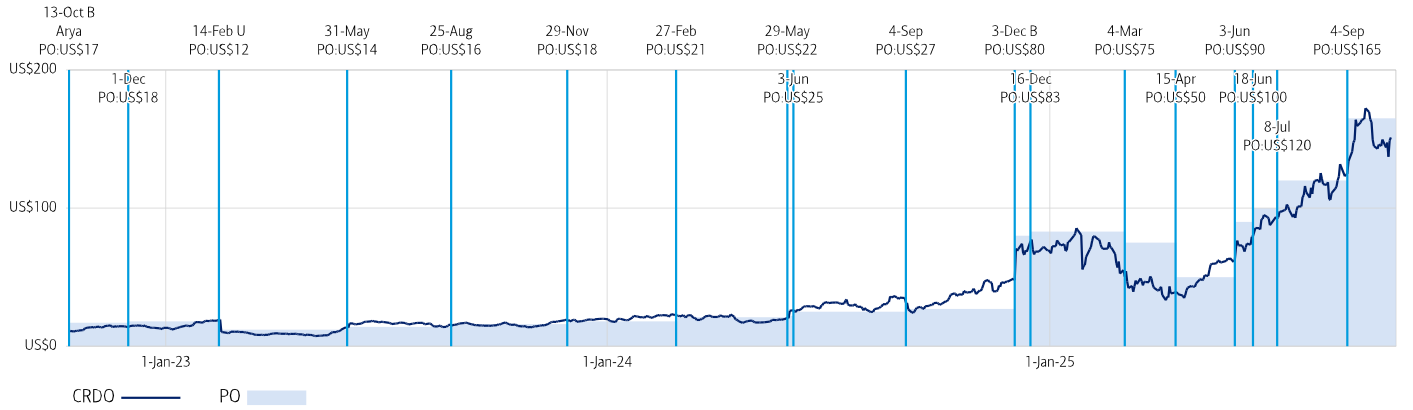
Broadcom (AVGO) Price Chart



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Credo Technology (CRDO) Price Chart

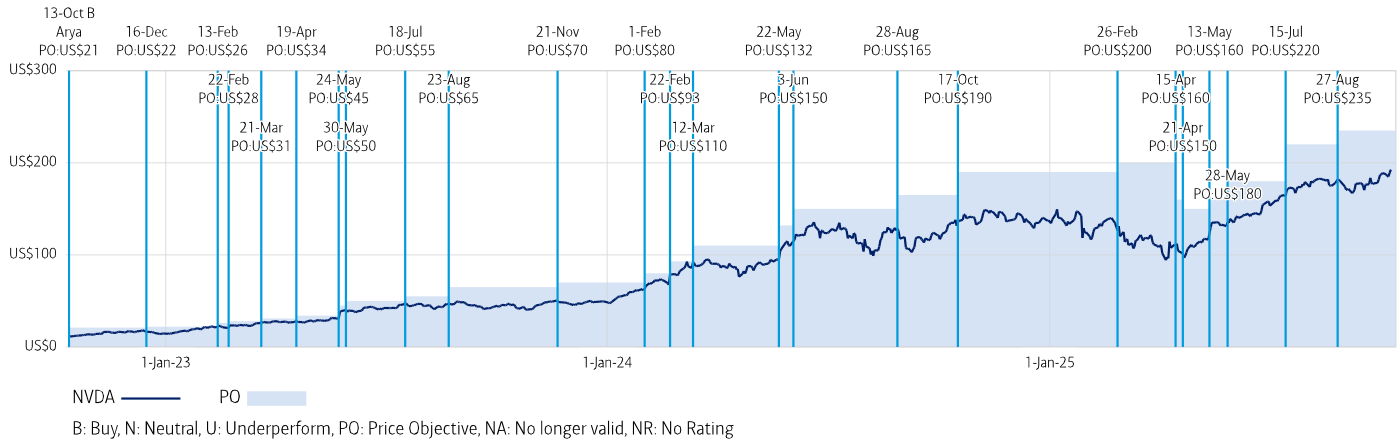


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NVIDIA (NVDA) Price Chart



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Equity Investment Rating Distribution: Technology Group (as of 30 Sep 2025)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	195	51.72%	Buy	99	50.77%
Hold	103	27.32%	Hold	52	50.49%
Sell	79	20.95%	Sell	23	29.11%

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Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1816	53.11%	Buy	1062	58.48%
Hold	825	24.13%	Hold	480	58.18%
Sell	778	22.76%	Sell	385	49.49%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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