

NVIDIA Corporation

GTC Takeaways: Sizzle and Substance, maintain Buy

Maintain Rating: BUY | PO: 1,100.00 USD | Price: 884.55 USD

Stronger pipeline, AI beyond hyperscalers, maintain Buy

Maintain Buy, \$1100 PO and top compute pick following slew of product/partner announcements at flagship GTC conference that continues to fundamentally widen NVDA's competitive moat in a multi \$Tn+ IT/Infrastructure service industry. Overall, announcements were within expectations: 1) new Blackwell silicon/server/system platform that scale AI training/inference performance by up to 4x/30x over prior-gen Hopper and now enable genAI on trillion-parameter size LLMs; 2) new 800G back-end switch offerings on both Ethernet (Spectrum-X800) and InfiniBand (Quantum-X800); 3) expanding enterprise use-cases and on-prem deployments such as with Omniverse and digital twin tools; and 4) new Blackwell-based Thor SoCs for autonomous vehicles (DRIVE) and robotics (Jetson). While no specific launch dates or pricing were announced for Blackwell, we expect the largest hyperscalers/tech companies including Microsoft (Azure), Amazon (AWS), Google (GCP), Oracle (OCI) and others to adopt the new platform as it ramps later this year. Overall, NVDA continues to dominate the AI value chain with its full-stack turnkey (hardware, software, systems, services, developers) model.

Blackwell further extends silicon, systems, platform lead

NVDA announced Blackwell, its next-gen data center accelerator platform and successor to its two-year old Hopper architecture. Its most basic building block, **B100**, is manufactured on TSMC 4NP process and packed with 208bn transistors (vs. 80bn H100, 153bn AMD MI300X), 192GB HBM3e (vs. 141GB H200, 192GB HBM3 MI300X), as well as 2nd-gen transformer engine for improved AI and 5th-gen NVLink capable of 1.8TB/s bidirectional throughput per GPU. NVDA also announced **GB200**, or Grace Blackwell Superchip, which includes 2x B200 GPUs and 1x Grace CPU over 900GB/s chip-to-chip interconnect. Lastly, 36x of GB200 combined make up one **GB200 NVL72 system** – a rack-scale system capable of acting as a single GPU via 18x **NVLink Switches**.

One big step for training, one giant leap for inference

With Blackwell, NVDA should not only cement its lead in LLM training, but also significantly step forward in AI inference. Specifically, Blackwell is capable of up to 4x faster training than H100, and as much as 30x faster in inference thanks to its new 2nd-gen transformer engine. Nearly half of all NVDA GPUs in cloud are already being utilized for inference today, and the latest GB200 NVL72 (combined with the latest NVLink Switch and 5,000 NVLink cables) should help extend that reach with its 1.4 exaflops of inference power inside a single rack (720 petaflops of training).

MRVL optical transceiver opportunity in-tact

Separately, we highlight MRVL's opportunity in optical transceivers remain unchanged despite NVDA's use of copper cable for its back-end NVLink Switches inside the GB200 NVL72 systems. NVDA has already been using copper in its prior-gen Hopper systems, and the intended use for optics has been in front-end networks anyways (rather than back-end) where we believe the move to 800G/1.6T can provide ASP uplift for MRVL DSPs vs. the current solution of multiplexing 400G into a single 800G connection.

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Stock Data

Price	884.55 USD
Price Objective	1,100.00 USD
Date Established	12-Mar-2024
Investment Opinion	C-1-7
52-Week Range	251.30 USD - 974.00 USD
Mkt Val (mn) / Shares Out (mn)	2,202,530 USD / 2,490.0
Free Float	96.1%
Average Daily Value (mn)	52729.82 USD
BofA Ticker / Exchange	NVDA / NAS
Bloomberg / Reuters	NVDA US / NVDA.OQ
ROE (2025E)	86.6%
Net Dbt to Eqty (Jan-2024A)	5.7%

Glossary

AI: Artificial Intelligence
AMD: Advanced Micro Devices
ASP: Average Selling Price
AWS: Amazon Web Services
CPU – Central Processing Unit
CSP: Cloud Service Provider
DSP: Digital Signal Processor
GCP: Google Cloud Platform
GPT – Generative Pre-trained transformer
GPU – Graphics Processing Unit
GTC: GPU Tech Conference
HBM: High Bandwidth Memory
IT- Information Technology
LLM – large language model
OCI: Oracle Cloud Infrastructure
TAM – Total addressable market
TSMC: Taiwan Semiconductor Manufacturing Company
TPU -Tensor Processing Unit
MRVL: Marvel

Price objective basis & risk

NVIDIA Corporation (NVDA)

Our \$1100 PO is based on 37x CY25E PE ex cash, within NVDA's historical 26x-69x forward year PE range, justified given stronger growth opportunities ahead as gaming cycle troughs and data center demand potentially faces strong, long-term demand dynamics.

Downside risks to our price objective are: 1) weakness in consumer driven gaming market, 2) Competition with major public firms, internal cloud projects and other private companies in 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.

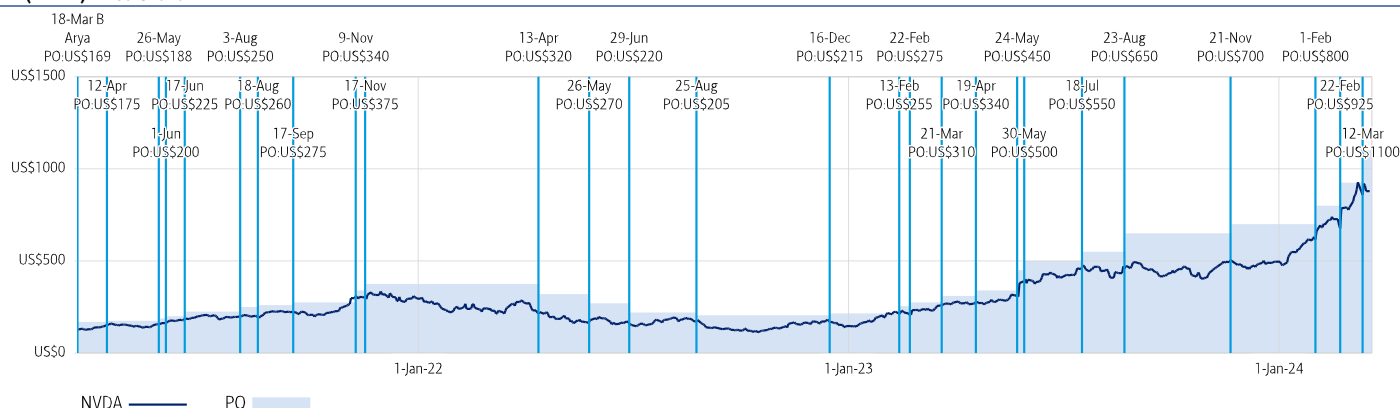
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NVIDIA (NVDA) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

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Buy	1895	53.62%	Buy	1083	57.15%
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Sell	807	22.84%	Sell	383	47.46%

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