

Technology (Hardware/Semi)

AI supply chain will continue riding the tailwind as Nvidia confirmed growth of data center into 2025

- Nvidia released FY3Q24 results with quarterly revenue at US\$18.1bn, up 34% QoQ and 206% YoY. GPM was 74.0%, up 3.9ppts QoQ. Net profit was US\$9.2bn, up 50% QoQ and 1,274% YoY. According to the company's guidance, 4Q24 revenue is expected to reach US\$20bn (+/-2%), implying 10% QoQ and 231% YoY growth; GAAP GPM is expected to increase to 74.5% (+/-50bps). Both the results and guidance are aligned with our previous expectation that Nvidia would "beat and raise" again ([link](#)). However, share price dropped as 1) some investors had anticipated higher QoQ growth in sales following Nvidia's 2Q performance at 88% QoQ and 2) investors may view the significant loss of China revenue as negative (considering 20-25% of Nvidia's data center revenue comes from China, historically).
- **Nvidia delivered strong 3Q results.** Nvidia is likely to maintain its industry leadership and market dominance, with the AI market continuing to expand along with ever-intensifying competition. For example, AMD's MI300X with higher specs on memory capacity and bandwidth, which is crucial in inference, is considered as a serious contender to Nvidia. According to CEO Lisa Su, AMD's data center GPU revenue is expected to reach US\$400mn in 4Q and exceed US\$2bn in 2024, with adequate supply. Additionally, Microsoft's new custom-designed chips for cloud computing, following Amazon and Google's steps, indicate that hyperscalers are slated to aim for improved efficiency and performance. ([link](#))
- **In terms of the impacts on AI supply chain, our view remains unchanged as summarized below:**
 - 1) Critical component suppliers will continue to benefit from the AI boom ([link](#)), with Nvidia confirming bright growth prospects in data center segment through 2025 during its earnings call. **We recommend investors to focus on beneficiaries in the supply chain, such as Super Micro Computer (SMCI US), Fabrinet (FN US), SK Hynix (000660 KS), Samsung (005930 KS), Micron (MU US), Innolight (300308 CH, BUY), Suzhou TFC (300394 CH), etc.**
 - 2) In China, a long-lasting focus on **semi self-reliance** is expected ([link](#)). Although Nvidia has announced tailored chips for China market, we believe domestic companies would still favor Nvidia's latest products, considering its superior performance. However, with the expectations that "*the evolving nature of the new US tech ban on China hints that this might not be the final action the US takes*" ([link](#)), the chip restriction could force domestic companies to reshape their supply chain and adopt more domestic products that **will further foster the domestic chip advancement like Huawei's Kirin**. A case in point is Baidu's recent bulk order of 1,600 Huawei 910B Ascend AI chips, indicating a move away from foreign tech products.

OUTPERFORM
(Maintain)

Technology Sector

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Figure 1: Nvidia's 3Q23 results

US\$ mn	Actual	3Q24	Consensus	Beat/(miss)	
		Guidance		Guidance	Consensus
Revenue	18,120	16,000	16,094	13.3%	12.6%
Gross Profit	13,409	11,600	11,666	15.6%	14.9%
Net profit	9,243		7,540		22.6%
EPS (USD)	3.75		3.06		22.4%
Gross Margin	74.0%	72.5%	72.5%	1.5 ppt	1.5 ppt
Net Margin	51.0%		46.8%		4.2 ppt

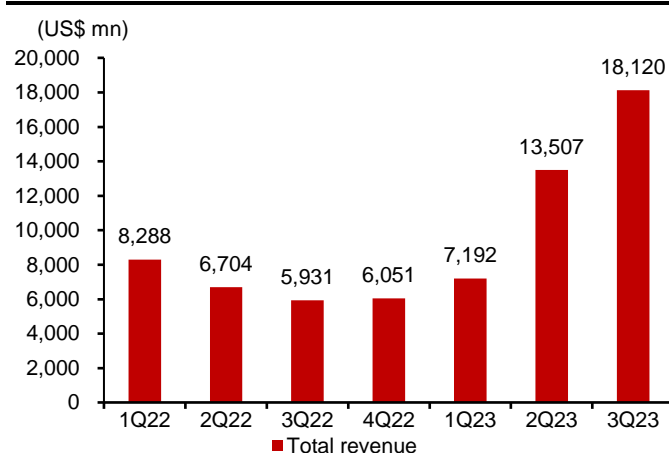
Source: Bloomberg

Figure 2: Nvidia's 3Q23 results & 4Q23 guidance/consensus

US\$ mn	3Q23	4Q23E		QoQ	
	Actual	Guidance	Consensus	Guidance	Consensus
Revenue	18,120	20,000	20,224	10.4%	11.6%
Gross Profit	13,409	15,100	15,264	12.6%	13.8%
Net profit	9,243		10,234		10.7%
EPS (USD)	3.75		4.14		10.5%
Gross Margin	74.0%	75.5%	75.5%	1.5 ppt	1.5 ppt
Net Margin	51.0%		50.6%		-0.4 ppt

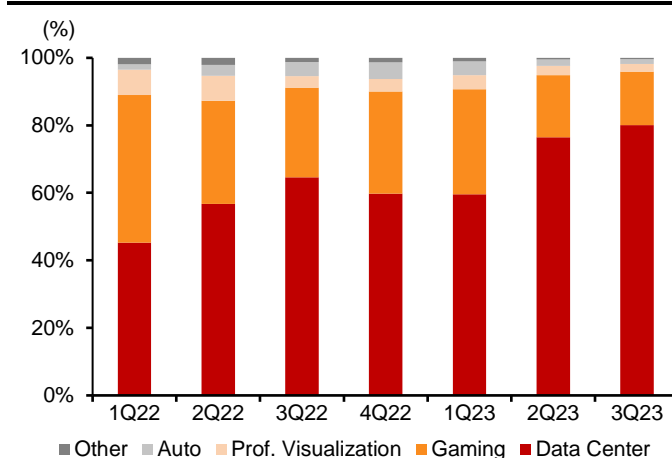
Source: Bloomberg

Figure 3: Nvidia's revenue (1Q22 - 3Q23)



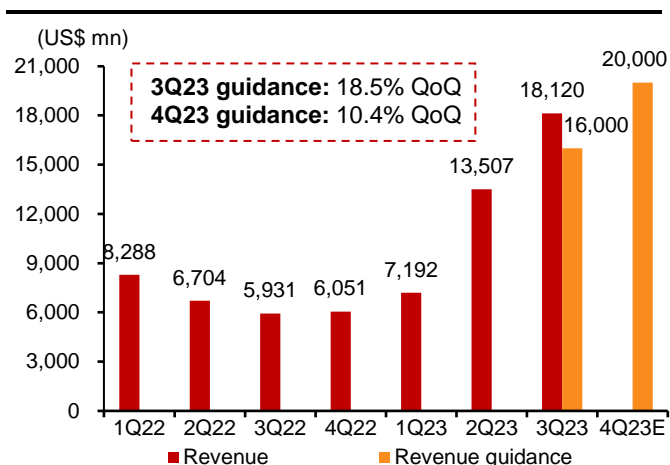
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Figure 4: Nvidia's revenue breakdown (1Q22 - 3Q23)



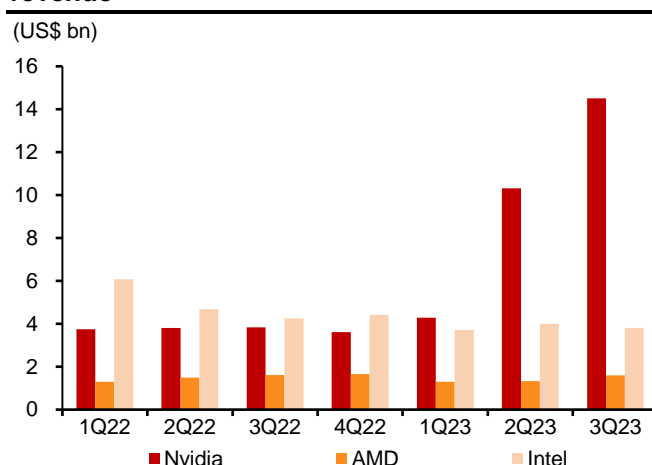
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Figure 5: NVDA's revenue vs. guidance



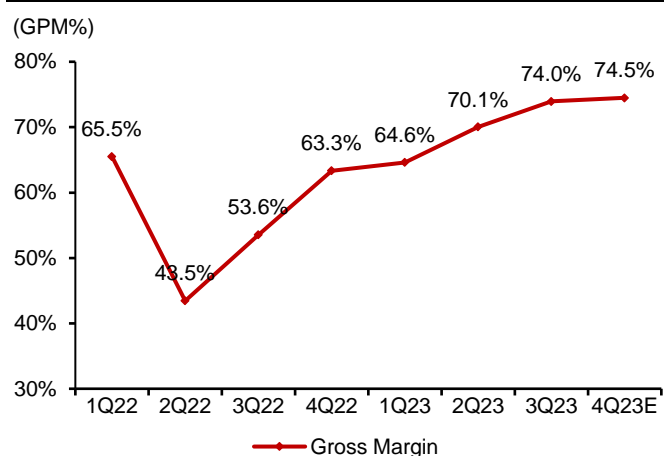
Source: Bloomberg, company data

Figure 6: Nvidia, AMD, and Intel's data center revenue



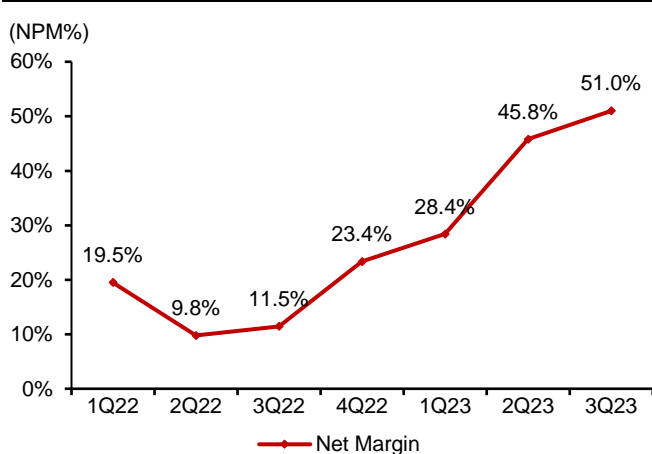
Source: Bloomberg, company data

Figure 7: Nvidia's gross profit margin (1Q22 - 4Q23)



Source: Bloomberg

Figure 8: Nvidia's net profit margin (1Q22 - 3Q23)



Source: Bloomberg

Figure 9: Specs comparison among the latest NVDA & AMD GPUs/CPUs

	Nvidia A100 SXM	Nvidia H100 SXM	AMD MI300A	AMD MI300X	Nvidia H200 SXM
Release date	2021	2022	2023	2023	2024
Processor	GPU	GPU	CPU+GPU	GPU	GPU
Technology node	TSMC 7nm	TSMC 4nm	TSMC (5nm + 6nm)	TSMC (5nm + 6nm)	TSMC 4nm
Memory	HBM2e 80GB	HBM3 80GB	HBM3 128GB	HBM3 192GB	HBM3e 141GB
Memory bandwidth	2TB/s	3.35TB/s	3.28TB/s	5.2TB/s	4.8TB/sec
# of transistors	54.2 billion	80 billion	146 billion	153 billion	80 billion
TDP	400W	700W	600W	Est. 750W	700W
Software	CUDA	CUDA	ROCm	ROCm	CUDA
Current status	Shipped	Shipped	Sample testing	Est. shipment in 2H23	Est. shipment in 2H24

Source: Anandtech, company website

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