

# Technology

## Implications of Nvidia H20 export restriction for AI server/component supply chain

Nvidia (NVDA, NR) disclosed ([link](#)) that the U.S. government informed on April 9 that H20 chips will require a license for export to China and other D:5 countries, and the new requirement will be in place indefinitely. Driven by DeepSeek's low-cost AI models since late Jan, we see accelerated deployments of H20 servers in China, and several server ODM/component suppliers also guided strong order demand from Chinese CSPs for H20-related products. In terms of impact, we estimate Nvidia's inventory writedown of US\$5.5bn implies US\$14bn sales (GPM 60%), 1.1mn H20 chips (ASP US\$12.5k) and 138k H20 AI servers (8 chips/server). For 2024, we estimate H20 AI servers accounted for ~30% of China AI server market, and thus domestic AI server/component suppliers may be impacted by the new restrictions in near term, such as **Lenovo, Fii, Huaqin, BYDE and Luxshare**. On the other hand, we believe China NDRC's recent new energy-efficiency rules ([link](#)) on H20 chip restriction suggest that the Chinese government is confident on advanced node capacity expansion and stronger support to domestic AI computing ecosystem. In longer term, we believe the H20 restriction will boost demand for AI servers with domestic chips, such as Huawei Ascend and non-Huawei AI chips (e.g. Cambricon/Hygon/Enflame/MetaX/Biren), and accelerate development of domestic AI computing supply chain.

■ **US restriction on Nvidia H20 export to China.** Nvidia disclosed that the U.S. government informed it on April 9 that H20 chips would require a license for sales to China, and that on April 14, those rules will be in place indefinitely. Chinese companies have been ramping up orders for H20 server products driven by DeepSeek's models since 1Q25. We estimate Nvidia's inventory writedown of US\$5.5bn is equivalent to 1.1mn H20 chips and 138k H20 AI servers (eight chips per server). For 2024, we estimate ~1mn H20 chips/125k H20 AI servers were shipped to China, and H20 AI servers accounted for ~30% of China AI server market (420k units). In 1Q25, media ([link](#)) reported that Chinese CSPs placed US\$16bn worth of orders for H20 chips, implying 1.3mn H20 chips and 160k AI servers.

■ **Impact on AI server/component supply chain.** Over the past month, there have been mixed media reports about the US's new regulations, including the US's suspension of H20 export ban plan ([link](#)) and Nvidia's plan to build AI servers worth \$500bn in the US in next four years ([link](#)), which have alleviated market concerns on H20 export ban and US tariff impact on Nvidia supply chain. Therefore, we believe the US's latest H20 export restriction has come in earlier than expected, which could weigh on domestic server supply chain sentiment in the near term, including AI server brands/ODM/component names such as Lenovo, Fii, Huaqin, BYDE and Luxshare. In long term, we expect Chinese CSPs will accelerate adoption of AI servers with domestic chips and bolster development of domestic AI computing supply chain.

### Valuation Table

Name	Ticker	Rating	Mkt Cap (US\$ mn)	TP (LC)	Upside/Downside	P/E (x) FY25E	P/E (x) FY26E	P/B (x) FY25E	P/B (x) FY26E	ROE (%) FY25E	ROE (%) FY26E
BYDE	285 HK	BUY	9,150	47.1	50%	10.7	8.6	1.7	1.5	16.3	17.7
Luxshare	002475 CH	BUY	29,109	55.09	87%	12.8	10.1	2.1	2.1	16.4	20.7
FIT Hon Teng	6088 HK	BUY	1,777	3.86	104%	6.9	4.7	0.6	0.6	9.0	11.7
Lenovo	992 HK	NR	12,489	-	-	8.5	7.9	1.9	1.6	23.8	22.5
Fii	601138 CH	NR	46,752	-	-	11.1	9.5	2.0	1.8	18.2	18.7
Huaqin	603296 CH	NR	8,478	-	-	16.4	13.8	2.4	2.1	13.8	14.4

Source: Company data, CMBIGM estimates. Data as of 04/15/2025 close.

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Figure 1: Nvidia' filings on H2O export restrictions

## Item 8.01 Other Events.

On April 9, 2025, the U.S. government, or USG, informed NVIDIA Corporation, or the Company, that the USG requires a license for export to China (including Hong Kong and Macau) and D:5 countries, or to companies headquartered or with an ultimate parent therein, of the Company's H2O integrated circuits and any other circuits achieving the H2O's memory bandwidth, interconnect bandwidth, or combination thereof. The USG indicated that the license requirement addresses the risk that the covered products may be used in, or diverted to, a supercomputer in China. On April 14, 2025, the USG informed the Company that the license requirement will be in effect for the indefinite future.

The Company's first quarter of fiscal year 2026 ends on April 27, 2025. First quarter results are expected to include up to approximately \$5.5 billion of charges associated with H2O products for inventory, purchase commitments, and related reserves.

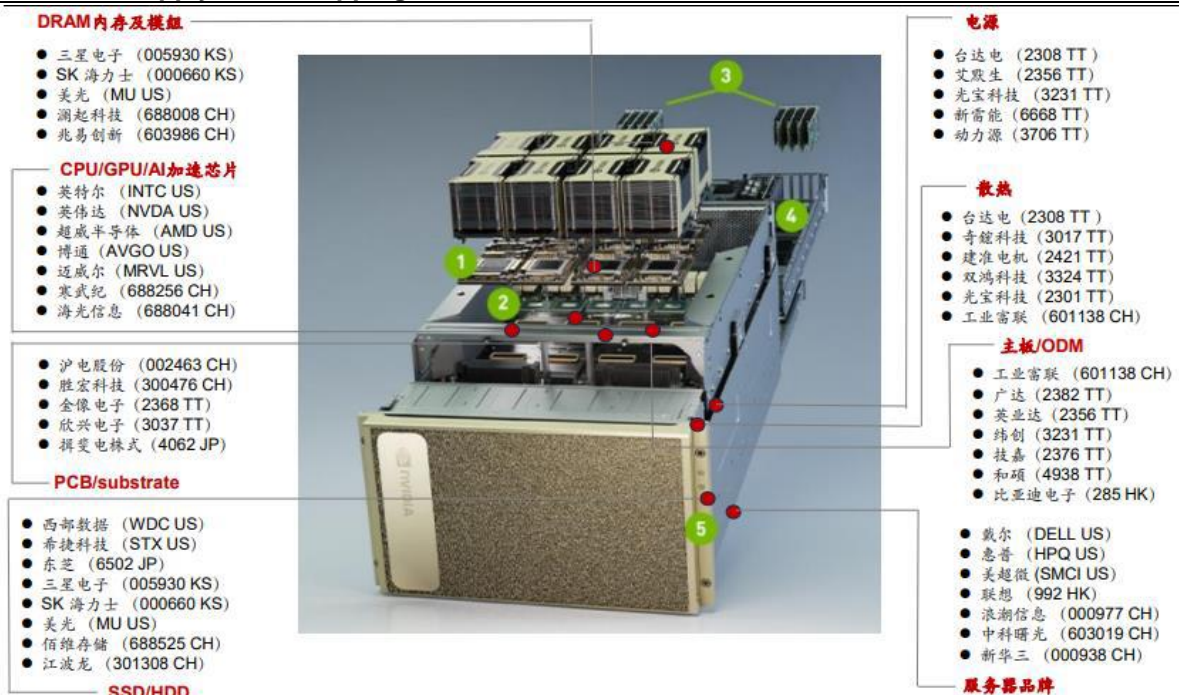
Source: US SFC, CMBIGM

Figure 2: Analysis of Nvidia's H2O restriction and inventory writedown impact

	2024	1Q25 (China CSP order)	Inventory Writedown
H2O Inventory (US\$ mn)	-	-	5,500
H2O Sales (US\$ mn)	12,500	16,000	13,750
H2O ASP (US\$ k)	12.5	12.5	12.5
H2O chip - shipment (k units)	1,000	1,280	1,100
H2O AI server - shipment (k units)	125	160	138

Source: Company data, CMBIGM estimates

Figure 3: Server supply chain mapping



Source: Company data, CMBIGM

Figure 4: Peers valuation

		Mkt Cap	Price	P/E (x)		P/B (x)		ROE (%)		Performance		
Company	Ticker	(US\$ mn)	(LC)	FY25E	FY26E	FY25E	FY26E	FY25E	FY26E	1M%	3M%	YTD (%)
Server/PC												
Lenovo	992 HK	12,489	7.81	8.5	7.9	1.9	1.6	23.8	22.5	(32.7)	(15.9)	(22.5)
Dell	DELL US	59,658	85.49	10.9	9.3	-	76.7	(166.4)	1,027.0	(10.6)	(22.4)	(25.8)
HPE	HPE US	19,717	15.01	8.3	7.3	0.8	0.7	9.3	9.8	(3.9)	(35.9)	(29.7)
HP Inc	HPQ US	22,380	23.74	6.8	6.5	-	-	(303.7)	(35.8)	(16.4)	(26.6)	(27.2)
Super Micro	SMCI US	19,870	33.48	12.9	9.0	3.1	2.3	29.9	31.9	(20.6)	7.6	9.8
ASUSTeK	2357 TT	12,750	558.00	11.7	10.2	1.5	1.5	13.0	15.1	(8.2)	(7.0)	(9.4)
Inspur	000977 CH	9,437	46.97	24.3	19.6	3.1	2.7	13.0	13.8	(20.8)	(5.8)	(9.5)
Dawning	603019 CH	13,084	65.51	37.6	31.2	4.2	3.8	11.5	12.4	(8.3)	2.4	(9.4)
Average				15.1	12.6	2.4	12.8	(46.2)	137.1	(15.2)	(12.9)	(15.5)
ODM/OEM												
FII	601138 CH	46,752	17.25	11.1	9.5	2.0	1.8	18.2	18.7	(18.9)	(17.2)	(19.8)
Huaqin	603296 CH	8,478	61.15	16.4	13.8	2.4	2.1	13.8	14.4	(25.3)	(14.3)	(13.8)
BYDE	285 HK	9,150	31.50	10.7	8.6	1.7	1.5	16.3	17.7	(37.2)	(17.0)	(25.1)
Quanta	2382 TT	27,151	228.50	12.6	10.5	3.7	3.2	31.1	32.3	(10.9)	(12.1)	(20.4)
Wistron	3231 TT	8,849	99.30	11.9	9.8	2.0	1.8	17.5	18.5	(5.0)	(5.0)	(4.5)
Wiwynn	6669 TT	10,748	1,880.00	12.1	10.2	3.5	3.0	30.2	29.9	(2.1)	(21.5)	(28.2)
Inventec	2356 TT	4,486	40.65	15.0	13.5	2.1	2.0	13.5	14.7	(12.6)	(17.4)	(18.9)
GigaByte	2376 TT	4,503	218.50	12.3	10.2	2.6	2.2	21.9	22.3	(16.0)	(12.8)	(19.8)
Average				12.8	10.8	2.5	2.2	20.3	21.1	(16.0)	(14.7)	(18.8)
Connector												
FIT Hon Teng	6088 HK	1,777	1.89	6.9	4.7	0.6	0.6	9.0	11.7	(31.3)	(43.9)	(48.2)
Luxshare	002475 CH	29,109	29.43	12.8	10.1	2.1	2.1	16.4	20.7	(28.2)	(25.0)	(27.8)
TE	TEL US	38,649	129.54	16.1	14.7	3.0	2.8	18.7	19.1	(11.2)	(9.8)	(9.4)
Amphenol	APH US	79,687	65.76	28.7	25.6	7.0	6.0	26.7	25.5	4.4	(5.9)	(5.3)
Average				16.1	13.8	3.2	2.9	17.7	19.2	(16.6)	(21.1)	(22.7)
Switch/Storage												
Cisco	CSCO US	227,558	57.20	15.4	14.3	4.9	4.5	33.0	33.2	(5.5)	(4.4)	(3.4)
Arista	ANET US	92,314	73.20	29.6	24.9	7.1	5.6	26.3	24.7	(12.3)	(38.0)	(33.8)
Juniper	JNPR US	11,552	34.67	16.9	15.6	2.3	2.2	14.2	14.5	(3.0)	(10.7)	(7.4)
Keysight	KEYS US	23,656	136.89	19.5	17.2	4.4	3.9	19.8	21.1	(10.0)	(17.1)	(14.8)
Seagate	STX US	15,243	72.00	9.8	7.7	-	44.4	(143.5)	4,846.2	(18.1)	(24.3)	(16.6)
Western Digital	WDC US	12,497	35.93	7.4	7.5	-	2.2	25.4	56.6	(19.3)	(26.0)	(20.3)
Average				17.6	15.2	4.4	8.7	1.5	629.4	(9.3)	(18.7)	(15.2)
Substrate												
Unimicron	3037 TT	4,066	86.40	13.7	8.3	1.3	1.2	9.4	14.8	(18.5)	(39.2)	(38.7)
Ibiden	4062 JP	3,506	3,550.00	16.4	14.2	1.0	0.9	6.1	7.0	(19.1)	(21.0)	(25.7)
NYPCB	8046 TT	1,785	89.80	30.1	13.2	1.2	1.2	4.8	8.5	(30.4)	(34.9)	(31.2)
Average				20.1	11.9	1.2	1.1	6.8	10.1	(22.7)	(31.7)	(31.9)
PCB												
WUS Printed	002463 CH	6,894	26.34	14.6	11.9	3.4	2.8	24.3	24.0	(26.3)	(32.8)	(33.5)
Victory Giant	300476 CH	8,449	71.77	20.1	15.1	5.4	4.1	19.6	21.2	(12.5)	53.5	70.5
Gold Circuit	2368 TT	2,814	186.00	12.4	9.9	3.5	2.8	31.3	30.6	(14.1)	(9.0)	(23.0)
Average				15.7	12.3	4.1	3.3	25.1	25.2	(17.6)	3.9	4.7
Power Supply												
Delta	2308 TT	25,850	323.50	18.0	15.3	3.2	2.9	18.0	18.7	(14.5)	(22.7)	(24.9)
Lite-On	2301 TT	6,419	88.90	13.4	11.7	2.2	2.1	16.8	18.2	(15.7)	(17.3)	(10.7)
Average				15.7	13.5	2.7	2.5	17.4	18.5	(15.1)	(20.0)	(17.8)
Thermal												
FII	601138 CH	46,752	17.25	11.1	9.5	2.0	1.8	18.2	18.7	(18.9)	(17.2)	(19.8)
Sunowearth	2421 TT	690	82.00	11.7	9.9	2.7	2.5	23.7	25.2	(24.1)	(15.6)	(16.0)
AVC	3017 TT	5,051	423.50	13.3	11.1	4.4	3.4	35.7	34.3	(26.5)	(19.6)	(32.0)
Average				12.0	10.2	3.0	2.5	25.9	26.1	(23.1)	(17.5)	(22.6)

Source: Bloomberg, CMBIGM estimates, as of 04/15/2025 close.

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