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Greater China Semiconductors | Asia Pacific

Preliminary 2028 Global AI semis vs. CSP capex growth; China AI Semi/DRAM progression

Charlie Chan
Equity Analyst
Charlie.Chan@morganstanley.com +886 2 2730-1725

Daniel Yen, CFA
Equity Analyst
Daniel.Yen@morganstanley.com +886 2 2730-2863

Daisy Dai, CFA
Equity Analyst
Daisy.Dai@morganstanley.com +852 2848-7310

Lucas Wang
Research Associate
Lucas.Wang@morganstanley.com +886 2 2730-2875

Henry Zhao
Equity Analyst
Henry.Zhao@morganstanley.com +852 2239-7731

Ethan Jia
Research Associate
Ethan.Jia@morganstanley.com +852 3963-2287

GREATER CHINA TECHNOLOGY SEMICONDUCTORS

Asia Pacific
Industry View **Attractive**

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Research as only a single factor in making their investment decision.

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Strong AI Semi Outlook

- Top ideas:
  - **OW:**
    - **AI:** MediaTek (Top Pick), TSMC, SMIC, Aspeed, Alchip, KYEC, ASE, FOCI, ASMPT, AllRing, GUC
    - **Memory:** CXMT, Macronix, AP Memory (Top Pick), Nanya Tech, Winbond, GigaDevice
    - **China – AI/Semis/WFE:** Iluvatar, Cambricon, Hygon, NAURA Tech, AMEC
    - **Testing Equipment and Consumables:** WinWay, MPI, Hon Precision, Gudeng
    - **Mature nodes:** UMC
  - **EW:** OmniVision, Phison, MetaX, Realtek, GlobalWafers
  - **UW:** WIN Semi, Silergy, ASMedia

Long-term demand drivers:

- **Chip inflation:** We expect “price elasticity” to affect demand for tech products. Rising wafer, OSAT, and memory costs create more margin headwinds for chip designers in 2026.
- **AI cannibalization:** Besides demand weakness (AI replacing some human jobs), we see the semi supply chain also prioritizing AI semis over non-AI semis, e.g., T-Glass and memory shortages.
- **China – AI: DeepSeek is triggering inferencing AI demand:** DeepSeek has demonstrated cheaper inferencing. Local foundry supply chain is also becoming more capable in terms of AI GPU production.

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Valuation Comparison: Foundry, Back-end, Memory, IDM and Semi Cap

Ticker	Company	Price 9/11/2026	Curr ency	Price Target	Upside/ Downside	Rating	Dividend Yield (%)	FCF Yield (%)	Market Cap (US$M)	3M Avg. Daily Trading (US$M)	P/E Ratio (x) 2026e	P/E Ratio (x) 2027e	P/E Ratio (x) 2028e	EPS Growth 2026e	EPS Growth 2027e	EPS Growth 2028e	ROAE 2026e	ROAE 2027e	ROAE 2028e	P/B Ratio (x) 2026e	P/B Ratio (x) 2027e	P/B Ratio (x) 2028e
Foundry																						
2330.TW	TSMC	2,410.0	TWD	2,988.0	24%	O	1.4%	1.8%	1,973,110	2,476.7	21.7	16.6	13.1	67%	31%	27%	44%	41%	38%	8.1	5.8	4.3
2303.TW	UMC	140.5	TWD	138.0	-2%	O	5.1%	5.3%	56,008	860.2	31.3	24.8	20.3	35%	26%	22%	14%	17%	19%	4.3	4.0	3.7
0981.HK	SMIC	63.2	HKD	85.0	35%	O	0.0%	-5.0%	76,261	1,013.4	NM	NM	NM	126%	65%	18%	7%	11%	11%	NM	NM	NM
5347.TWO	Vanguard	157.5	TWD	180.0	14%	E	4.9%	3.1%	9,242	128.1	28.8	23.3	18.9	31%	24%	23%	12%	14%	17%	3.4	3.2	3.0
1347.HK	Hua Hong	111.7	HKD	128.0	15%	E	0.1%	-4.6%	24,820	722.0	NM	NM	NM	491%	76%	30%	4%	7%	8%	NM	NM	NM
6770.TW	PSMC	70.7	TWD	111.0	57%	O	0.0%	5.6%	9,430	444.6	NM	NM	NM	-151%	301%	28%	4%	11%	12%	1.5	1.2	1.0
3105.TWO	WIN Semi	437.5	TWD	300.0	-31%	U	0.5%	-3.8%	2,264	307.9	NM	46.3	34.0	83%	30%	36%	7%	9%	12%	4.4	4.3	4.2
8086.TWO	AWSC	106.0	TWD	130.0	23%	U	1.1%	-3.9%	658	14.5	16.7	14.8	12.0	89%	13%	24%	14%	14%	16%	2.3	2.0	1.7
Mean:							**1.6%**	**-0.2%**			**22.8**	**28.2**	**21.7**	**96%**	**71%**	**26%**	**13%**	**15%**	**16%**	**4.0**	**3.4**	**3.0**
Median:							**0.8%**	**-1.0%**			**25.3**	**23.3**	**18.9**	**75%**	**30%**	**25%**	**10%**	**13%**	**14%**	**3.8**	**3.6**	**3.4**
Memory																						
688825.SS	CXMT	56.7	CNY	88.0	55%	O	NA	NA	527,105	4,082.4	18.9	11.9	9.0	NM	59%	33%	105%	69%	51%	12.5	6.1	3.6
603986.SS	Giga Device	371.3	CNY	750.0	102%	O	0.3%	4.1%	34,452	3,841.7	10.7	8.2	7.1	1302%	30%	15%	78%	57%	45%	5.8	3.7	2.6
2408.TW	Nanya Tech	493.0	TWD	580.0	18%	O	0.0%	13.6%	47,980	1,325.2	7.9	4.4	6.6	NM	NM	NM	77%	68%	29%	4.0	2.0	1.5
2344.TW	Winbond	171.5	TWD	288.0	68%	O	0.0%	16.6%	24,369	930.3	6.9	3.4	2.9	NM	NM	NM	68%	67%	46%	3.5	1.7	1.1
8299.TWO	Phison	1,990.0	TWD	2,588.0	30%	E	1.5%	1.6%	13,696	313.7	5.3	15.1	35.3	839%	-65%	-57%	83%	22%	10%	3.1	3.5	3.5
SIMO.O	Silicon Motion	265.3	USD	400.0	51%	O	2.2%	2.1%	9,095	268.4	23.1	12.8	9.6	263%	81%	33%	38%	47%	45%	7.4	5.2	3.8
2337.TW	Macronix	119.0	TWD	220.0	85%	O	4.6%	17.2%	6,972	307.7	NM	NM	NM	-1421%	159%	5%	69%	81%	46%	2.5	1.1	0.7
Mean:							**1.4%**	**9.2%**			**12.1**	**9.3**	**11.8**	**246%**	**53%**	**6%**	**74%**	**59%**	**39%**	**5.5**	**3.3**	**2.4**
Median:							**0.9%**	**8.8%**			**9.3**	**10.1**	**8.0**	**551%**	**59%**	**15%**	**77%**	**67%**	**45%**	**4.0**	**3.5**	**2.6**
Backend																						
3711.TW	ASEH	618.0	TWD	628.0	2%	O	2.2%	6.0%	85,145	452.0	34.5	20.6	13.3	94%	68%	55%	20%	28%	36%	6.3	5.3	4.2
600584.SS	JCET	67.7	CNY	50.0	-26%	E	0.3%	5.7%	16,840	2,045.1	46.9	33.9	28.4	65%	38%	19%	8%	11%	11%	3.8	3.4	3.1
601231.SS	USI	26.9	CNY	39.3	46%	O	1.4%	-7.4%	8,531	148.9	26.3	17.8	14.0	23%	48%	27%	13%	17%	17%	2.7	2.4	2.1
2449.TW	KYEC	263.0	TWD	338.0	29%	O	1.9%	1.6%	10,154	232.5	29.4	19.2	14.2	0%	53%	35%	21%	28%	32%	5.7	4.7	3.9
3363.TWO	FOCI	681.0	TWD	708.0	4%	O	0.2%	4.8%	2,261	75.4	NM	NM	NM	NM	NM	NM	-2%	55%	79%	NM	NM	NM
Mean:							**1.5%**	**1.5%**			**27.8**	**18.5**	**14.1**	**45%**	**52%**	**34%**	**15%**	**21%**	**24%**	**4.6**	**4.0**	**3.3**
Median:							**1.7%**	**3.7%**			**27.8**	**18.5**	**14.1**	**44%**	**51%**	**31%**	**16%**	**22%**	**24%**	**4.7**	**4.1**	**3.5**
Power Semis/ IDM																						
688396.SS	CR Micro	56.0	CNY	51.6	-8%	U	0.2%	1.6%	10,205	300.4	44.4	31.1	22.8	153%	43%	37%	6%	9%	11%	2.8	2.6	2.3
600460.SS	Silan Micro	30.1	CNY	26.9	-11%	U	0.5%	2.1%	6,952	654.4	38.8	24.7	19.1	224%	57%	29%	10%	14%	15%	3.6	3.2	2.8
603290.SS	StarPower	82.7	CNY	110.0	33%	E	1.0%	0.0%	2,750	148.0	61.7	34.8	22.4	-21%	77%	56%	5%	8%	12%	2.7	2.5	2.3
300373.SZ	Yangjie	84.4	CNY	136.0	61%	O	1.4%	-2.8%	6,328	348.6	28.1	19.9	15.2	29%	41%	31%	15%	19%	21%	4.0	3.4	2.9
Mean:							**0.8%**	**0.2%**			**43.2**	**27.6**	**19.9**	**96%**	**55%**	**38%**	**9%**	**12%**	**15%**	**3.3**	**2.9**	**2.6**
Median:							**0.7%**	**0.8%**			**41.6**	**27.9**	**20.8**	**91%**	**50%**	**34%**	**8%**	**11%**	**14%**	**3.2**	**2.9**	**2.6**
Semicap / Equipment/ Materials/ Supply Chain																						
002371.SZ	NAURA	634.0	CNY	818.0	29%	O	0.6%	-0.9%	63,823	1,245.1	49.9	34.1	26.8	45%	46%	27%	19%	24%	25%	8.9	7.4	6.1
688012.SS	AMEC	333.6	CNY	488.0	46%	O	0.0%	17.6%	29,108	1,494.9	47.9	43.2	31.8	116%	11%	36%	18%	16%	19%	7.7	6.5	5.4
7769.TW	Hon Precision	6,310.0	TWD	10,008.0	59%	O	2.5%	NA	35,845	147.5	48.8	28.4	17.0	69%	72%	67%	37%	53%	65%	NM	13.2	9.5
6223.TWO	MPI	5,620.0	TWD	8,000.0	42%	O	0.0%	-5.4%	17,388	171.7	87.1	37.4	17.6	98%	133%	113%	35%	57%	76%	NM	NM	NM
6515.TW	Winway	6,890.0	TWD	12,000.0	74%	O	0.9%	1.3%	7,778	104.1	NM	32.1	15.7	99%	132%	104%	44%	69%	84%	NM	NM	NM
6488.TWO	GlobalWafers	902.0	TWD	900.0	0%	E	2.7%	1.7%	13,618	288.5	38.1	25.4	17.7	55%	50%	44%	12%	16%	21%	4.4	4.0	3.5
0522.HK	ASM Pacific	161.8	HKD	248.0	53%	O	1.8%	6.5%	8,227	86.7	36.8	23.7	17.2	73%	55%	38%	10%	15%	19%	3.6	3.3	2.9
688234.SS	SICC	94.9	CNY	127.1	34%	O	0.6%	NA	6,389	251.2	NM	NM	NM	NM	NM	NM	1%	3%	4%	6.3	6.2	6.0
ACMR.O	ACM Research	72.4	USD	130.0	80%	O	1.1%	-0.7%	4,750	108.7	25.6	16.5	12.6	104%	55%	31%	10%	14%	16%	2.3	2.0	1.8
3680.TWO	Gudeng Precision	510.0	TWD	648.0	27%	O	0.0%	-6.1%	1,547	27.2	26.2	18.5	13.4	106%	42%	38%	15%	19%	22%	3.8	3.2	2.7
6187.TWO	AllRing Tech	1,250.0	TWD	1,580.0	26%	O	2.8%	1.1%	3,798	96.1	49.1	31.4	27.8	64%	56%	13%	31%	39%	35%	NM	NM	NM
Mean:							**1.2%**	**1.7%**			**45.5**	**29.1**	**19.8**	**83%**	**65%**	**51%**	**21%**	**29%**	**35%**	**5.3**	**5.7**	**4.7**
Median:							**0.9%**	**1.1%**			**47.9**	**29.9**	**17.4**	**86%**	**55%**	**38%**	**18%**	**19%**	**22%**	**4.4**	**5.1**	**4.4**

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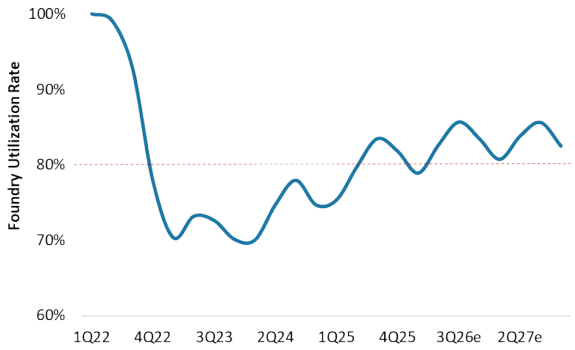
Valuation Comparison: Fabless, Power Semis, FPGA and Analog

Ticker	Company	Price 9/11/2026	Currency	Price Target	Upside/ Downside	Rating	Dividend Yield (%)	FCF Yield (%)	Market Cap (US$M)	3M Avg. Daily Trading (US$M)	P/E Ratio (x)			EPS Growth			ROAE			P/B Ratio (x)		
											2026e	2027e	2028e	2026e	2027e	2028e	2026e	2027e	2028e	2026e	2027e	2028e
Fabless																						
AI accelerators																						
688256.SS	Cambricon	1,040.0	RMB	1,408.0	35%	O	0.0%	-2.2%	90,772	2,378.5	91.1	54.7	42.3	134%	67%	29%	44%	52%	44%	36.4	22.9	15.7
9903.HK	Iluvatar	311.6	HKD	668.0	114%	O	NA	NA	10,134	157.2	NM	47.6	26.5	-81%	-734%	80%	-6%	26%	34%	14.5	11.2	7.9
688802.SS	MetaX	489.0	RMB	700.0	43%	E	0.0%	NA	27,181	219.2	NM	371.4	212.6	-103%	1844%	75%	0%	4%	7%	14.8	14.2	13.3
Smartphone/Wireless Semis																						
2454.TW	MediaTek	4,585.0	TWD	5,588.0	22%	O	17.3%	0.9%	226,606	1,286.4	62.7	31.2	14.9	17%	101%	110%	26%	39%	55%	14.8	10.3	6.6
603501.SS	OmniVision	76.9	CNY	111.0	44%	E	0.5%	2.1%	12,879	349.1	23.1	15.9	12.9	0%	45%	23%	14%	18%	19%	2.9	2.5	2.2
300782.SZ	Maxscend	71.0	CNY	58.00	-18%	U	0.1%	-2.2%	5,265	222.9	NM	190.4	54.5	113%	-132%	250%	-2%	5%	9%	3.9	3.7	3.4
603160.SS	Goodix	50.6	CNY	58.0	15%	U	0.7%	-1.4%	3,238	53.0	42.4	37.5	33.9	-35%	13%	11%	6%	6%	7%	2.4	2.3	2.2
6462.TWO	Egis	96.2	TWD	105.0	9%	E	1.0%	-16.3%	277	2.8	NM	17.9	NM	-88%	-462%	NA	-1%	5%	NA	1.0	0.9	NA
IP/Design Service																						
3661.TW	Alchip	3,650.0	TWD	5,888.0	61%	O	1.0%	5.1%	9,397	278.3	20.7	16.2	10.0	161%	28%	61%	32%	33%	44%	NM	NM	NM
301269.SZ	Empyrean Technology	86.5	CNY	95.0	10%	E	0.1%	NA	6,556	188.0	NM	NM	NM	251%	159%	68%	4%	10%	15%	NM	NM	NM
3443.TW	GUC	6,120.0	TWD	6,288.0	3%	O	0.8%	4.7%	25,897	336.9	122.5	44.3	29.2	79%	176%	52%	44%	74%	68%	NM	NM	NM
6531.TW	AP Memory	988.0	TWD	1,666.0	69%	O	1.2%	4.1%	5,049	104.8	55.8	27.9	15.2	129%	100%	84%	22%	36%	49%	11.2	8.8	6.4
PC/Cloud/Display Semis																						
3034.TW	Novatek	547.0	TWD	414.0	-24%	U	6.1%	14.3%	10,510	81.9	15.8	15.5	18.1	29%	2%	-15%	30%	28%	23%	4.4	4.3	4.3
2379.TW	Realtek	704.0	TWD	717.0	2%	E	4.8%	5.0%	11,342	103.0	18.8	18.8	16.2	30%	0%	16%	34%	31%	34%	6.0	5.7	5.2
5269.TW	ASMedia	1,315.0	TWD	1,482.0	13%	U	4.1%	0.9%	3,100	36.2	14.3	14.7	13.9	25%	-3%	6%	18%	16%	15%	2.4	2.2	2.0
5274.TWO	Aspeed	17,885.0	TWD	24,000.0	34%	O	1.3%	1.3%	21,349	142.4	86.0	57.1	40.3	100%	51%	41%	83%	81%	82%	NM	NM	NM
4966.TWO	Parade	528.0	TWD	818.0	55%	O	2.9%	1.6%	1,298	20.4	17.4	12.2	10.5	-11%	42%	17%	10%	14%	15%	1.8	1.6	1.5
2458.TW	Elan Micro	126.5	TWD	250.0	98%	O	4.8%	9.6%	1,144	22.7	12.1	10.3	10.2	24%	18%	1%	27%	28%	26%	3.1	2.7	2.5
HIMX.O	Himax	13.8	TWD	17.4	26%	E	2.7%	8.3%	2,350	25.9	34.6	19.0	9.4	65%	82%	102%	8%	14%	26%	2.8	2.6	2.2
Analog IC																						
6415.TW	Silergy	401.0	TWD	388.0	-3%	U	1.4%	4.8%	4,914	67.1	39.5	24.3	18.9	59%	62%	29%	10%	15%	17%	3.8	3.4	3.0
300661.SZ	SG Micro	108.0	CNY	100.0	-7%	E	0.3%	1.1%	9,303	290.2	74.9	50.9	38.8	57%	47%	31%	15%	18%	20%	NM	NM	NM
MCU																						
4919.TW	Nuvoton	112.5	TWD	95.0	-16%	U	0.8%	14.5%	1,491	39.1	NM	27.1	14.7	-70%	-455%	84%	-4%	13%	20%	3.7	3.3	2.7
688018.SS	Espressif	103.7	CNY	125.0	21%	O	NA	NA	3,353	121.4	NM	NM	NM	NA	NA	NA	12%	14%	15%	NM	NM	NM
FPGA																						
002049.SZ	Unigroup Guoxin	59.1	CNY	52.0	-12%	U	0.4%	1.5%	6,974	337.1	25.2	19.5	17.3	38%	29%	13%	14%	15%	15%	3.2	2.8	2.4
1385.HK	Shanghai Fudan	24.8	HKD	42.0	69%	O	0.1%	0.1%	6,905	16.6	17.1	17.5	15.8	415%	-2%	11%	18%	15%	14%	2.8	2.4	2.1
IC distributor																						
3702.TW	WPG	106.5	TWD	160.0	50%	O	7.2%	-27.2%	5,647	43.2	8.3	8.5	8.1	115%	-2%	5%	24%	21%	20%	1.8	1.6	1.5
3036.TW	WT Micro	191.0	TWD	349.0	83%	O	4.4%	-21.4%	7,632	68.4	7.7	6.8	6.0	107%	13%	13%	25%	25%	24%	1.8	1.6	1.4

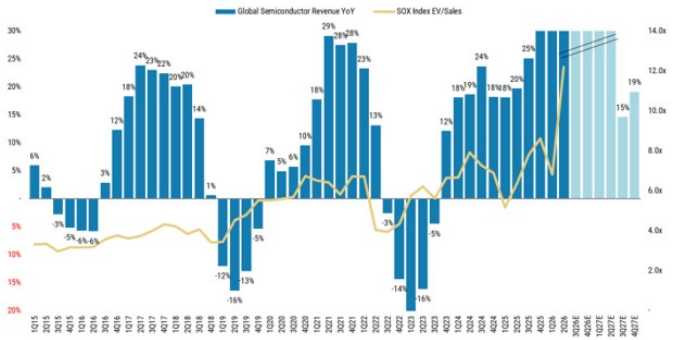
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Broader Semiconductor Cycle

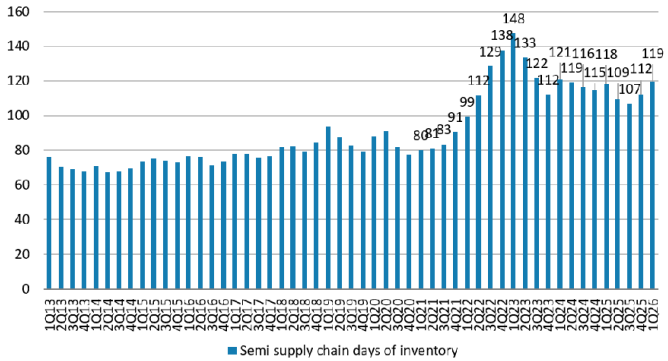
Logic semi foundry utilization could reach 80% in 2H26



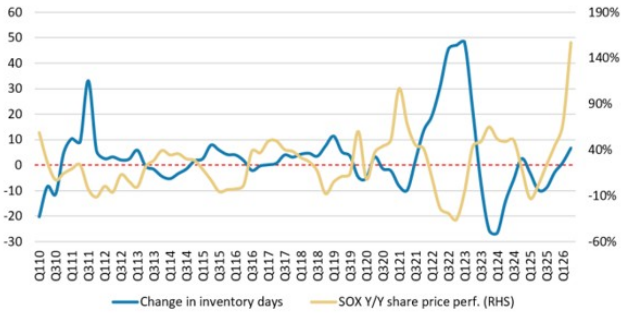
Excluding memory and NVIDIA's AI GPU revenue, non-AI semi growth is expected to decline in 2026



Semi supply chain – days of inventory as of 1Q26



Historically, when inventory days have gone down, the semi stock index has risen



Morgan Stanley

AI Semi Supply Chain and Niche Memory

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AI Semis: Now and the Future – "Prompts"

- Generative AI Demand Driver:
    - Killer apps
    - Competition
    - Sovereign
- Growth limitations:
    1. Budget
    2. Energy -> in the US
    3. Chip capacity -> in China
    4. Regulation
- Semiconductor solutions:
    - Moore's Law
    - CoWoS/ SoIC
    - HBM
    - CPO
    - Custom chip
    - GaN HVDC 800V
- Growth perspective:
    1. Inference vs. Training AI semis
    2. Edge vs. Cloud AI semis
    3. Custom ASIC vs. AI GPU

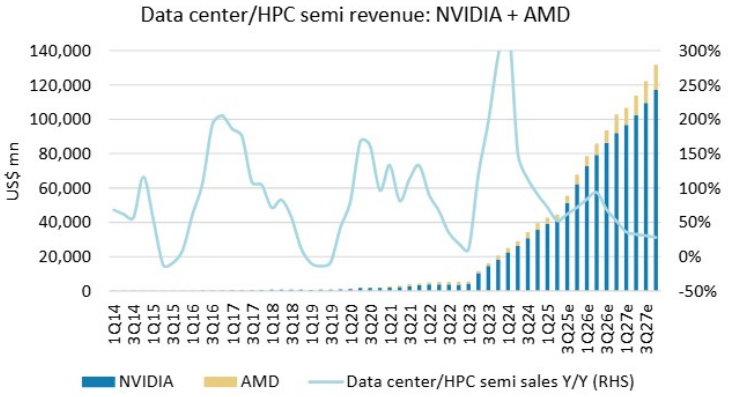
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GPU Vendor P/E Multiple Might Catch up After Delivering Strong Revenue

P/E multiple trend of AI semis



We still expect AI chip revenue to rise QoQ

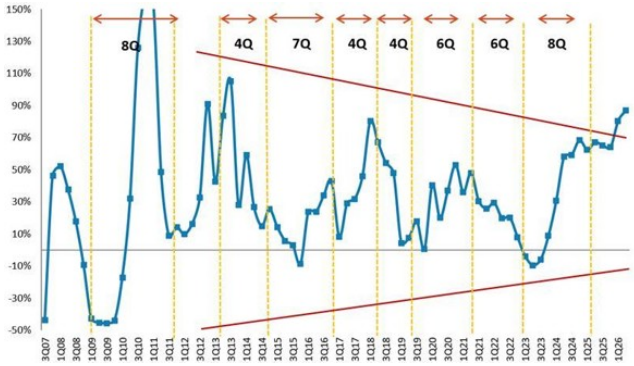


Source: FactSet, company data,
Synopsys, Cadence, ASML, BESI, Ibiden, KYEC, Advantest.

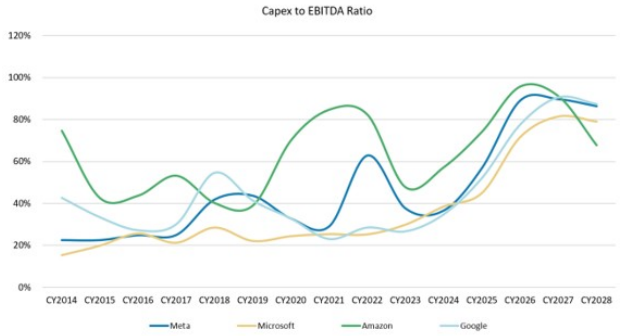
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Cloud Semis: Brighter Outlook

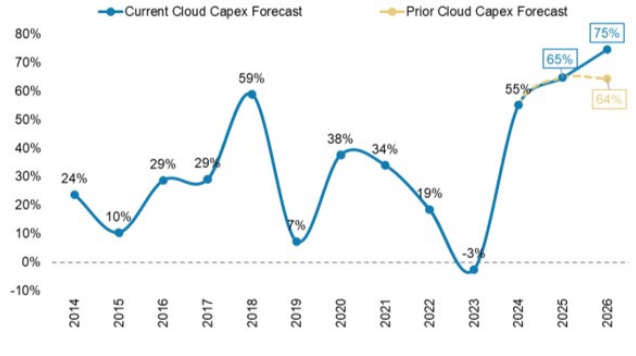
Top 4 CSPs (Amazon, Google, Microsoft and Meta): capex was up 87% Y/Y in 2Q26CY



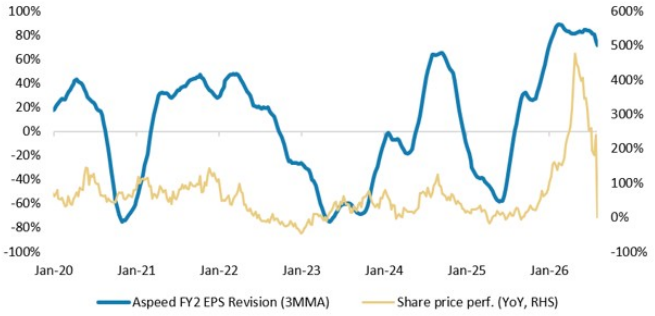
Capex-to-EBITDA ratio is reaching over 70%



Top 4 Cloud Providers: Cloud Capex Y/Y Growth



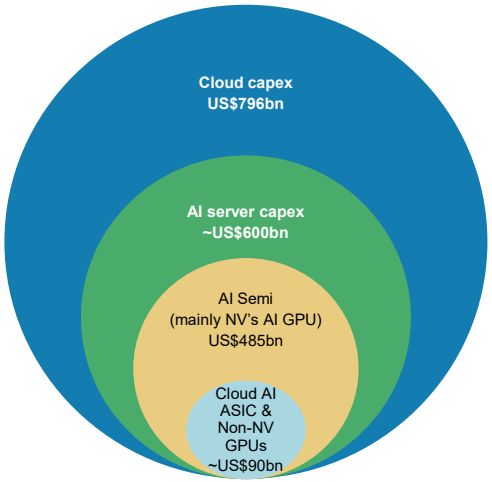
Aspeed – earnings estimate revision breadth



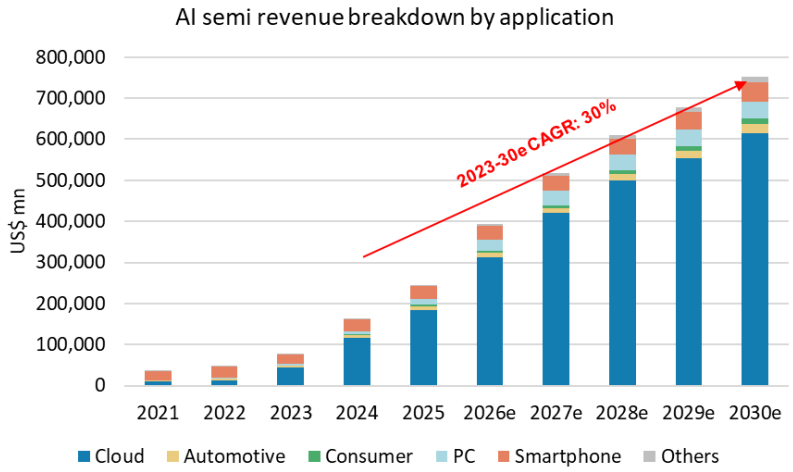
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Global Semi Industry Market Could Reach US$1.5tn by 2030e, with AI Semis Contributing Half

Our supply chain data-driven bull case assumption is that cloud AI Semi TAM could grow to US$485bn in 2026e



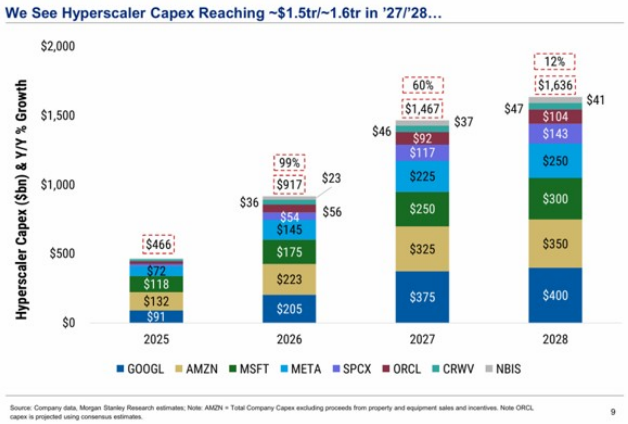
We expect AI semi TAM to reach ~US$753bn by 2030e



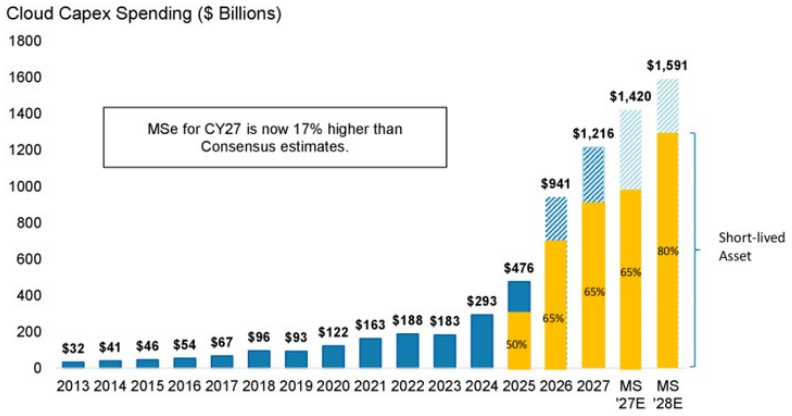
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Deceleration of Cloud Capex from Major CSPs into 2028?

Hyperscaler Capex breakdown by major CSP: in aggregate, total 12% growth seen for 2028



Morgan Stanley cloud capex tracker: we estimate nearly US$1.6tn of cloud capex in 2028 (top 14 listed global CSPs; no sovereign AI)

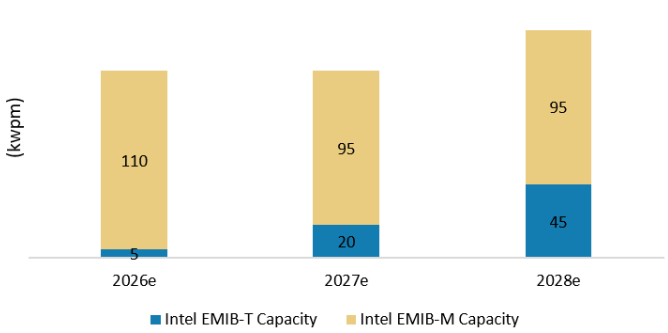


Source: FactSet, company data,

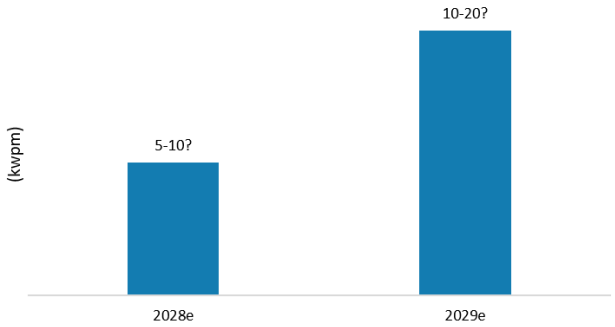
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Total 2.5D Packaging Capacity Could Still Reach 50% YoY Growth in 2028

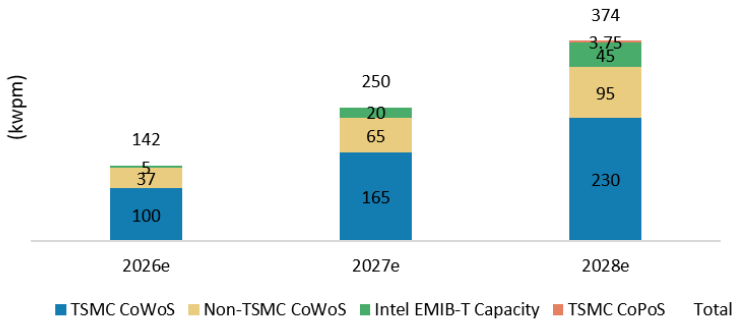
Intel EMIB Capacity (Average)



TSMC CoPoS capacity



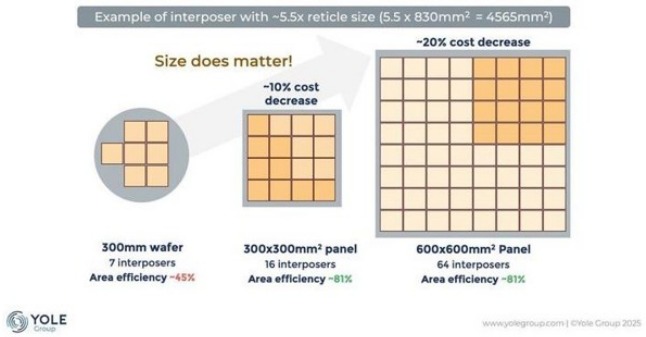
Total 2.5D Packaging Capacity (Average)



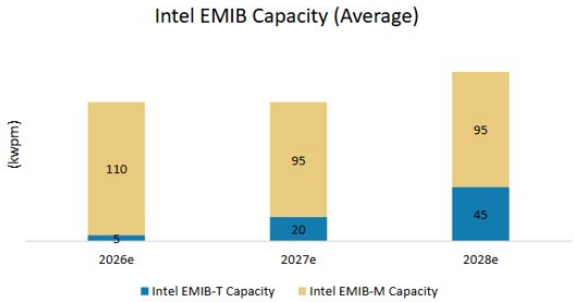
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What About the Competition Between TSMC's CoWoS and Intel's EMIB?

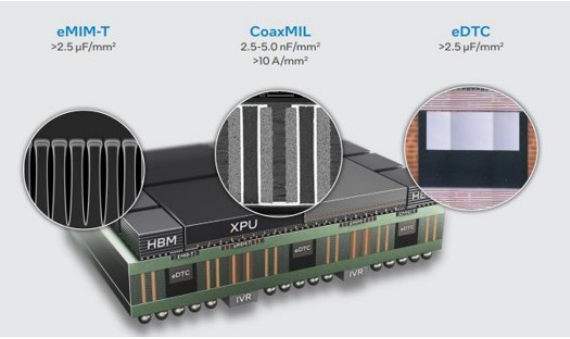
TSMC CoWoS can support up to 9.5x reticles, or four chips per wafer



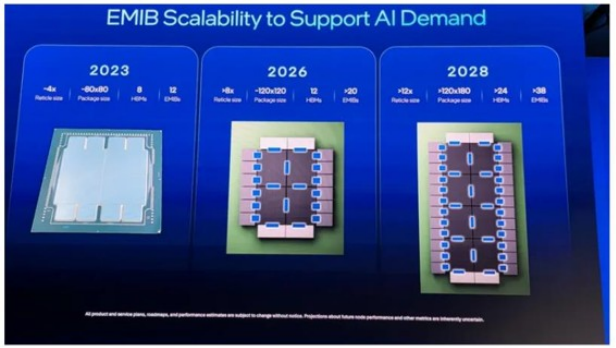
We expect Intel's EMIB-T capacity to reach 20kwpm in 2027 and 45kwpm in 2028



Intel EMIB eDTC: APMemory's technology



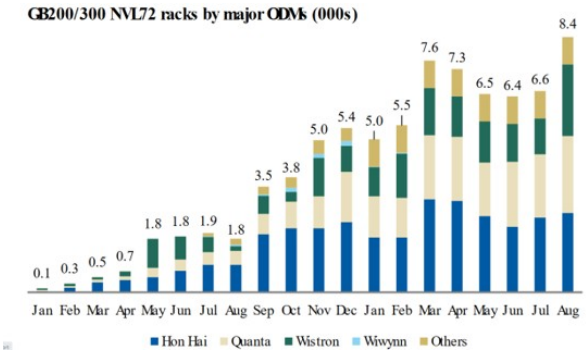
Intel's EMIB can support larger chips with more reticles (>12) if its supply chain can execute well



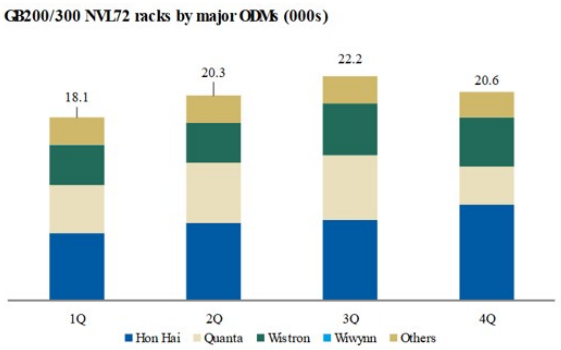
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NVIDIA NVL72 Rack Forecasts

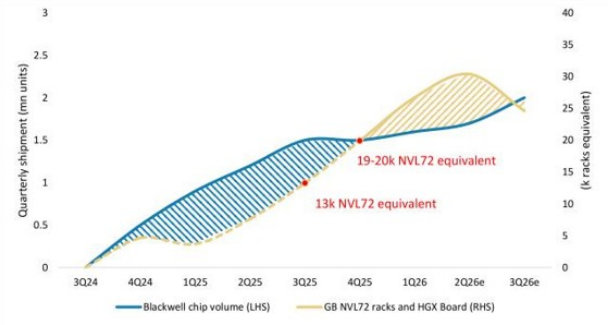
GB200/300 NVL72 Rack Ramp Monthly Trajectory



Industry-wide GB200/300 NVL72 Rack Split



We estimate that TSMC produced 5.1mn chips in 2025, with full-year GB200 NVL72 shipments seen reaching 30k



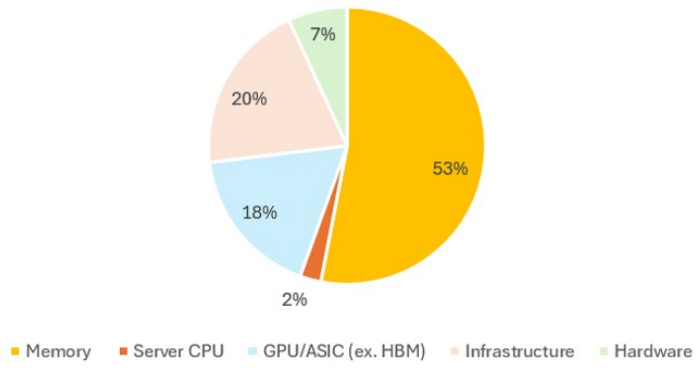


we include Wistron's computing tray (L10) rack equivalent number (without accounting for rack assembly and test times for L11). Estimates are from our Asia Pacific tech team's downstream estimates.

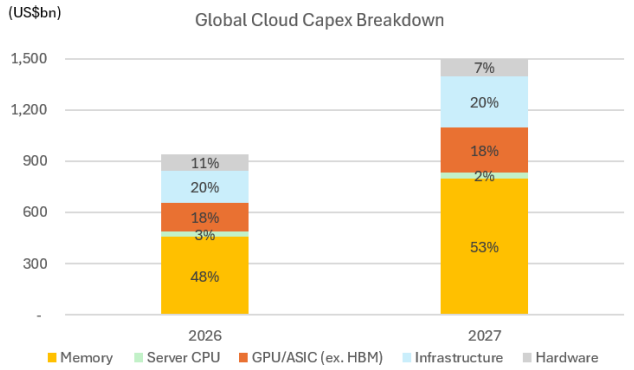
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Logic Cloud Accounts for Around 20% of Global Cloud Capex

2027 Cloud Capex Breakdown



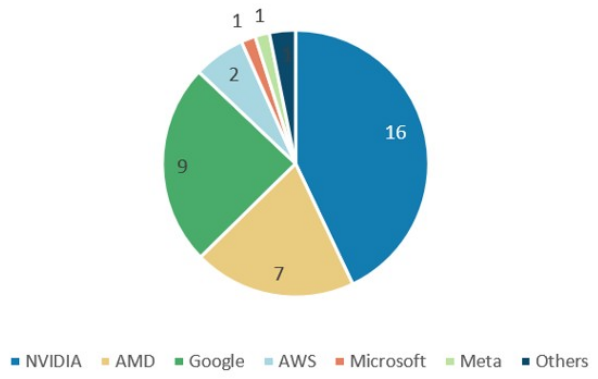
Global Cloud Capex Breakdown



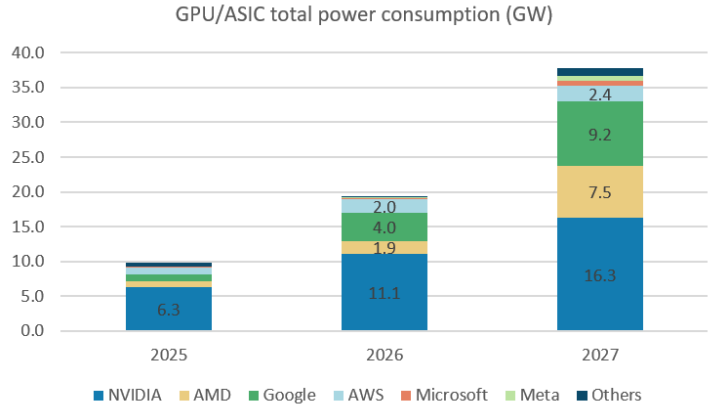
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Power Consumption Growth Remains Robust

2027 GPU/ASIC total power consumption (GW)



Global GPU/ASIC Total Power Consumption from TSMC CoWoS Shipment



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Announced Power Deployment – Implications for TSMC

Announced Power Deployment Implication for TSMC					
GPU/ASIC Vendor	NVIDIA (Top US AI firm)	AMD (Top US AI firm)	Broadcom	AWS (Top US AI firm)	NVIDIA (SpaceX)
Power Deployed (GW)	10	6	3.5	2	8
Rack name	Vera Rubin NVL144	Helios	TPU	Trainium3 UltraServers	Vera Rubin NVL144
Power consumption per Rack (kW)	220	220	63	144	220
Rack Number (k units)	45	27	56	14	36
Chip Name	Rubin GPU	MI455 GPU	TPUv7 (Ironwood) TPUv8i (Sunfish)	Trainium3 (4)	Rubin GPU
Chip Volume (k units)	3,273	1,964	3,571	2,000	2,618
Life Cycle for the project	3	3	5	8	1
Implied life-cycle CoWoS Volume (k wafers)	409	166	260	118	409
Implied life-cycle 2/3nm wafer Volume (k wafers)	260	95	190	107	208
2027 annual CoWoS demand (k wafers)	136	55	52	15	409

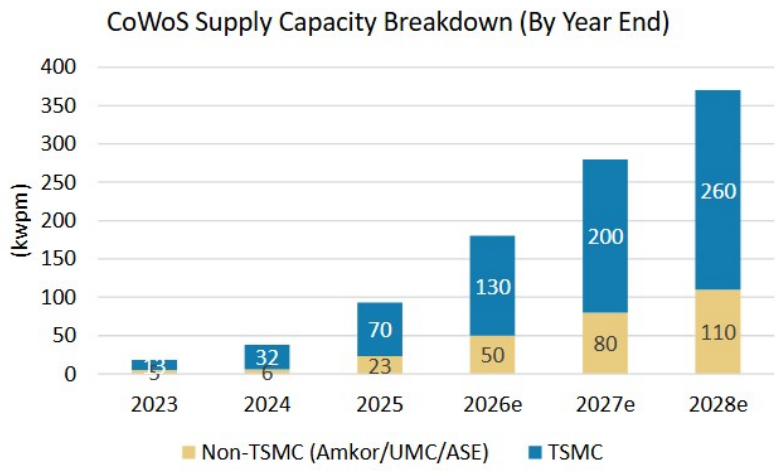
v8i per chip TDP being ~980W.

17

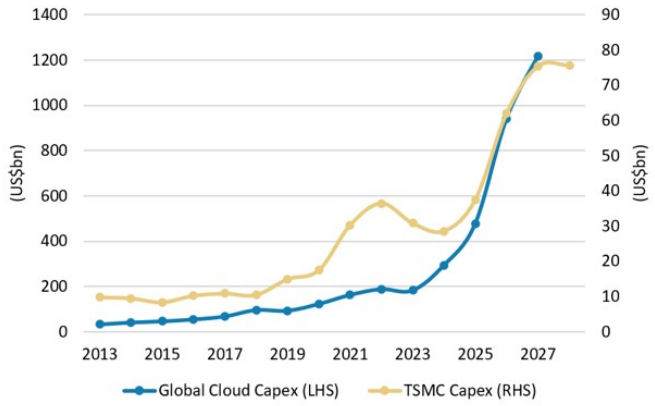
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TSMC May Expand CoWoS Capacity to 200kwpm by 2027, and 260kwpm by 2028, Given Ongoing Strong AI Demand

Global CoWoS capacity expansion by year-end and by vendor



Global Cloud Capex vs. TSMC's Capex



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Global CoWoS Demand Breakdown

Factoring in Nvidia chip price hike starting in Q1 next year, 70%+ revenue growth in CY27 looks consistent with TSMC CoWoS implied chip shipments

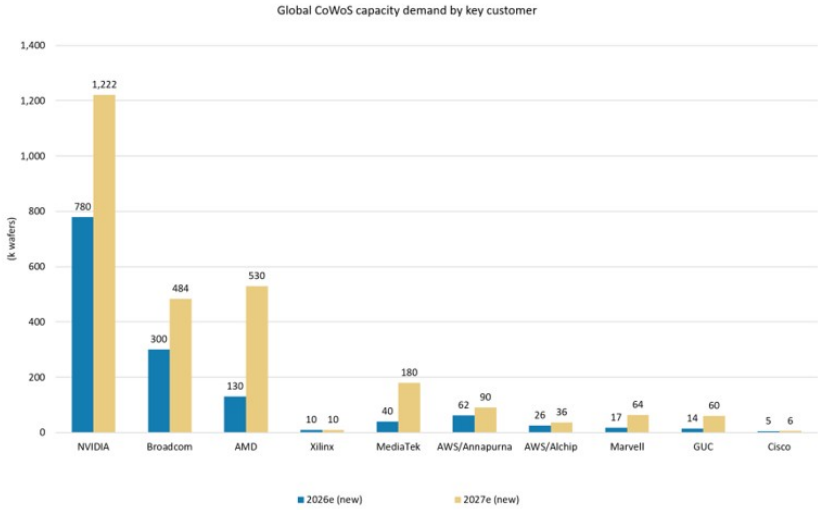
(k wafer)	2023	2024	2025	2026e	2027e	2023	2024	2025e	2026e	2027e
NVIDIA	53	200	425	780	1,222	45%	54%	62%	56%	49%
TSMC			390	680	1,090					
CoWoS-L			390	650	910					
CoWoS-S			0	20	50					
CoWoS-R			0	10	130					
Non-TSMC			35	100	132					
Amkor			35	100	132					
CoWoS-S			20	20	12					
CoWoS-R			15	80	120					
ASE/SPIL			0	0	0					
CoWoS-S			0	0	0					
CoWoS-R			0	0	0					
Broadcom	23	68	85	300	484	20%	18%	12%	22%	19%
TSMC			83	260	420					
CoWoS-L			0	15	60					
CoWoS-S			83	245	360					
ASE/SPIL			2	30	40					
CoWoS-L			0	0	0					
CoWoS-S			2	30	40					
Amkor				10	24					
CoWoS-S				10	24					
AMD	7	40	60	130	345	6%	11%	9%	9%	14%
TSMC			60	80	215					
CoWoS-L			0	70	210					
CoWoS-S			60	10	5					
ASE/SPIL			0	50	110					
CoWoS-L			0	50	110					
Amkor				0	20					
CoWoS-L				0	20					

Xilinx	3	10	10	10	10	3%	3%	1%	1%	0%
MediaTek				40	180				3%	7%
TSMC				40	180					
CoWoS-S				40	180					
AWS/Annapurna			60	62	90				4%	4%
TSMC			60	32	54					
CoWoS-R			60	32	54					
ASE/SPIL				30	36					
CoWoS-R				30	36					
AWS/Alchip	9	16	5	26	36	8%	4%	1%	2%	1%
Intel Habana	0	7	9	0	0	0%	2%	1%	0%	0%
Marvell	1	18	15	17	64	1%	5%	2%	1%	3%
TSMC				5	50					
CoWoS-L				5	50					
CoWoS-R			15	0	0					
ASE/SPIL				12	14					
CoWoS-R				12	14					
GUC	1	1	2	14	60	1%	0%	0%	1%	2%
Cisco		2	3	5	6		1%	0%	0%	0%
Others	20	10	15	10	12	17%	3%	2%	1%	0%
Total demand	**117**	**372**	**689**	**1,394**	**2,509**	**100%**	**100%**	**100%**	**100%**	**100%**

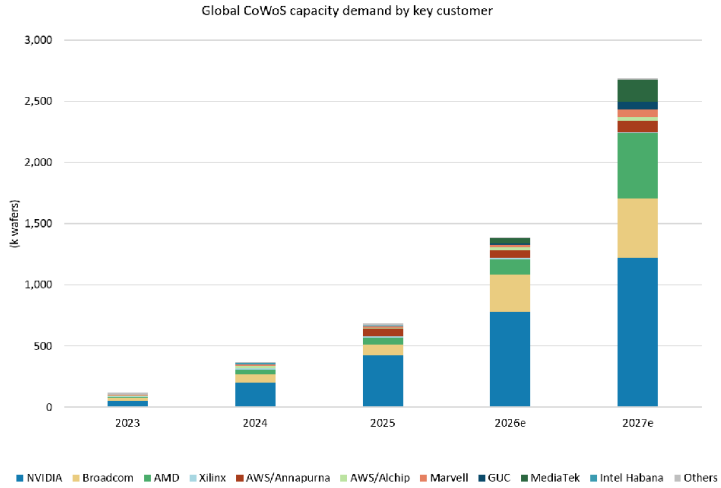
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Global CoWoS Demand set to Grow Robustly in 2027 at Each Major Customer

Global CoWoS capacity demand, by customer



Global CoWoS consumption, by customer

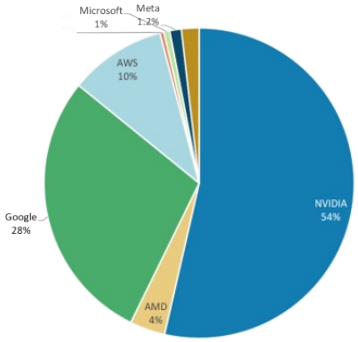


Source: Company

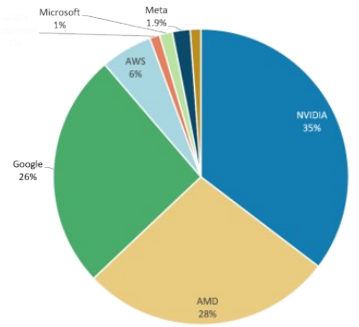
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AI Computing Wafer Consumption Could Reach >US$46bn in 2027, with NVIDIA Accounting for the Majority

AI semi wafer consumption, by customer, 2026e



AI semi wafer consumption, by customer, 2027e



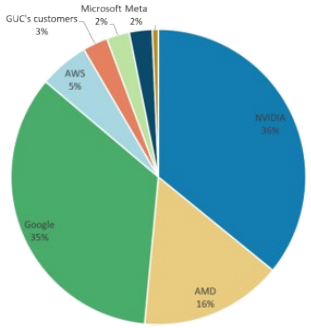
AI chip vendor	Product name	CoWoS capacity allocation (k wafers)	Chips per CoWoS wafer	Implied shipments (k)	Compute die size	Geometry	Compute die units	Wafer consumption (k wafers)	Wafer price (US$)	Wafer revenue TAM (US$ mn)
AI GPU (2027e)										
NVIDIA	B300	40	14	560	850	4nm	2	44	23,042	1,024
	Vera CPU	250	23	5,750	850	3nm	1	228	27,300	6,229
	Rubin R200	740	8	5,920	850	3nm	2	470	27,300	12,827
	Rubin Ultra	130	8	1,040	850	3nm	2	83	27,300	2,253
AMD	MI350 series	5	12	60	110	3nm	8	2	27,300	48
	MI455	75	7	525	850	2nm	2	56	30,000	1,667
	MI450 (for Meta)	45	14	630	850	2nm	1	33	30,000	1,000
	MI500 (Arcadia)	10	4	40	850	2nm	2	4	30,000	127
	Venice CPU	210	21	4,410	155	2nm	8	176	30,000	5,292
AI ASIC (2027e)										
Google	TPU v7p (Ironwood; AVGO)	13	16	208	700	3nm	2	14	27,300	371
	TPU v8i (Sunfish; AVGO)	330	12	3,960	800	3nm	2	296	27,300	8,075
	TPU v8t (Zebrafish; MediaTek)	180	20	3,600	800	3nm	2	269	27,300	7,341
	TPU v9 (Humufish; MediaTek)			400	850	2nm	4	63	30,000	1,905
AWS	Trainium 3	140	17	2,380	700	3nm	2	127	27,300	3,465
Microsoft	Maia 200	5	29	145	700	3nm	1	3.8	27,300	103
	Maia 300	50	11	550	850	2nm	1	29.1	30,000	873
Meta	MTIA 3 (Iris)	55	10	550	850	3nm	2	44	27,300	1,192
US AI Lab	Nexus (Titan 1)	25	13	325	750	3nm	4	45.5	26,000	1,183
	Titan 2	5	8	40	850	2nm	4	8.5	30,000	254
Others		18								
Total		2,454						1,996		55,230

Source: Company

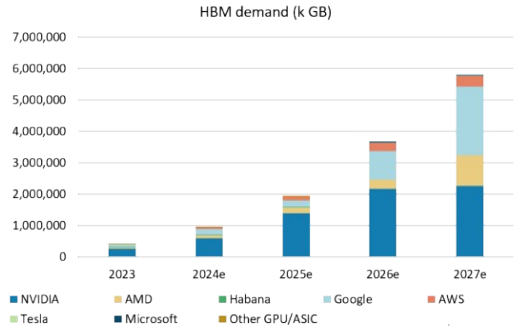
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HBM Consumption in 2027e – Up to 48bn Gb

HBM consumption by customer in 2027e



NVIDIA still consumes most HBM supply in 2027e

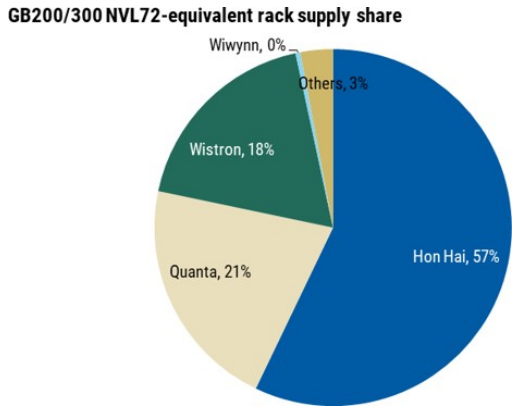


AI chip vendor	Product name	CoWoS capacity allocation (k wafers)	Chips per CoWoS wafer	Implied shipments (k)	HBM chip density (GB)	HBM chip units	Total HBM size (GB)	HBM generation	HBM vendor	Total HBM demand (k GB)
AI GPU (2027e)										
NVIDIA	B300	40	14	560	36	8	288	HBM3e 12hi	Hynix/Micron	161,280
	Vera CPU	250	23	5,750						
	Rubin R200	740	8	5,920	36	8	288	HBM4 12hi	Hynix/Micron/Samsung	1,704,960
	Rubin Ultra	130	8	1,040	48	8	384	HBM4e 12hi	Hynix/Micron/Samsung	399,360
AMD	MI350 series	5	12	60	36	8	288	HBM3e 12hi	Samsung/Micron	17,280
	MI455	75	7	525	36	12	432	HBM4 12hi	Samsung/Micron	226,800
	MI450 (for Meta)	45	14	630	36	6	216	HBM4 12hi	Samsung/Micron	136,080
	MI500 (Arcadia)	10	4	40	48	16	768	HBM4e 12hi	Samsung/Micron	30,720
	Venice CPU	210	21	4,410						
AI ASIC (2027e)										
Google	TPU v7p (Ironwood; AVGO)	13	16	208	24	8	192	HBM3e 8hi	Hynix/Samsung	39,936
	TPU v8i (Sunfish; AVGO)	330	12	3,960	36	8	288	HBM3e 12hi	Samsung/Hynix/Micron	1,140,480
	TPU v8t (Zebrafish; MediaTek)	180	20	3,600	36	6	216	HBM3e 12hi	Samsung/Hynix/Micron	777,600
	TPU v9 (Humufish; MediaTek)			400	48	12	576	HBM4e 12hi	Samsung/Hynix/Micron	230,400
AWS	Trainium 3	140	17	2,380	36	4	144	HBM3e 12hi	Hynix/Samsung/Micron	342,720
Microsoft	Maia 200	5	29	145	16	4	64	HBM3	Samsung	9,280
	Maia 300	50	11	550	36	8	288	HBM4 12hi	Samsung	158,400
Meta	MTIA 3 (Iris)	55	10	550	36	8	288	HBM3e 12hi	Samsung/Hynix/Micron	158,400
US AI Lab	Nexus (Titan 1)	25	13	325	36	6	216	HBM4 12hi	Samsung/Hynix/Micron	70,200
	Titan 2	5	8	40	36	8	288	HBM4 12hi	Samsung/Hynix/Micron	11,520
Others		18								
Total		2,454								5,615,416
									Total HBM demand (mn Gb)	44,923

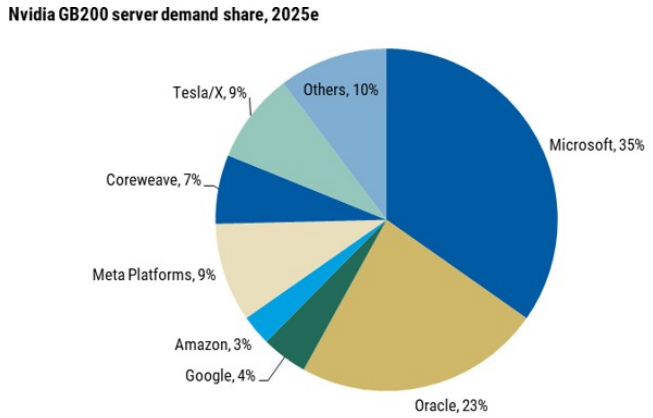
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NVIDIA GB200/300 Server Racks – Supply/Demand Assumptions

NVIDIA GB200/300 rack supply share (2025)



NVIDIA GB200/300 rack demand share (2025)



Morgan Stanley

Nvidia CY27 70% revenue growth guidance should be positive for Taiwan supply chains with higher revenue exposure

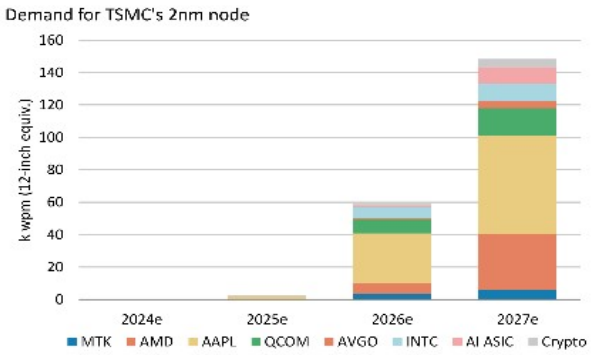
Revenue exposure related to Nvidia

Ticker	Company	Rating	Revenue exposure related to Nvidia in 2026	Supply/business related to Nvidia	Current share price	MS Price Target	Upside	2027 P/E (x)	2027 PEG (x)	Dividend Yield	Covered Analyst
Greater China Semiconductor											
2449.TW	KYEC	Overweight	40%	Final test	261.5	338.00	29%	19.1	0.5	1.9%	Charlie Chan
6515.TW	Winway	Overweight	40%	Test Socket	6600	12,000.00	82%	30.7	0.3	0.9%	
2330.TW	TSMC	Overweight	25%	Wafer foundry	2380	2,988.00	26%	16.4	0.5	1.4%	Charlie Chan
5274.TWO	Aspeed	Overweight	20%	BMC	17980	24,000.00	33%	57.4	1.0	1.3%	Daniel Yen
7769.TW	Hon Precision	Overweight	20%	Handler	6305	10,008.00	59%	28.3	0.4	2.5%	
3711.TW	ASE	Overweight	<10%	CP, oS packaging	612	628.00	3%	20.4	0.6	2.2%	Charlie Chan
Greater China Technology Hardware											
2376.TW	Giga-Byte	Equal-Weight	67%	Server / rack assembly	344	405.00	18%	10.0	0.5	4.3%	Howard Kao
2382.TW	Quanta	Overweight	62%	Server / rack assembly	332.5	385.00	16%	11.5	1.2	3.9%	Howard Kao
2317.TW	Hon Hai	Overweight	56%	L6/L10/L11 server assembly	248.5	310.00	25%	12.5	0.9	3.1%	Howard Kao
3231.TW	Wistron	Overweight	49%	L6/L10 server assembly	181	275.00	52%	8.4	0.2	2.4%	Howard Kao
2360.TW	Chroma	Overweight	40%	Testing equipments	2140	2,800.00	31%	34.1	0.9	1.2%	Derrick Yang
8210.TW	Chenbro	Overweight	40%	Chassis	886	1,600.00	81%	15.1	0.5	0.7%	Derrick Yang
2357.TW	Asustek	Underweight	31%	Server / rack assembly	934	700.00	-25%	13.7	1.2	6.2%	Howard Kao
3665.TW	Bizlink	Overweight	30%	Interconnects	1955	3,665.00	87%	16.2	0.3	0.8%	Derrick Yang
2059.TW	King Slide	Overweight	20%	Rail kits	11990	15,000.00	25%	23.8	0.7	0.9%	Derrick Yang
3037.TW	Unimicron	Overweight	16%	ABF substrate & PCB	970	1,465.00	51%	29.0	0.7	0.7%	Howard Kao
2327.TW	Yageo	Overweight	10%	Passive components	545	1,465.00	169%	15.9	0.4	2.2%	Howard Kao

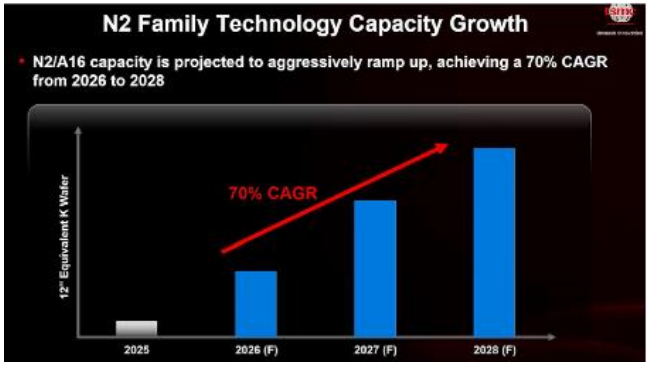
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TSMC 2nm Demand Remains Very Strong

TSMC – our projection of 2nm customer demand breakdown



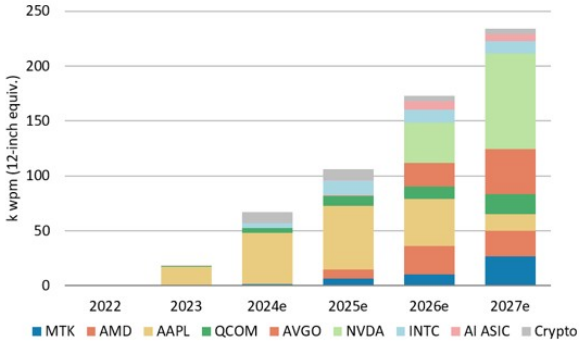
TSMC suggests N2 capacity to achieve 70% CAGR from 2026-2028e



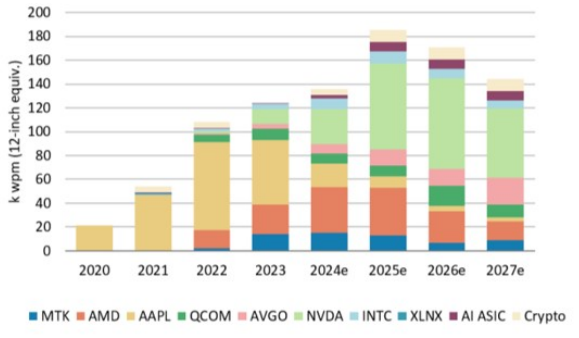
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TSMC N5 Capacity to Drop in 2027 while N3 Should Keep Increasing, Similar to our Demand Forecast

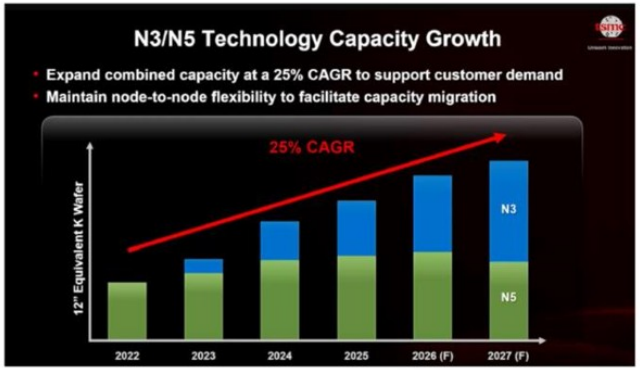
TSMC – our projection of 3nm customer demand breakdown



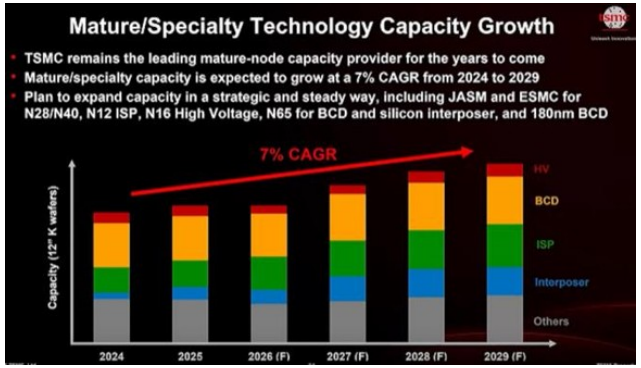
TSMC – our projection of 4/5nm customer demand breakdown



TSMC indicates that N5 capacity will drop in 2027 while N3 capacity should keep increasing



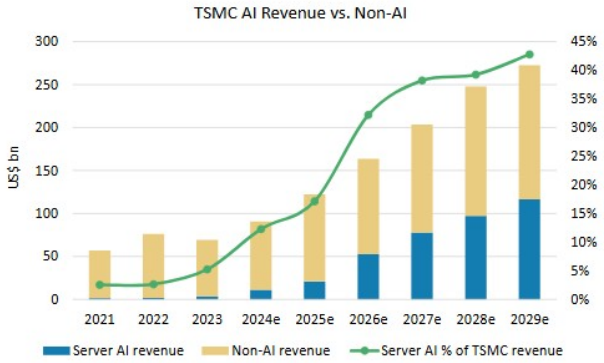
TSMC mature/specialty capacity is expected to grow 7% CAGR from 2024-2029



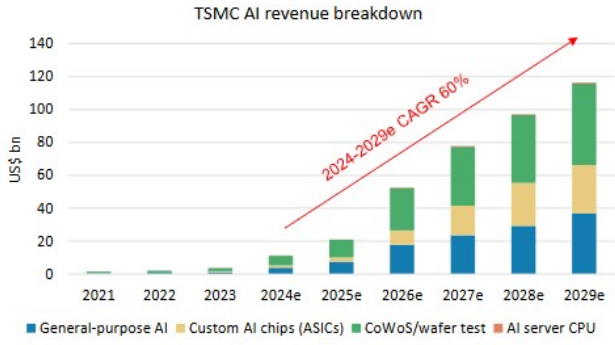
Morgan Stanley

TSMC – AI Semis Revenue Could Reach 60% from 2024 to 2029e

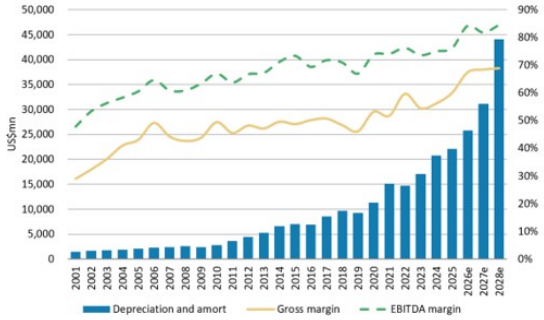
TSMC – AI semis revenue could account for >30% of 2026e revenue



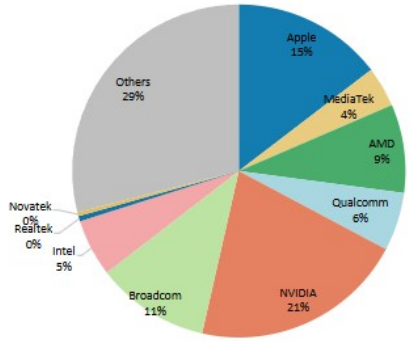
TSMC – AI semis revenue breakdown



TSMC – margin expansion



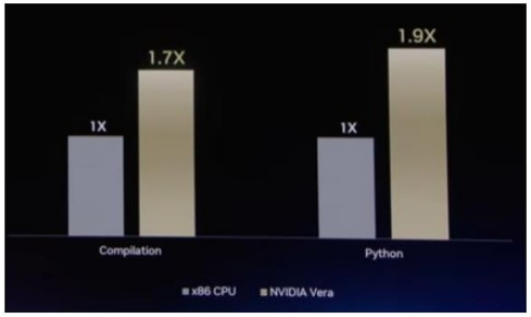
TSMC – 2026e revenue breakdown by customer



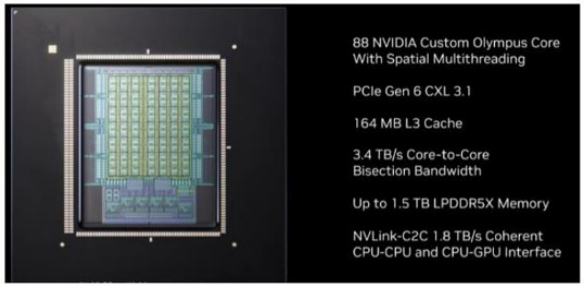
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Nvidia's Latest Vera CPU Could Support Robust Agentic CPU Demand

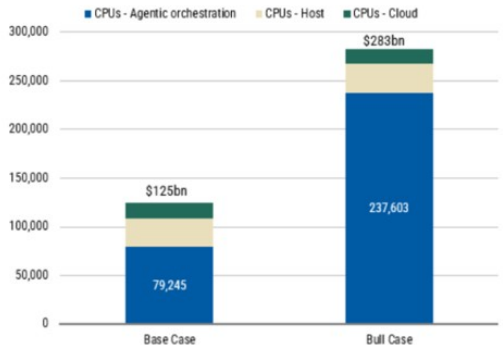
Vera performance could be 1.8x that of highest-performance x86 CPU



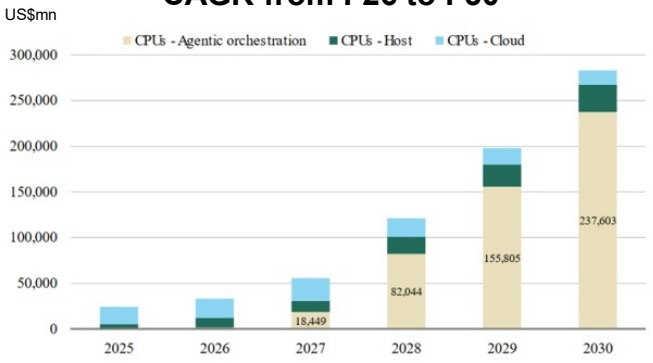
Vera CPU cores are not split across chiplets, enabling faster core-to-core connection



Our bull case implies a US$238bn CPU orchestration TAM



In MS top-down model, we estimate the Agentic CPU TAM will expand at a 251% CAGR from F26 to F30

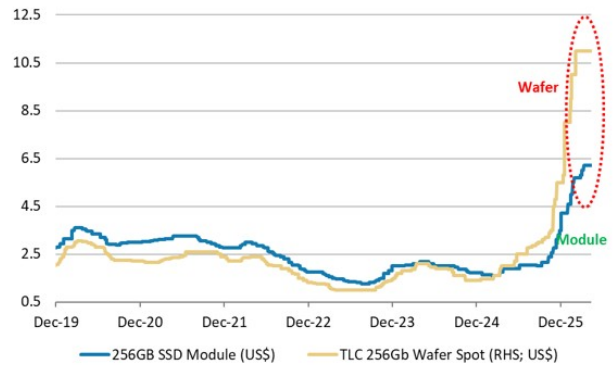


Global Technology: Agentic AI – The Surge Begins (11 May 2026)

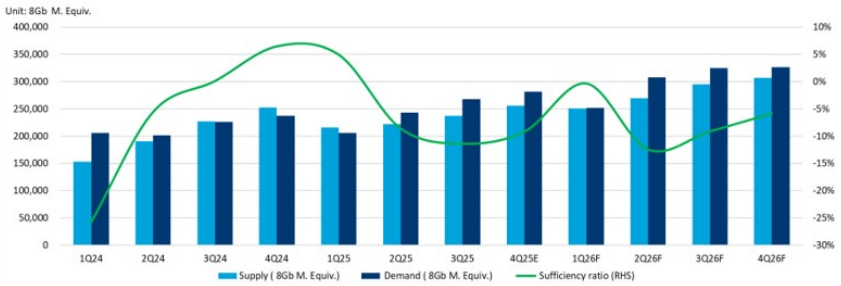
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AI Storage Leads to NAND Shortage; We Also Expect NOR Flash Undersupply into 2026

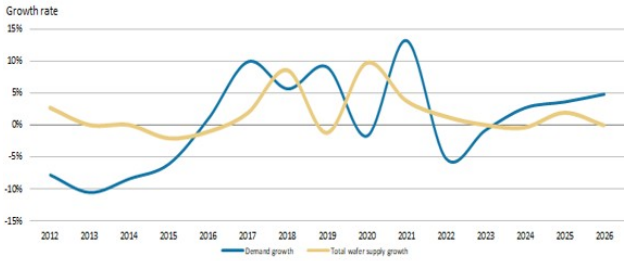
NAND wafer spot pricing and module prices



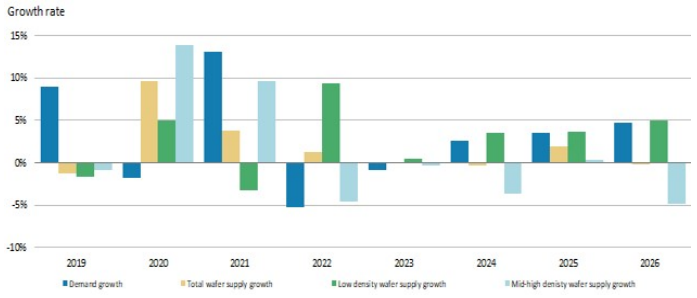
NAND supply and demand model



NOR flash demand and supply growth rates



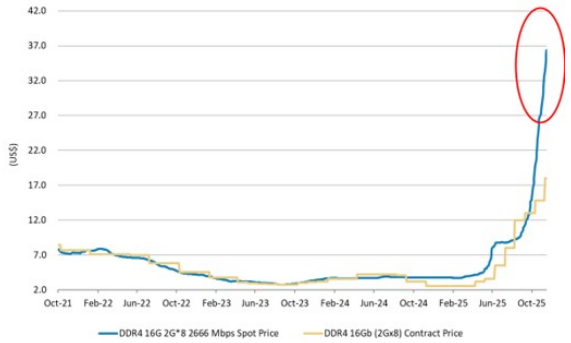
NOR flash demand and supply growth rates



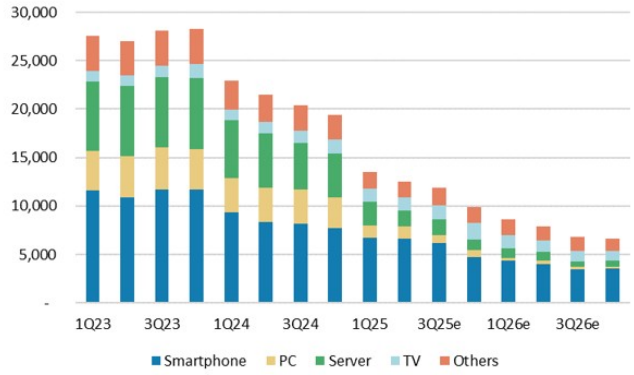
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DDR4 Shortage to Persist into 2H26; Spot Price Capped

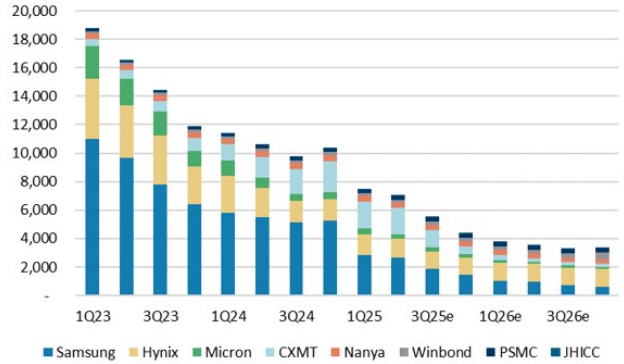
DDR4 16Gb spot vs. contract price



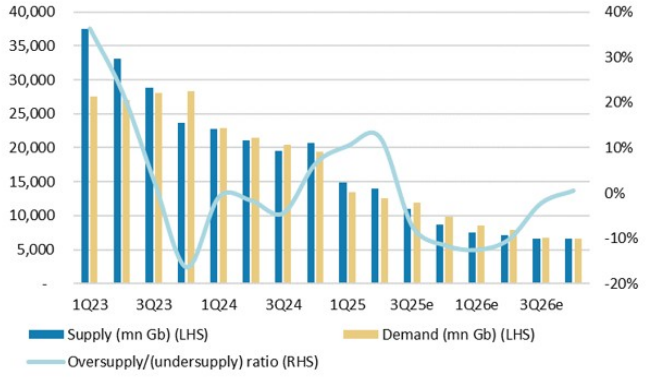
Quarterly demand breakdown, by product (mn Gb)



Quarterly supply breakdown (mn Gb)



Quarterly supply and demand summary



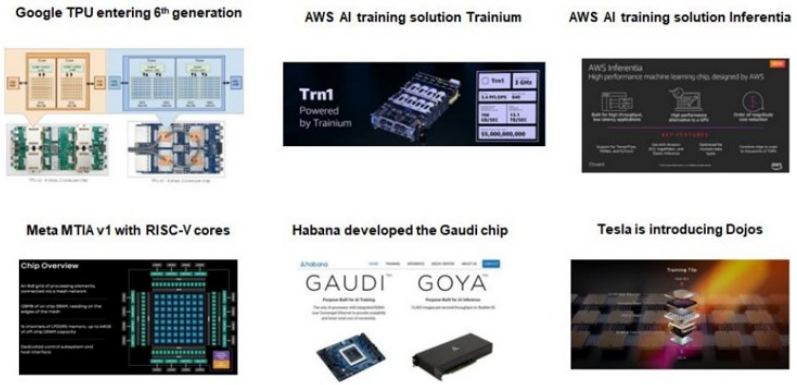
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AI ASIC and Chip Testing

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CSPs Still Need Custom Chips, Even with NVIDIA Providing Powerful AI GPUs

Global CSP cloud AI custom chips



The volume upside of AI chips like Google TPU could depend on ABF substrate supply



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Alchip might achieve US$8bn revenue for Trainium4 in 2028

Alchip 2028 Trainium revenue could reach US$8bn

		2026e	2027e	2028e
Volume (k)	Trainium3	400	600	
	Trainium4			800
Chip ASP Recognized by Alchip (US$k)	Trainium3	4.6	4.6	
	Trainium4			10
Trainium Revenue (US$bn)	Trainium3	1.8	2.8	
	Trainium4			8
	Total Trainium Revenue	1.8	2.8	8
Total Alchip Revenue (US$bn)		3.1	4.4	9.8
Trainium Revenue %		60%	63%	82%

Trainium Forecasts from Our Asian Research team

k Units	2023	2024	2025e	2026e	2027e	2028e
Trainium1/Inferentia2	300	600	30			
Trainium2		300	1,200			
Trainium3			85	1,700	2,380	-
Trainium4					unknown	2,500
Total	**300**	**900**	**1,315**	**1,700**	**2,380**	**2,500**

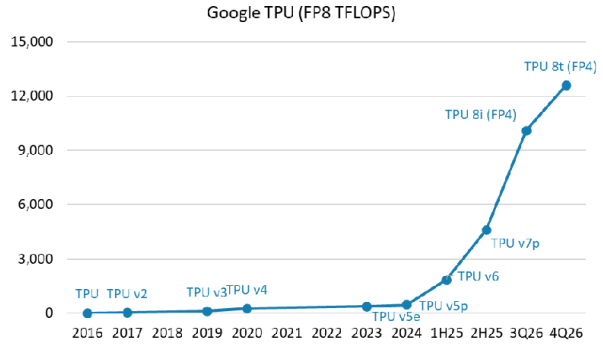
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More ASIC Projects Are Coming, According to Each CSP Plan

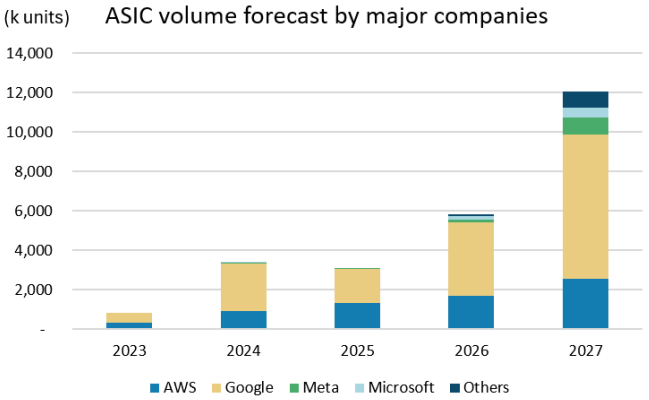
TPU Forecasts from MS Asia Research team

k Units	2023	2024	2025e	2026e	2027e	2028e
v5	500	2,400	250			
v6 (Trillium)			1,200			
v7 (Ironwood, by Broadcom)			300	2,300	200	
v8i (Sunfish; 3nm, by Broadcom)				900	4,000	2,500
v8t (Zebrafish; 3nm, by MediaTek)				500	3,000	1,000
v9 (Humufish; 2nm, by MediaTek)					150	3,000
v9a (Merope; 2nm, by US design service)						unknown
v10 (Icefish; 1.4nm, by MediaTek)						unknown
Total	**500**	**2,400**	**1,750**	**3,700**	**7,350**	**>6500**

Google's TPU performance is growing rapidly



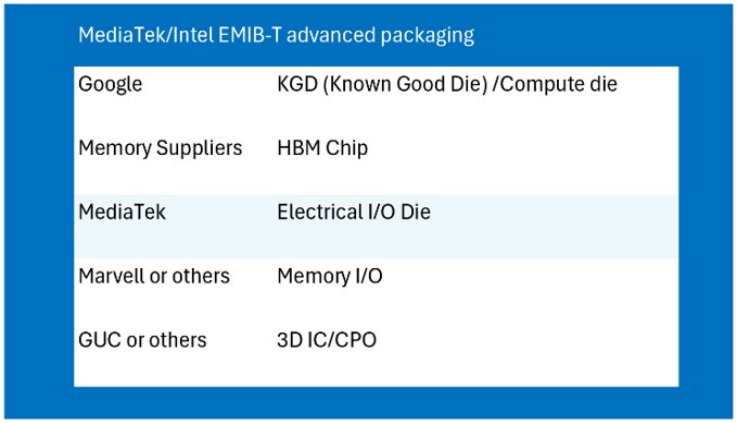
ASIC volume forecast by major companies



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MediaTek TPU revenue could reach US$70bn by 2029 even under a COT model

We believe MediaTek would still at least handle the packaging and I/O die for TPU v10



We expect MediaTek 2029 TPU revenue to reach US$70bn

		2027e	2028e	2029e
Volume (mn)	TPU v8t (Zebrafish)	3	1	
	TPU v9 (Humufish)		3	4
	TPU v10 (Icefish)			1
Chip ASP Recognized by MediaTek (US$k)	TPU v8t	4.5	4.5	
	TPU v9		13	13
	TPU v10			18
TPU Revenue (US$bn)	TPU v8t	13.5	4.5	
	TPU v9		39	52
	TPU v10			18
	Total TPU Revenue	13.5	43.5	70
Total MediaTek Revenue (US$bn)		35	67	NA
TPU Revenue %		38%	65%	NA



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KYEC Benefits from Strong AI GPU, TPU and CPU Growth

AI Revenue Forecast For KYEC

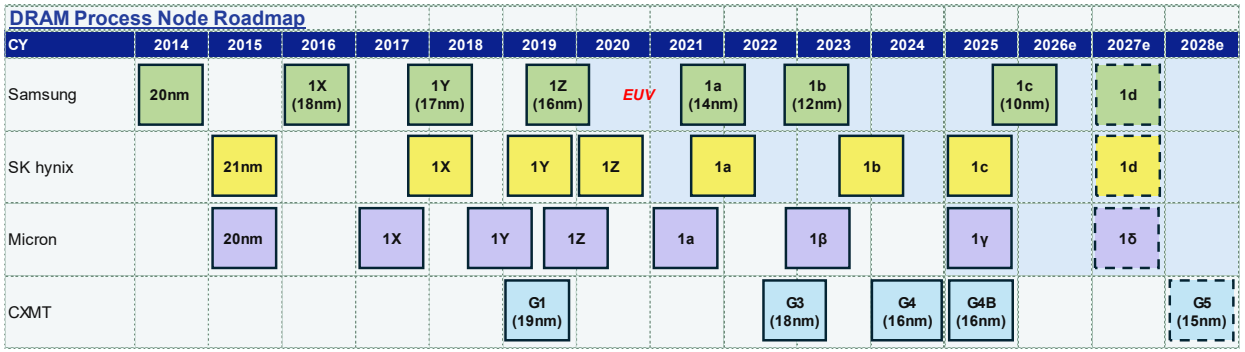
	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26e	3Q26e	4Q26e		2025	2026e	2027e
Units (k)												
H-series	650	200	250	500	400	400	600	600		1,600	2,000	
B-series with GDDR7	-	-	300	500	250	250	250	250		800	1,000	
B-series with HBM	1,000	1,100	1,400	1,500	1,500	1,500	1,600	300		5,000	4,900	560
R-series							500	1,500			2,000	6,500
G-series CPU										1,100	2,450	250
V-series CPU											2,500	5,750
Google TPU										1,750	3,680	4,000
Google CPU											1,500	3,000
Test time												
Per chip test time (seconds)												
H-series test time	350	350	350	350	350	350	350	350		350	350	350
B-series with GDDR7 test time			350	350	350	350	350	350		350	350	350
B-series with HBM test time	700	750	900	1,000	1,000	1,000	850	850		1,000	850	850
R-series test time							850	850			850	1,275
G-series CPU test time										300	300	300
V-series CPU test time											700	700
Google TPU blended test time										186	340	450
Google CPU test time											300	300
Total test demand (k hrs)												
H-series	63	19	24	49	39	39	58	58		156	194	-
B-series with GDDR7			29	49	24	24	24	24		78	97	-
B-series with HBM	194	229	350	417	417	417	378	71		1,190	1,282	132
R-series					-	-	118	354			472	2,302
G-series CPU										92	204	21
V-series CPU											486	1,118
Google TPU										90	348	500
Google CPU											125	250
Test hour rate (for the largest customer including burn-in)	***170***	***170***	***170***	***170***	***170***	***170***	***180***	***190***		***170***	***178***	***200***
Test hour rate (for TPU with self-bought testers)										***200***	***250***	***280***
Largest customer's AI revenue to KYEC (US$ mn)	43.8	42.3	68.6	87.4	81.6	81.6	104.1	96.5		257.6	486.3	714.6
% of KYEC MSe Revenue (quarterly figures without CPU)	19%	15%	23%	27%	25%	23%	27%	21%		23%	32%	32%
TPU revenue to KYEC (US$ mn)										18.1	86.9	140.0
% of KYEC MSe Revenue										1.6%	5.7%	6.2%
Google CPU revenue to KYEC (US$ mn)											31.3	70.0
% of KYEC MSe Revenue											2.0%	3.1%

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CXMT in the context of Global DRAM

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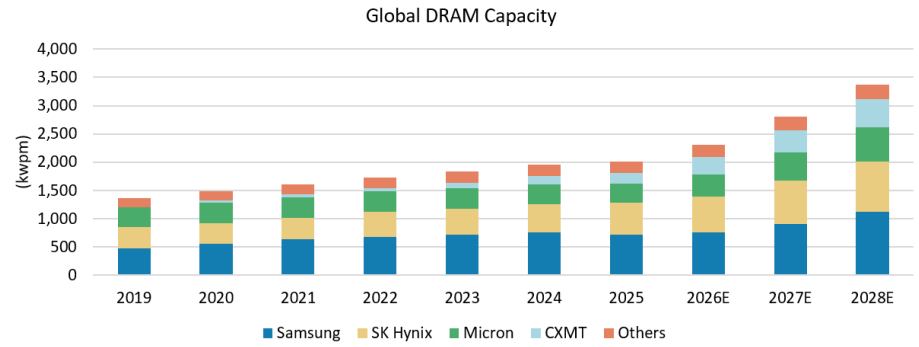
CXMT's Process Node Roadmap and Specs Compared to Global Vendors

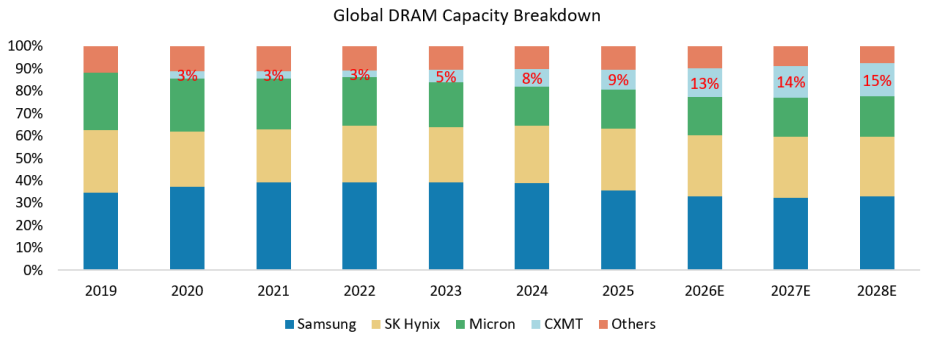


DDR5 Spec Comparison				
Manufacturer 16 Gb DDR5	Samsung 16 Gb DDR5	SK hynix 16 Gb DDR5	Micron 16 Gb DDR5	CXMT 16 Gb DDR5
Year First Revealed (Clock Speed, ex.)	2021DDR5-5600, DDR5-6000	2021DDR5-4800, DDR5-6000	2021DDR5-4800	2024DDR5-6000
Parent Product Examples	G.SKILL Trident Z5 DDR5 F5-5600U3636C16GX2-TZ5K (K4RAH086VB-BCQK)	SK Hynix 32 GB HMCG88MEBUA81N DDR5 UDIMM PC5-4800B module (H5CG48MEBD-X014)	TeamGroup ELITE DDR516 GB UDIMM (MT60B2G8HB-48B:A)	Gloway 16GB×2 (32GB) DDR5-6000 Module(H2G08SC522-6AF)
DRAM Process / Geometry	D1y (17nm)	D1y (17nm)	D1z (16nm)	G4 (16nm)
Die Size (Scaled)	73.58 mm² (8.94 mm × 8.23 mm)	75.21 mm² (9.24 mm × 8.14 mm)	66.26 mm² (8.43 mm × 7.86 mm)	66.99 mm² (8.19 mm × 8.18 mm)
Bit Density	0.217 Gb/mm²	0.213 Gb/mm²	0.241 Gb/mm²	0.239 Gb/mm²
Peripheral Gate Process	HKMG (Gate-first)	Poly/W Gate	Poly/W Gate	Poly/W Gate

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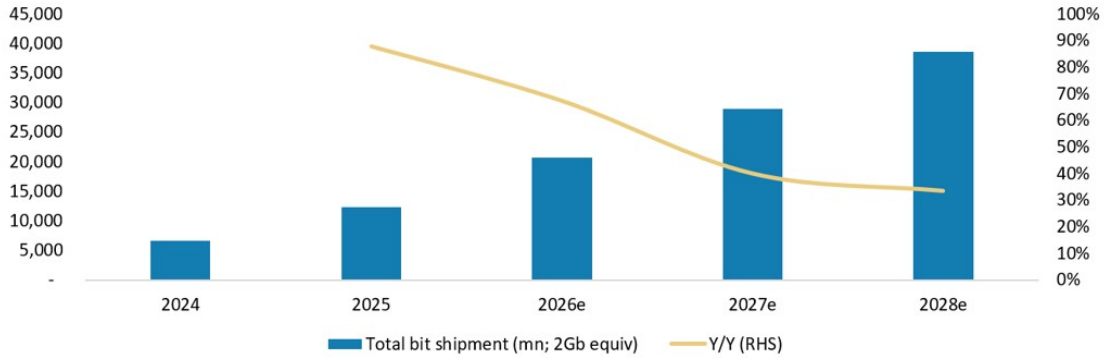
Global DRAM capacity seen reaching 3,374kwpm in 2028; CXMT could account for 15% (~500kwpm)

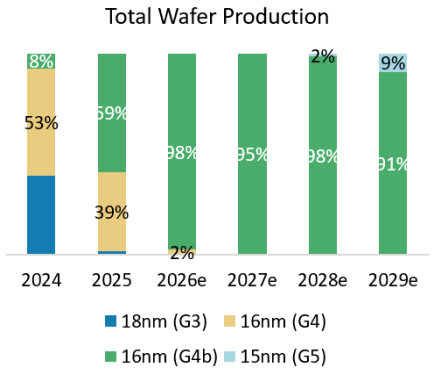


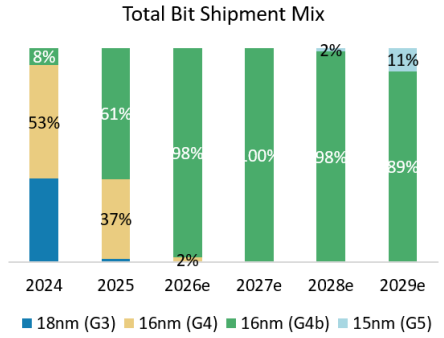


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CXMT total bit shipments to rise at 40% CAGR (2025-28e) as production mix shifts from G4b to G5 in 2028/29

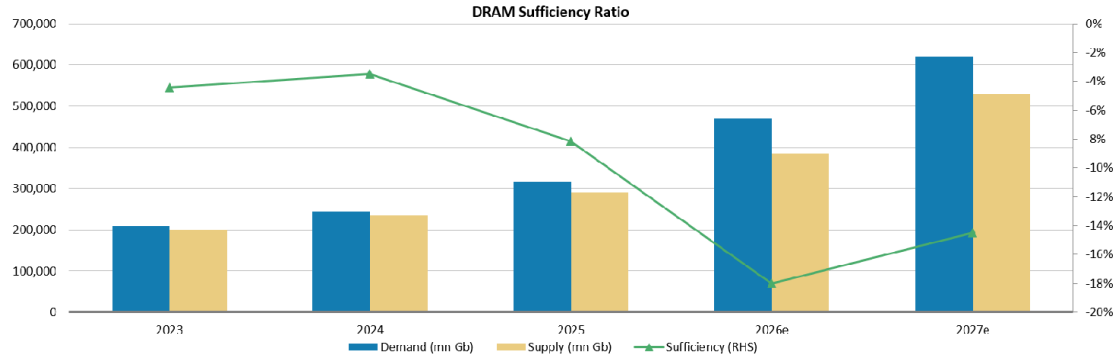


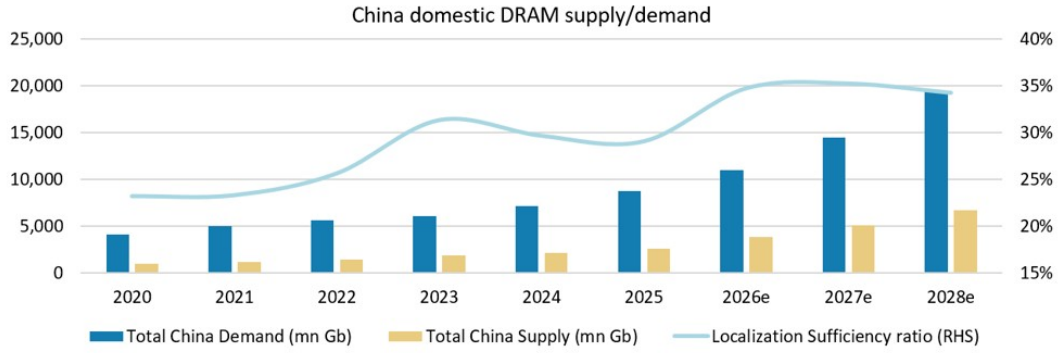




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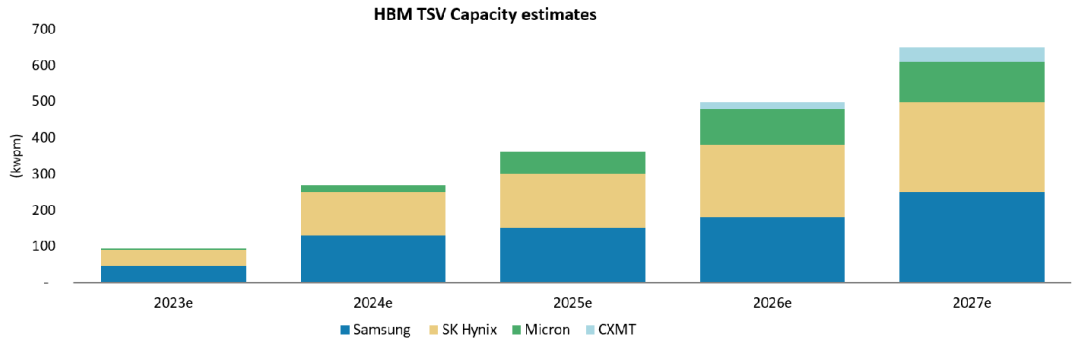
Global DRAM supply growth continues to lag demand; China's domestic supply is even more constrained

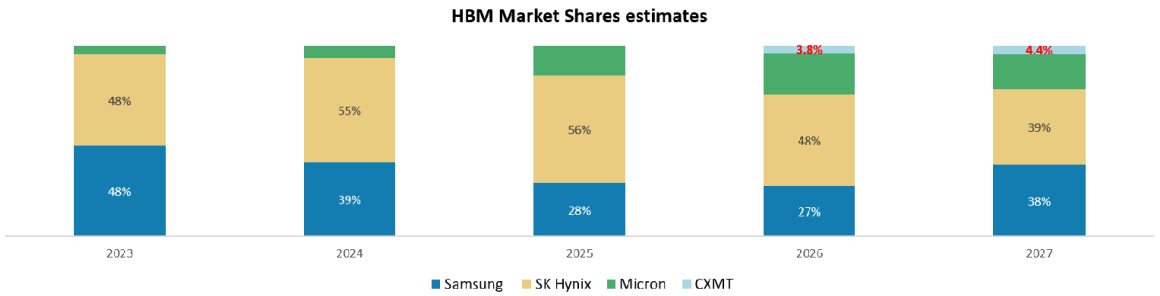




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CXMT's HBM TSV capacity seen reaching 20kwpm in 2026, 40kwpm in 2027 and 70kwpm in 2028, to account for 3.8% of the total HBM market in 2026 and 4.4% in 2027 in terms of bit shipments





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Even with CXMT's capacity added in, the overall HBM market remains undersupplied

Sufficiency estimates	2023	2024	2025	2026e	2027e
HBM TSV Capacity (K wpm)					
Samsung	45	130	150	180	250
SK Hynix	45	120	150	200	250
Micron	3	20	60	100	110
CXMT				20	40
Total	**93**	**270**	**360**	**500**	**650**
Yield rate assumptions				**38.9%**	**30.0%**
Samsung		*50%*	*60%*	*55%*	*70%*
SK Hynix		*60%*	*75%*	*65%*	*70%*
Micron		*50%*	*70%*	*65%*	*70%*
CXMT				*40%*	*50%*
UTR assumptions					
Samsung		*80%*	*60%*	*70%*	*100%*
SK Hynix		*100%*	*100%*	*100%*	*100%*
Micron		*100%*	*100%*	*100%*	*100%*
CXMT				*100%*	*100%*
Implied HBM production (mn Gb)					
Samsung	1,500	4,435	6,387	9,696	21,239
SK Hynix	1,500	6,273	12,830	17,363	22,226
Micron	150	729	3,548	7,937	10,372
CXMT				1,382	2,462
Total	**3,150**	**11,436**	**22,765**	**36,379**	**56,300**
Sufficiency Ratio				**59.8%**	**54.8%**
HBM Demand (mn Gb)	1,866	9,258	20,176	36,641	60,653
Commodity DRAM market demand (mn Gb)	209,527	243,423	316,640	469,675	619,970
Total HBM+DRAM demand (mn Gb)	211,393	252,681	336,816	506,316	680,624
Commodity DRAM market supply (mn Gb)	200,214	228,086	301,257	382,107	519,666
Total HBM+DRAM supply (mn Gb)	203,364	239,523	324,022	418,486	575,965
Total DRAM sufficiency	***-4%***	***-5%***	***-4%***	***-17%***	***-15%***

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Quantum Security

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Governments have established Post-Quantum Cryptography migration roadmaps

Exhibit 13: Migration timelines differ across regions, with 2030 as a key inflection point

United States	2027	Deprecate vulnerable cryptographic algorithms	2030	Complete migration of critical systems
European Union	2026	Publish migration roadmap	2030	Complete protection of sensitive information systems
United Kingdom	2028	Complete inventory and initial migration planning	2035	Full migration completed
South Korea	2028	Complete inventory and migration planning	2035	Complete migration of national cryptographic systems

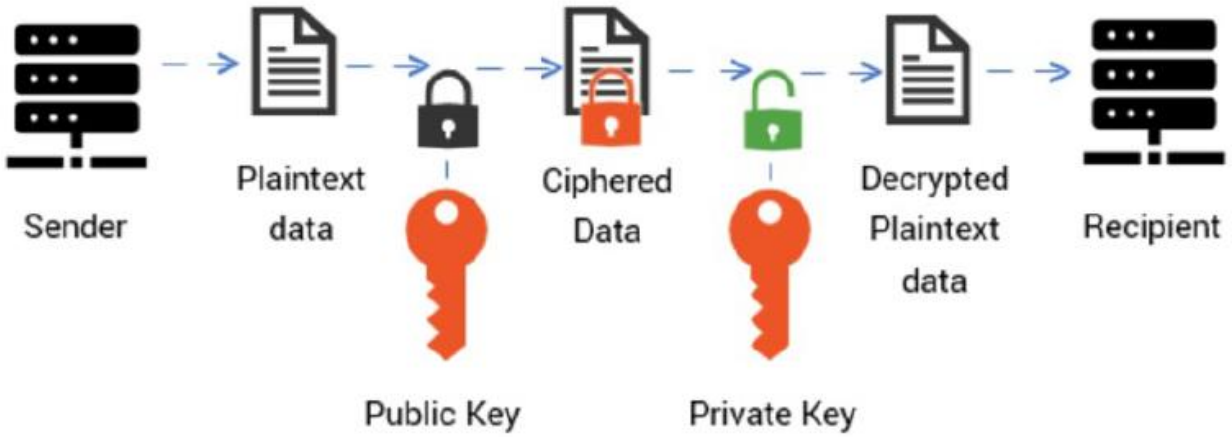
Major economies are largely aligning with NIST PQC standards, while some countries continue developing domestic cryptographic frameworks.

Source: Topology Research Institute, Morgan Stanley Research

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Asymmetric cryptography is the dominant security framework in modern electronic systems

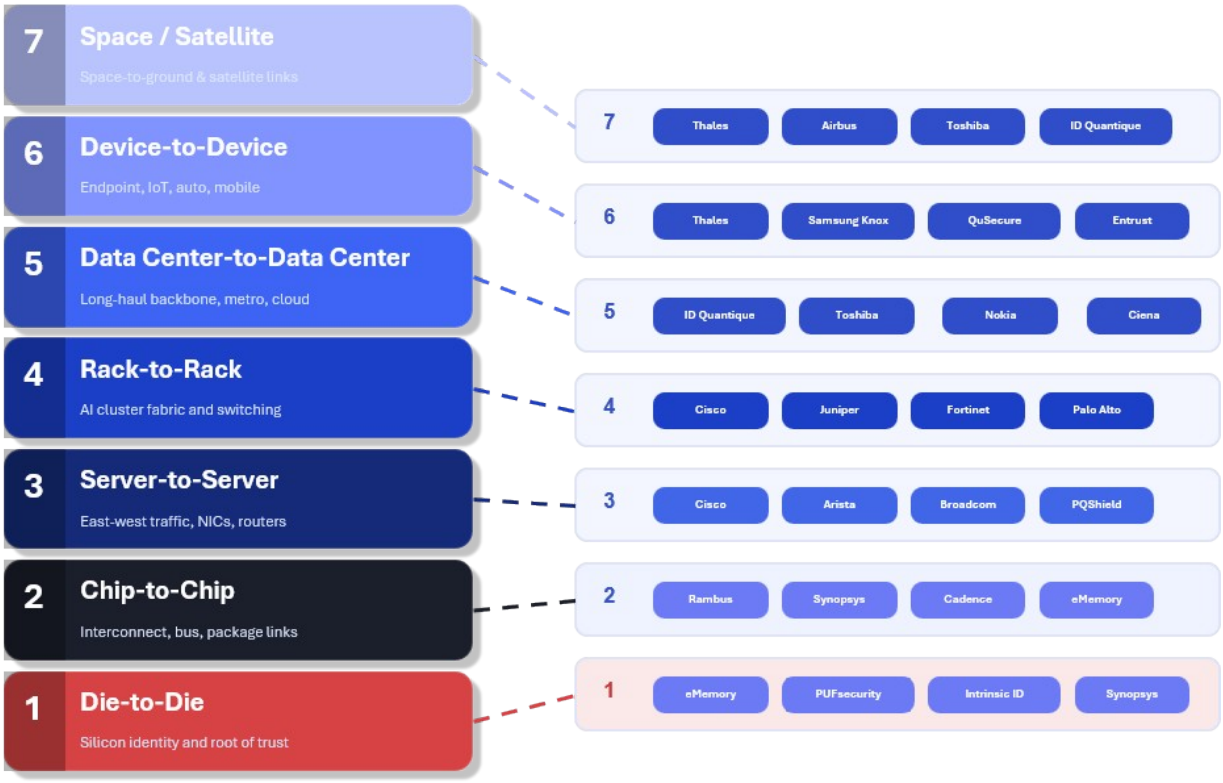
Exhibit 21: Asymmetric encryption



Source: cheapsslsecurity

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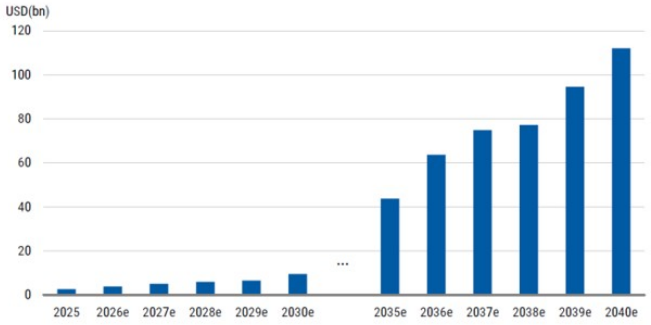
Quantum security across different connectivity layers



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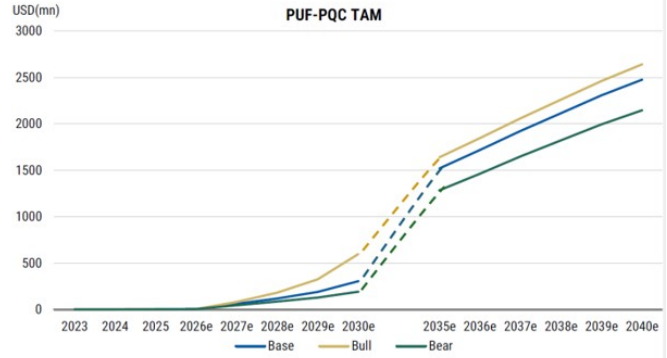
We estimate PUF TAM to be around US$310mn by 2030

Exhibit 1: We project the quantum infrastructure TAM will reach US$110bn by 2040



Source: Morgan Stanley Research (E) estimates.

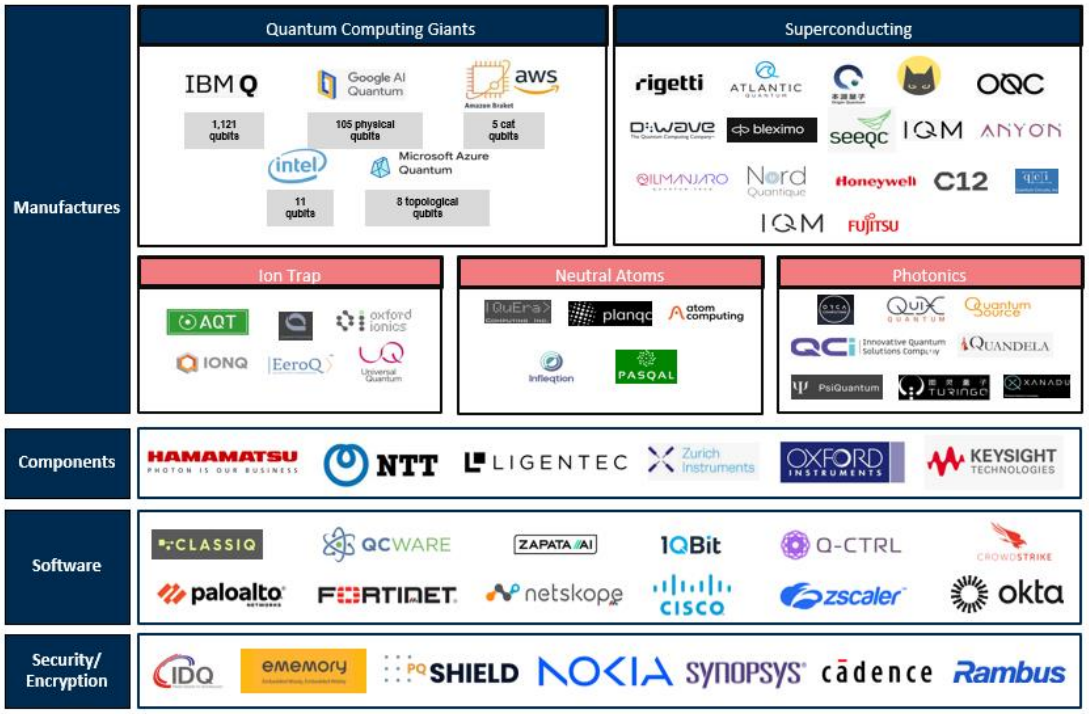
Exhibit 3: The quantum hardware security TAM – our bull, base and bear cases



Source: Company data, Morgan Stanley Research estimates.

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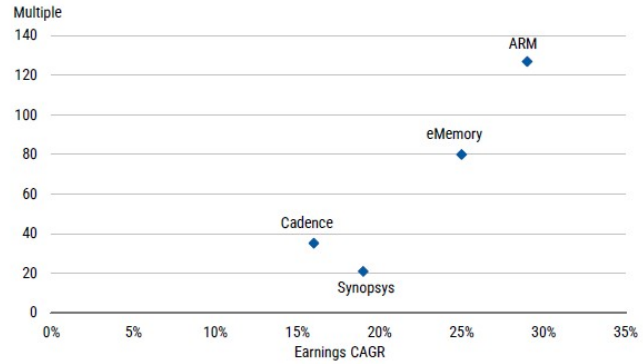
Global quantum supply chain – Hardware security is the foundation



Morgan Stanley

Global PUF/IP comp & eMemory P/E band

Exhibit 6: Global Semi/PUF IP-related stocks – 2027 P/E vs. 2025-28 earnings growth



Source: Morgan Stanley Research estimates.

Exhibit 14: eMemory: P/E band



Source: FactSet, Morgan Stanley Research (e) estimates

relation to its assessment of strategic options for its SMT Solutions Segment (the "Assessment"), as announced on January 21, 2026. There is no assurance that the Assessment will result in a transaction, nor as to the timing or terms thereof. ASMPT has agreed to pay

with Intel Corporation ("Intel"), for Intel to repurchase the 49% equity interest in the joint venture related to Intel's Fab 34 in Ireland not held by Intel, as announced on April 1, 2026. The transaction is subject to customary closing conditions. AP Grange has agreed to pay