

Memory Semis Monthly

May '26 Edition: Server memory procurement upside continues to gather pace

Equities

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Increasing DDR DRAM and NAND flash ASPs once again

Continuing upside in server demand is rippling through memory demand and pricing. Based upon our latest industry checks, we now forecast DDR contract pricing to increase close to +60% QoQ in 2Q26 (was +37%). We estimate that server DDR contract pricing could reach US\$1.95 per Gb, with some DDR5 quotes close to US\$2.10, compared to US\$1.15 in 1Q. We continue to forecast 10% QoQ increase in 3Q, and now expect server DDR to reach close to US\$2.80 by 4Q27. We see a widening gap with mobile DRAM in particular. As for NAND flash, we now forecast banded contract +60% QoQ in 2Q26 (was +40%), and also +10% QoQ in 3Q26. This is also driven by server SSDs.

Upping HBM end-demand forecasts as well

We increase HBM bit end-demand to 32.9bn Gb in 2026 (up 88% YoY), vs. 31.5bn prior, and for 2027, 58.0bn Gb (up 76% YoY) vs. prior 53.9bn. Our main revision up is for Google TPU unit procurement assumptions, consistent with our latest forecasts for Broadcom ([link](#)) and MediaTek ([link](#)). On the other hand, we now assume 768GB for Rubin Ultra (HBM4E 12-Hi) vs. 1TB prior (HBM4E 16-Hi). We would stress this is still an evolving situation, with no final decision. If this is the path forward, this would reflect Nvidia pre-empting possible supply constraints (at the DRAM die level) and inherently more challenging yields for Thermal Compression Bonding for 16-Hi vs. 12-Hi.

Samsung could reach market share parity for HBM with SK Hynix by 2027E

We lower our SK Hynix HBM shipment forecasts to 17.7bn Gb for 2026 (+40% YoY), vs. 18.4bn prior, and for 2027, to 23.1bn Gb (+30% YoY), vs. 24.7bn prior. This is in large part as SK Hynix is allocating more capacity to DDR5/LPDDR5X due to continuous demand upside, as per customers requests. We would stress that we do not see HBM4 as a bottleneck for the impending Rubin ramp in 2H26. As for Samsung, we maintain our HBM shipment forecasts for 2026 at 9.7bn Gb (+124% YoY) but raise 2027 to 23.0bn Gb (+137% YoY) vs 20.3bn prior. This is on the back of some recent capex pull-in ([link](#); [link](#)). This would put Samsung and SK Hynix at equal HBM bit market share in 2027 at 40% each, vs. 20% for Micron. Demand for 2027 remains over supply though and further upside for Samsung could be the main swing factor. We increase HBM ASPs assumptions to up 30% YoY in 2027 for HBM4/HBM3E (per bit) from flat, and keep +50% for HBM4E vs HBM4 prior year.

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KEY CHARTS

Figure 1: AI server GPU/accelerator unit forecasts ('000 units)

	HBM Gen.	HBM Content (GB)			2025	1Q26E	2Q26E	3Q26E	4Q26E	2026E	1Q27E	2Q27E	3Q27E	4Q27E	2027E
NVIDIA															
L40S	GDDR6	48			38.1										
H200	HBM3E	141			592.7										
H20 / H20E	HBM3 / 3E	96	96		441.0										
B200 (8Hi)	HBM3E	192	192		1,440.9										
GB200 (2x GPU - 8Hi)	HBM3E	384	384		1,080.4	102.9				102.9					
B300 (12Hi)	HBM3E	288	288	288	587.4	267.0	270.0	217.0	116.0	870.0	50.0				50.0
GB300 (2x GPU - 12Hi)	HBM3E	576	576	576	778.2	658.0	700.0	560.0	420.0	2,338.0	350.0	200.0	150.0	100.0	800.0
R200 (12Hi)	HBM4	288	288	288			20.0	200.0	320.0	540.0	350.0	380.0	250.0	200.0	1,180.0
RV200 (2x GPU - 12Hi)	HBM4	576	576	576			40.0	370.0	590.0	1,000.0	740.0	890.0	870.0	720.0	3,220.0
Rubin Ultra (16Hi)	HBM4E		768	768									280.0	670.0	950.0
*Other GPU/Accel	HBM3 / 3E	288	384	576	106.9	60.0	80.0	80.0	80.0	300.0	60.0	50.0	40.0	40.0	190.0
Total Units					5,065.6	1,087.9	1,110.0	1,427.0	1,526.0	5,150.9	1,550.0	1,520.0	1,590.0	1,730.0	6,390.0
% YoY					3.2%	-17.2%	0.0%	11.9%	11.8%	1.7%	42.5%	36.9%	11.4%	13.4%	24.1%
% QoQ						-20.3%	2.0%	28.6%	6.9%		1.6%	-1.9%	4.6%	8.8%	
Total GPUs					6,924.3	1,848.8	1,850.0	2,357.0	2,536.0	8,591.8	2,640.0	2,610.0	3,450.0	4,560.0	13,260.0
% YoY					37.9%	27.2%	24.9%	26.5%	19.3%	24.1%	42.8%	41.1%	46.4%	79.8%	54.3%
% QoQ						-13.0%	0.1%	27.4%	7.6%		4.1%	-1.1%	32.2%	32.2%	
AMD															
MI300	HBM3	192	192		71.3										
MI325X (12Hi)	HBM3E	256	256		223.8	21.4				21.4					
MI355X (12Hi)	HBM3E	288	288	288	220.7	203.3	176.3	83.0		462.6					
MI308X	HBM3	192	192	192	95.8	29.0	33.0	5.0		67.0					
MI450 (12Hi)	HBM4		432	432				80.0	180.0	260.0	200.0	320.0	290.0	220.0	1,030.0
MIXXX (16Hi)	HBM4E			1024									60.0	200.0	260.0
*Other GPU/Accel	HBM3	192	192	288	4.2	1.4	1.5	1.5	1.5	5.8	2.0	2.0	2.0	2.0	8.0
Total Units					615.8	255.2	210.8	169.4	181.5	816.9	202.0	322.0	352.0	422.0	1,298.0
% YoY					41.1%	111.4%	119.0%	-5.3%	-17.5%	32.6%	-20.8%	52.7%	107.7%	132.6%	58.9%
% QoQ						16.0%	-17.4%	-19.6%	7.1%		11.3%	59.4%	9.3%	19.9%	
Google															
TPU v5e	HBM2E	32	32		134										
TPU v5p	HBM2E	96	96		1,916										
TPU v6e	HBM3E	32	32	32	426	269	294	185	92	840					
TPU v7	HBM3E	192	192	192	90	420	650	720	730	2,520	660	480	320	210	1,670
TPU v8i (Dual die AX)	HBM3E		288	288				125	375	500	690	800	850	740	3,080
TPU v8t (Single die X)	HBM3E		216	216				110	340	450	670	770	820	720	2,980
TPU v9AX	HBM4E		768	768										90	90
TPU v9X	HBM4E		384	384										70	70
*Other TPU/Accel	HBM3	96	144	144	77	14	19	17	23	73	15	15	15	15	60
Total Units					2,642.5	702.6	962.9	1,156.9	1,560.5	4,382.8	2,035.0	2,065.0	2,005.0	1,845.0	7,950.0
% YoY					18.6%	9.7%	67.7%	101.7%	82.6%	65.9%	189.6%	114.5%	73.3%	18.2%	81.4%
% QoQ						-17.8%	37.0%	20.1%	34.9%		30.4%	1.5%	-2.9%	-8.0%	
Amazon															
Inferentia 2	HBM2E	32	32		88										
Trainium 2 / 2.5	HBM3E	96	144	144	496	180	250	180	140	750	80	40			120
Inferentia 3	HBM3	96	96	96	162	38	32	20	15	105	15	10			25
Trainium 3	HBM3E	144	144	144				350	553	903	500	430	200	150	1,280
Trainium 4	HBM4		256	256									250	490	740
*Other Accel	HBM3	144	144	144	37	7	8	11	14	40	9	9	9	9	36
Total Units					783.2	224.5	290.5	561.0	722.4	1,798.4	604.0	489.0	459.0	649.0	2,201.0
% YoY					-7.7%	13.8%	41.6%	186.1%	291.1%	129.6%	169.0%	68.4%	-18.2%	-10.2%	22.4%
% QoQ						21.6%	29.4%	93.1%	28.8%		-16.4%	-19.0%	-6.1%	41.4%	
Intel / Habana															
Gaudi 3	HBM2 / 3E	288	288	288	188	30	18	8	0	56					
Gaudi 4	HBM3E	288	288	288				10	25	35	25	20	15	10	70
*Others	HBM2 / 3E	192	192	192	25	6	4	4	5	18	4	4	4	4	16
Total Units					213.2	36.0	21.6	21.6	30.0	109.2	29.0	24.0	19.0	14.0	86.0
% YoY					-32.1%	-20.3%	-60.1%	-62.7%	-46.3%	-48.8%	-19.4%	11.1%	-12.0%	-53.3%	-21.2%
% QoQ						-35.6%	-40.0%	0.0%	38.9%		-3.3%	-17.2%	-20.8%	-26.3%	
Microsoft															
Maia 100	HBM3	120	120	120	34	3	1			4					
Maia 200	HBM3E		288	288		2	6	10	14	33	14	10	7	4	35
Maia 300	HBM4			288									8	14	22
*Others	HBM3	120	192	192	8	2	2	2	2	8	2	2	2	2	8
Total Units					41.8	7.3	8.9	12.5	16.1	44.7	16.0	12.0	17.0	20.0	65.0
% YoY					22.3%	-27.1%	-19.2%	3.9%	83.6%	7.1%	119.5%	35.0%	36.3%	24.4%	45.3%
% QoQ						-16.7%	21.9%	40.3%	28.9%		-0.4%	-25.0%	41.7%	17.6%	
Meta															
MTIA v1	LPDDR5	64	64		421	20	5			25					
MTIA v2	LPDDR5	128	128		30	20	8			30					
MTIA v3	HBM3E	192	192	192	5	15	20	35	40	110	40	30	20	15	105
MTIA v4	HBM4		432	432							40	60	80	120	300
*Others	LPDDR5	64	128	128	28	3	1	1	1	6	5	5	5	5	20
Total Units					483.9	57.8	34.3	38.1	41.2	171.4	85.0	95.0	105.0	140.0	425.0
% YoY					19.3%	-43.2%	-71.1%	-71.4%	-68.3%	-64.6%	47.2%	176.8%	175.5%	239.8%	148.0%
% QoQ						-55.6%	-40.6%	11.0%	8.1%		106.3%	11.8%	10.5%	33.3%	
OpenAI															
Titan v1	HBM3E		216	216				20	150	170	160	170	130	100	560
Titan v2	HBM4E		576	576									50	120	170
Total Units								20.0	150.0	170.0	160.0	170.0	180.0	220.0	730.0
% YoY													800.0%	46.7%	329.4%
% QoQ									650.0%		6.7%	6.3%	5.9%	22.2%	
Tesla															
Dojo	HBM3	64	64	64	62	17	18	15	14	64	15	15	18	15	63
*Others	HBM3	64	64	64	44	7	7	6	6	26	6	6	5	5	22
Total Units					105.9	23.8	25.2	21.0	19.6	89.6	21.0	21.0	23.0	20.0	85.0
% YoY					-39.1%	-12.4%	-9.3%	-24.1%	-15.9%	-15.4%	-11.8%	-16.7%	9.5%	2.0%	-5.2%
% QoQ						2.0%	5.9%	-16.7%	-6.6%		7.1%	0.0%	9.5%	-13.0%	
Others															
Startups	HBM3	192	288	288	657	165	160	160	160	645	160	165	165	165	655
Others	HBM2E / 3	192	288	288	361	50	48	48	48	194	56	58	58	58	229
Total Units					1,018.5	214.5	208.0	208.0	208.0	838.5	216.0	222.8	222.8	222.8	884.3
% YoY					58.8%	-14.5%	-21.0%	-20.3%	-14.6%	-17.7%	0.7%	7.1%	7.1%	7.1%	5.5%
% QoQ						-11.9%	-3.0%	0.0%	0.0%		3.8%	3.1%	0.0%	0.0%	
Total GPU / Accelerator Units ('000)															
					12,829.1	3,370.4	3,612.2	4,565.5	5,465.2	17,013.2	6,008.0	6,030.8	6,832.8	8,112.8	26,984.3
% YoY					27.0%	18.4%	27.5%	38.2%	42.1%	32.6%	78.3%	67.0%	49.7%	48.4%	58.6%
% QoQ						-12.4%	7.2%	26.4%	19.7%		9.9%	0.4%	13.3%	18.7%	

Figure 2: HBM demand forecasts by GPU/accelerator

	HBM Gen.	HBM Content (GB)			2025	1Q26E	2Q26E	3Q26E	4Q26E	2026E	1Q27E	2Q27E	3Q27E	4Q27E	2027E
		2025E	2026E	2027E											
NVIDIA															
H200	HBM3E	141			83,571										
H20 / H20E	HBM3 / 3E	96	96		42,336										
B200 (8Hi)	HBM3E	192	192		276,649										
GB200 (2x GPU - 8Hi)	HBM3E	384	384		414,872	39,504				39,504					
B300 (12Hi)	HBM3E	288	288	288	169,176	76,896	77,760	62,496	33,408	250,560	14,400				14,400
GB300 (2x GPU - 12Hi)	HBM3E	576	576	576	448,259	379,008	403,200	322,560	241,920	1,346,688	201,600	115,200	86,400	57,600	460,800
R200 (12Hi)	HBM4	288	288	288			5,760	57,600	92,160	155,520	100,800	109,440	72,000	57,600	339,840
RV200 (2x GPU - 12Hi)	HBM4	576	576	576			23,040	213,120	339,840	576,000	426,240	512,640	501,120	414,720	1,854,720
Rubin Ultra (16Hi)	HBM4E		768	768									215,040	514,560	729,600
*Other GPU/Accel	HBM3 / 3E	288	384	576	30,787	23,040	30,720	30,720	30,720	115,200	34,560	28,800	23,040	23,040	109,440
Total ('000 GB)					1,465,650	518,448	540,480	686,496	738,048	2,483,472	777,600	766,080	897,600	1,067,520	3,508,800
Total (bn Gb)					11.73	4.15	4.32	5.49	5.90	19.87	6.22	6.13	7.18	8.54	28.07
AMD															
MI300	HBM3	192	192		13,685										
MI325X (12Hi)	HBM3E	256	256		57,294	5,479				5,479					
MI355X (12Hi)	HBM3E	288	288	288	63,569	58,556	50,782	23,897		133,236					
MI308X	HBM3	192	192	192	18,394	5,568	6,336	960		12,864					
MI450 (12Hi)	HBM4		432	432				34,560	77,760	112,320	86,400	138,240	125,280	95,040	444,960
MI5XX (16Hi)	HBM4E			1,024									61,440	204,800	266,240
*Other GPU/Accel	HBM3	192	192	288	812	274	285	282	281	1,123	576	576	576	576	2,304
Total ('000 GB)					153,754	69,877	57,403	59,700	78,041	265,022	86,976	138,816	187,296	300,416	713,504
Total (bn Gb)					1.23	0.56	0.46	0.48	0.62	2.12	0.70	1.11	1.50	2.40	5.71
Google															
TPU v5e	HBM2E	32	32		4,282										
TPU v5p	HBM2E	96	96		183,913										
TPU v6e	HBM3E	32	32	32	13,632	8,602	9,408	5,914	2,957	26,880					
TPU v7	HBM3E	192	192	192	17,280	80,640	124,800	138,240	140,160	483,840	126,720	92,160	61,440	40,320	320,640
TPU v8i (Dual die AX)	HBM3E		288	288				36,000	108,000	144,000	198,720	230,400	244,800	213,120	887,040
TPU v8t (Single die X)	HBM3E		216	216				23,760	73,440	97,200	144,720	166,320	177,120	155,520	643,680
TPU v9AX	HBM4E		768	768										69,120	26,880
TPU v9X	HBM4E		384	384										26,880	26,880
*Other TPU/Accel	HBM3	96	144	144	7,389	1,984	2,719	2,462	3,321	10,485	2,160	2,160	2,160	2,160	8,640
Total ('000 GB)					226,495	91,225	136,927	206,376	327,878	762,405	472,320	491,040	485,520	507,120	1,956,000
Total (bn Gb)					1.81	0.73	1.10	1.65	2.62	6.10	3.78	3.93	3.88	4.06	15.65
Amazon															
Inferentia 2	HBM2E	32	32		2,823										
Trainium 2 / 2.5	HBM3E	96	144	144	47,574	25,920	36,000	25,920	20,160	108,000	11,520	5,760			17,280
Inferentia 3	HBM3	96	96	96	15,563	3,648	3,072	1,920	1,440	10,080	1,440	960			2,400
Trainium 3	HBM3E	144	144	144				50,400	79,680	130,060	72,000	61,920	28,800	21,600	184,320
Trainium 4	HBM4		256	256									64,000	125,440	189,440
*Other Accel	HBM3	144	144	144	5,375	942	1,218	1,584	2,040	5,784	1,296	1,296	1,296	1,296	5,184
Total ('000 GB)					71,336	30,510	40,290	79,824	103,300	253,924	86,256	69,936	94,096	148,336	398,624
Total (bn Gb)					0.57	0.24	0.32	0.64	0.83	2.03	0.69	0.56	0.75	1.19	3.19
Intel															
Gaudi 3	HBM2 / 3E	288	288	288	54,212	8,640	5,184	2,304		16,128					
Gaudi 4	HBM3E	288	288	288				2,880	7,200	10,080	7,200	5,760	4,320	2,880	20,160
*Others	HBM2 / 3E	192	192	192	4,789	1,152	691	691	960	3,494	768	768	768	768	3,072
Total ('000 GB)					59,001	9,792	5,875	5,875	8,160	29,702	7,968	6,528	5,088	3,648	23,232
Total (bn Gb)					0.47	0.08	0.05	0.05	0.07	0.24	0.06	0.05	0.04	0.03	0.19
Microsoft															
Maia 100	HBM3	120	120	120	4,050	360	120			480					
Maia 200	HBM3E		288	288		660	1,696	3,016	4,052	9,424	4,032	2,880	2,016	1,152	10,080
Maia 300	HBM4			288									2,304	4,032	6,336
*Others	HBM3	120	192	192	960	384	384	384	384	1,536	384	384	384	384	1,536
Total ('000 GB)					5,010	1,404	2,200	3,400	4,436	11,440	4,416	3,264	4,704	5,568	17,952
Total (bn Gb)					0.04	0.01	0.02	0.03	0.04	0.09	0.04	0.03	0.04	0.04	0.14
Meta															
MTIA v3	HBM3E	192	192	192	960	2,880	3,840	6,720	7,680	21,120	7,680	5,760	3,840	2,880	20,160
MTIA v4	HBM4		432	432							17,280	25,920	34,560	51,840	129,600
Total ('000 GB)					960	2,880	3,840	6,720	7,680	21,120	24,960	31,680	38,400	54,720	149,760
Total (bn Gb)					0.01	0.02	0.03	0.05	0.06	0.17	0.20	0.25	0.31	0.44	1.20
OpenAI															
Titan v1	HBM3E		216	216				4,320	32,400	36,720	34,560	36,720	28,080	21,600	120,960
Titan v2	HBM4E		576	576									28,800	69,120	97,920
Total ('000 GB)								4,320	32,400	36,720	34,560	36,720	56,880	90,720	218,880
Total (bn Gb)								0.03	0.26	0.29	0.28	0.29	0.46	0.73	1.75
Others															
Tesla	HBM3	64	64		6,780	1,523	1,613	1,344	1,255	5,735	1,344	1,344	1,472	1,280	5,440
Startups / Etc.	HBM2E / 3	192	288		195,559	61,776	59,904	59,904	59,904	241,488	62,208	64,152	64,152	64,152	254,664
Total ('000 GB)					202,339	63,299	61,517	61,248	61,159	247,223	63,552	65,496	65,624	65,432	260,104
Total (bn Gb)					1.62	0.51	0.49	0.49	0.49	1.98	0.51	0.52	0.52	0.52	2.08
Total HBM Demand ('000 GB)					2,184,545	787,435	848,532	1,113,958	1,361,103	4,111,029	1,558,608	1,609,560	1,835,268	2,243,480	7,246,856
Total HBM Demand (bn Gb)					17.48	6.30	6.79	8.91	10.89	32.89	12.47	12.88	14.68	17.95	57.97
% YoY					103.0%	99.7%	97.2%	84.1%	80.6%	88.2%	97.9%	89.7%	64.7%	64.8%	76.3%
% QoQ						4.5%	7.8%	31.3%	22.2%		14.5%	3.3%	14.0%	22.2%	

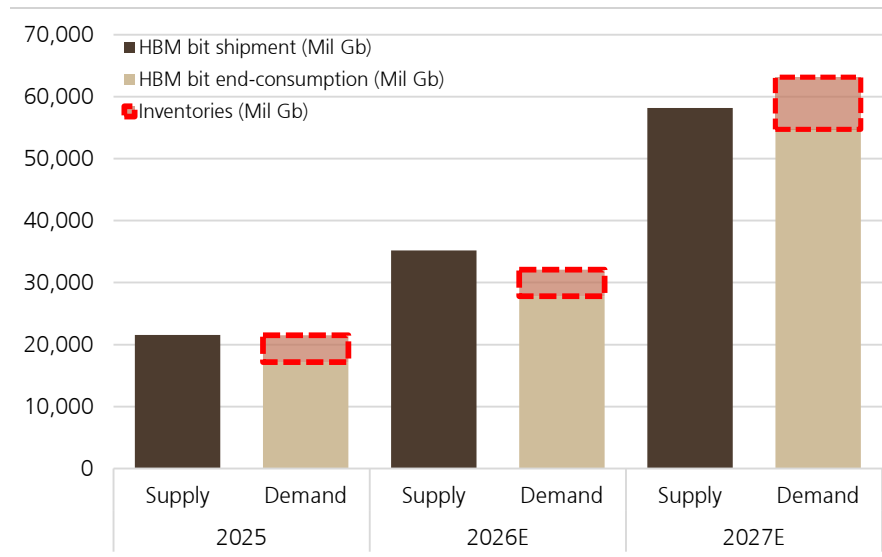
Source: Company data, UBS estimates

Figure 3: HBM vendors' bit shipments

(M 1Gb)		2025	Q126E	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
SK Hynix		12,628	3,803	4,297	4,654	4,958	17,711	5,041	5,336	6,002	6,705	23,084
	% YoY	86%	31%	36%	44%	49%	40%	33%	24%	29%	35%	30%
Samsung	% QoQ		15%	13%	8%	7%		2%	6%	12%	12%	
		4,327	1,519	1,949	2,839	3,400	9,707	4,222	5,251	6,365	7,187	23,025
Micron	% YoY	-15%	161%	155%	101%	116%	124%	178%	169%	124%	111%	137%
	% QoQ		-3%	28%	46%	20%		24%	24%	21%	13%	
Total Supply		4,584	1,612	1,821	2,040	2,305	7,778	2,559	2,840	3,181	3,467	12,047
	% YoY	417%	106%	60%	62%	64%	70%	59%	56%	56%	50%	55%
	% QoQ		15%	13%	12%	13%		11%	11%	12%	9%	
		21,539	6,934	8,068	9,532	10,663	35,197	11,822	13,427	15,547	17,359	58,155
	% YoY	69%	62%	59%	61%	70%	63%	70%	66%	63%	63%	65%
	% QoQ		10%	16%	18%	12%		11%	14%	16%	12%	

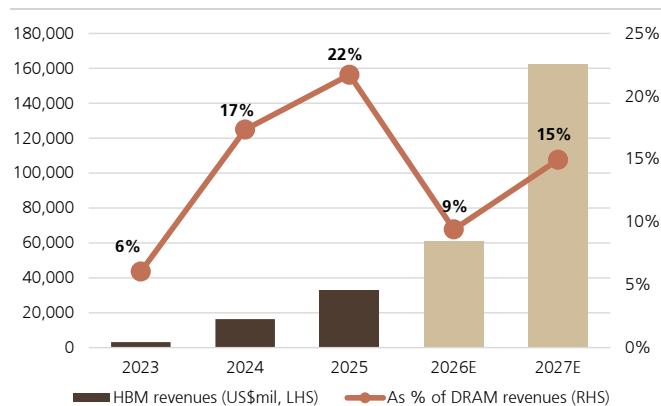
Source: Company data, UBS estimates

Figure 4: Adjusted HBM supply vs demand



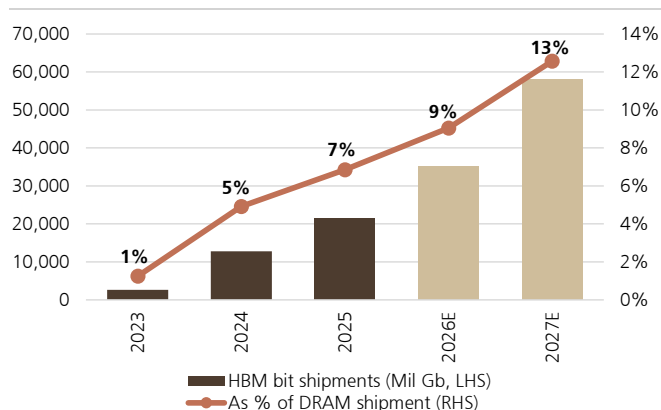
Source: Company data, UBS estimates

Figure 5: HBM as % of total DRAM revenues



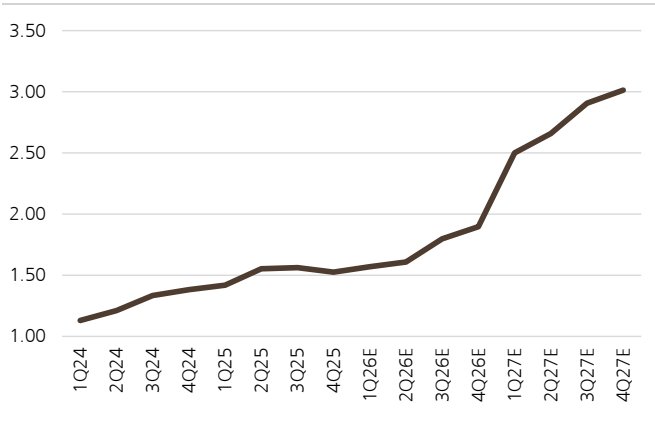
Source: UBS estimates

Figure 6: HBM as % of total DRAM bits



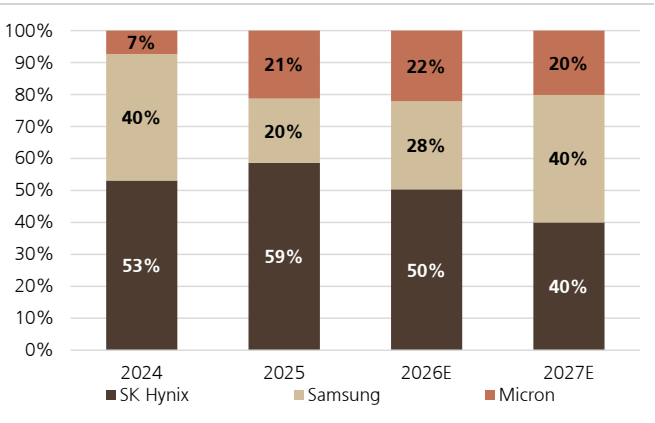
Source: UBS estimates

Figure 7: HBM ASP forecasts (US\$/1Gb)



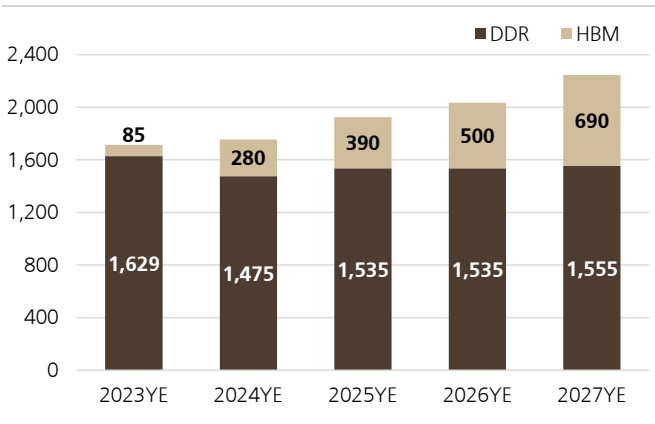
Source: UBS estimates

Figure 8: HBM bit share by vendor



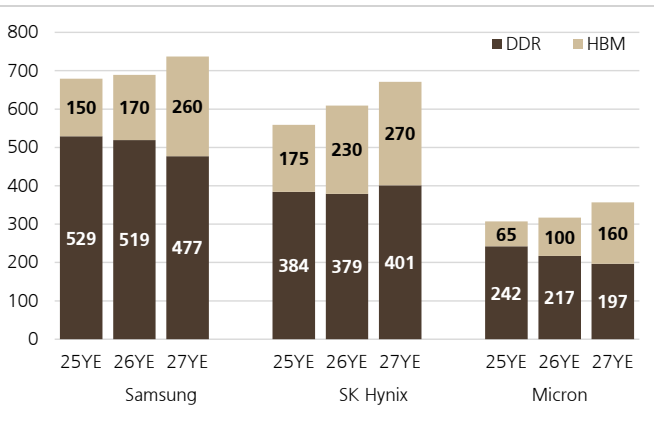
Source: Company data, UBS estimates

Figure 9: DRAM industry capacity (k wpm) breakdown between DDR and HBM



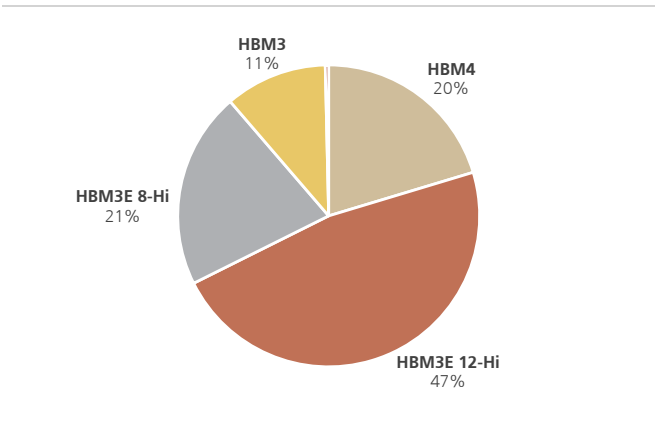
Source: Company data, UBS estimates

Figure 10: DRAM capacity (k wpm) breakdown between DDR and HBM by supplier



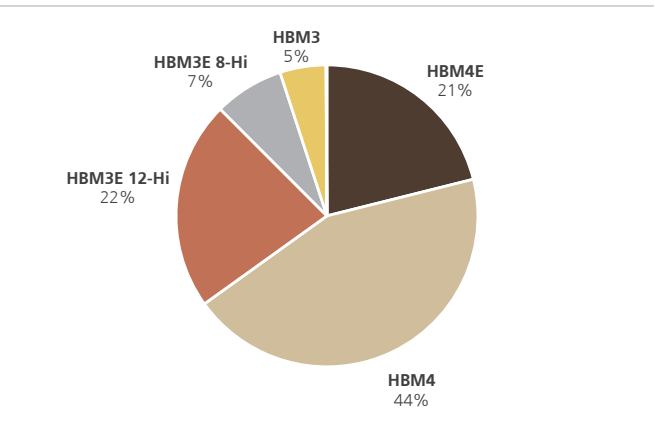
Source: Company data, UBS estimates

Figure 11: HBM demand by type (2026E)



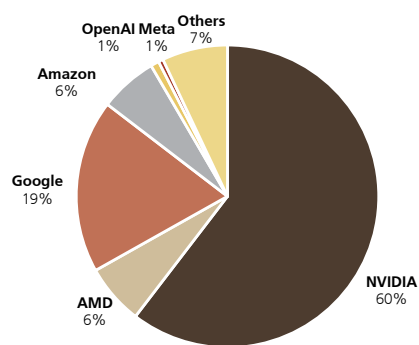
Source: UBS estimates

Figure 12: HBM demand by type (2027E)



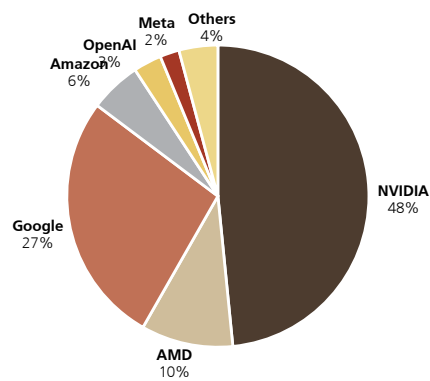
Source: UBS estimates

Figure 13: HBM demand by customer (2026E)



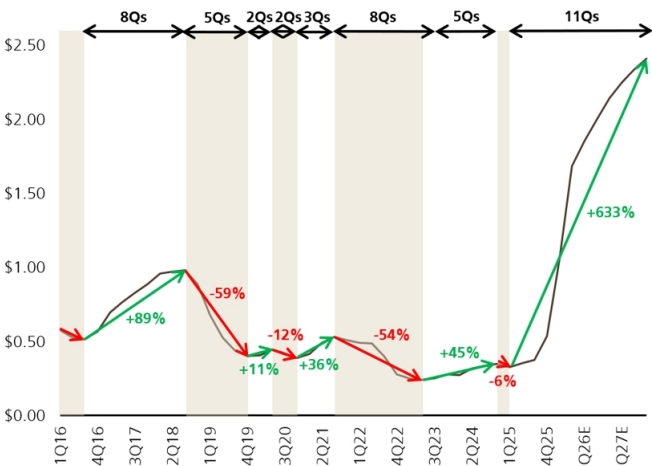
Source: UBS estimates

Figure 14: HBM demand by customer (2027E)



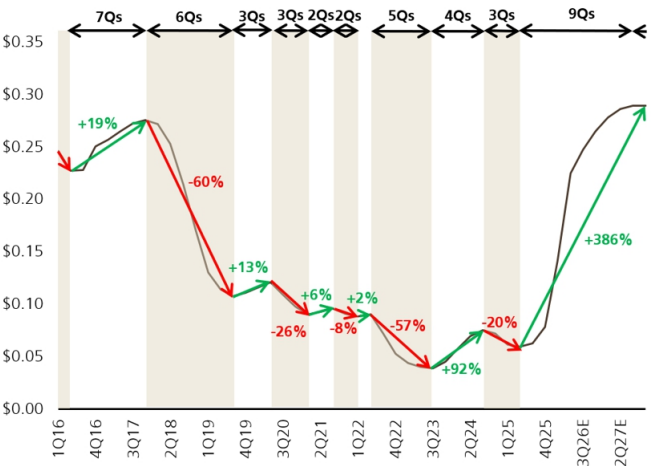
Source: UBS estimates

Figure 15: DDR cycles in context



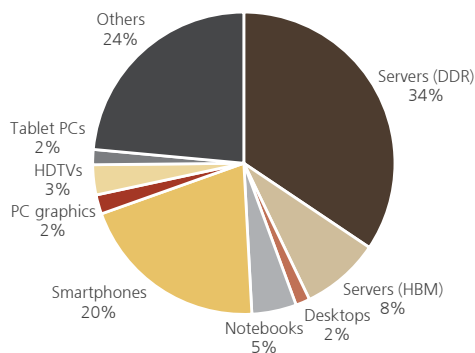
Source: Company data, UBS estimates

Figure 16: NAND cycles in context



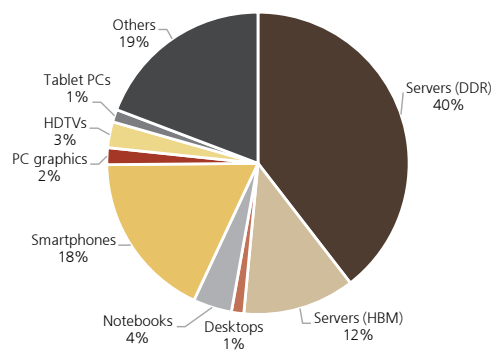
Source: Company data, UBS estimates

Figure 17: DRAM bit demand per application (2026E)



Source: Gartner, UBS estimates

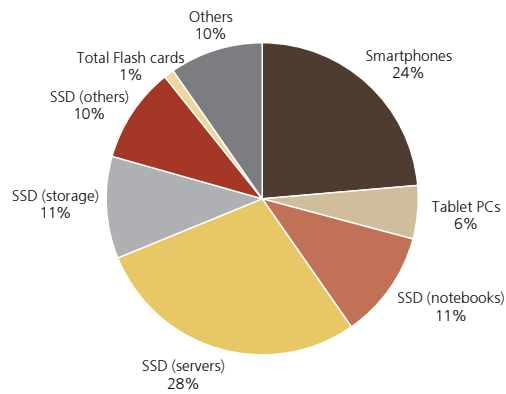
Figure 18: DRAM bit demand per application (2027E)



Source: Gartner, UBS estimates

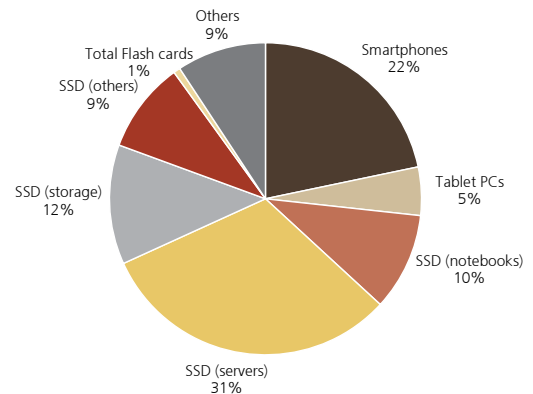


Figure 19: NAND bit demand per application (2026E)



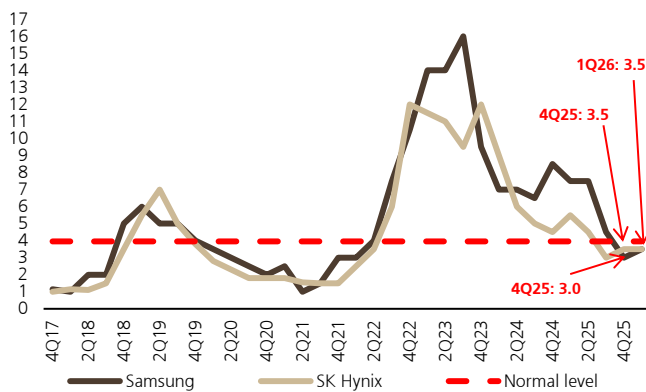
Source: Gartner, UBS estimates

Figure 20: NAND bit demand per application (2027E)



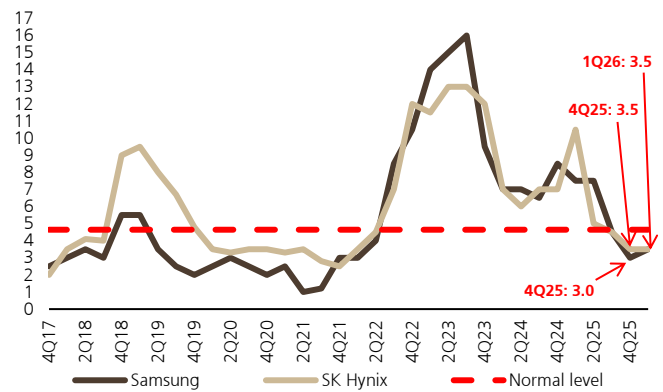
Source: Gartner, UBS estimates

Figure 21: Samsung and SK Hynix – DRAM finished wafers and dies inventories



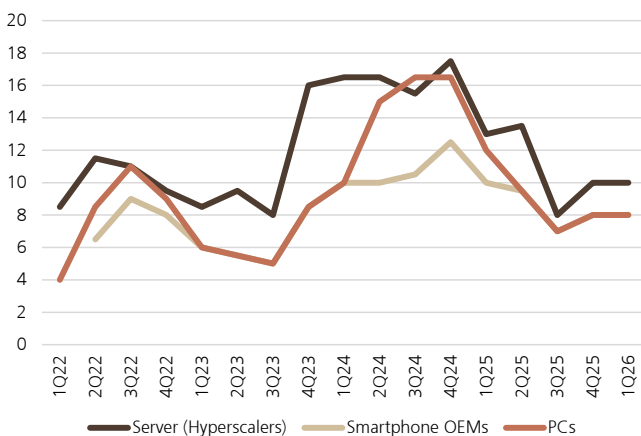
Source: Company data, UBS estimates

Figure 22: Samsung and SK Hynix – NAND finished wafers and dies inventories



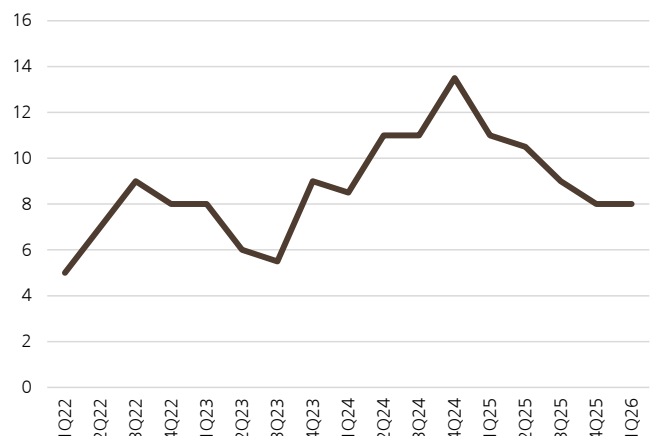
Source: Company data, UBS estimates

Figure 23: DRAM customer inventories (weeks)



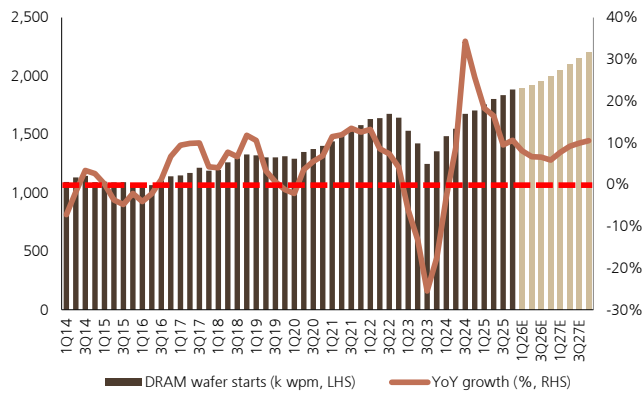
Source: Company data, UBS estimates

Figure 24: NAND customer inventories (weeks)



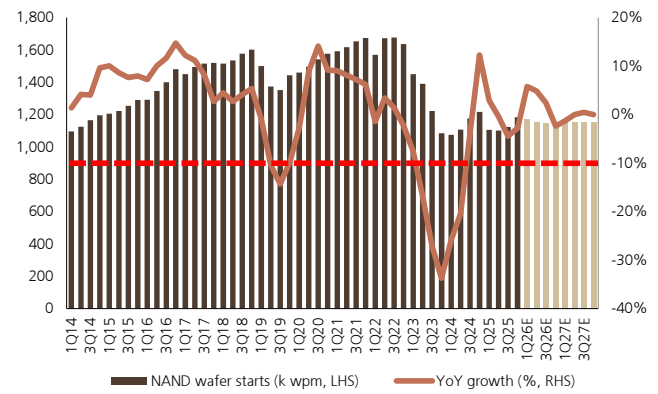
Source: Company data, UBS estimates

Figure 25: DRAM industry wafer starts and YoY growth



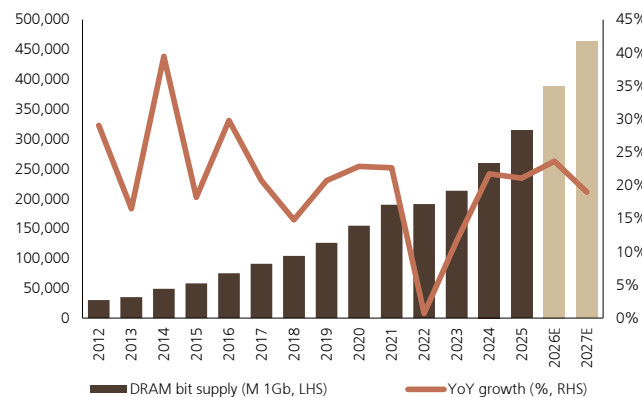
Source: Company data, UBS estimates

Figure 26: NAND industry wafer starts and YoY growth



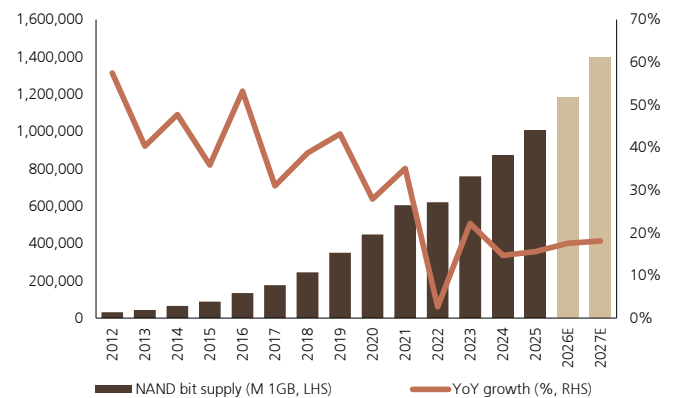
Source: Company data, UBS estimates

Figure 27: DRAM industry bit supply and YoY growth



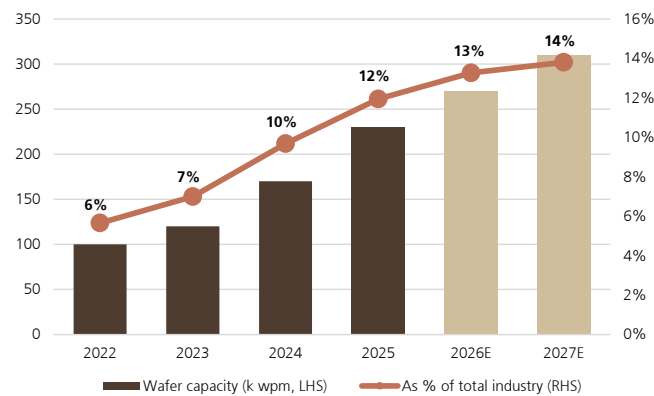
Source: Company data, UBS estimates

Figure 28: NAND industry bit supply and YoY growth



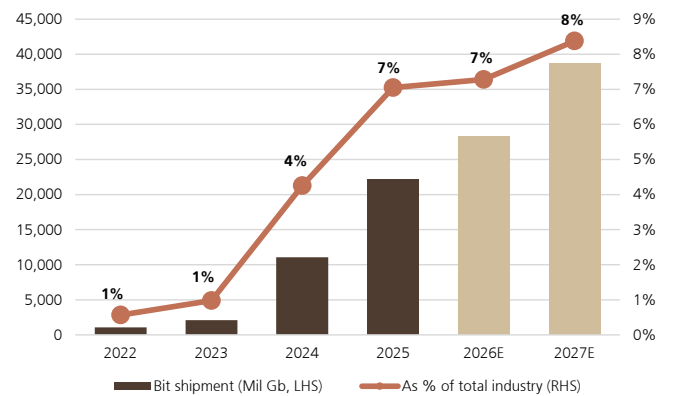
Source: Company data, UBS estimates

Figure 29: CXMT wafer capacity and as % of DRAM industry



Source: UBS estimates

Figure 30: CXMT bit shipments and as % of DRAM industry



Source: UBS estimates

Figure 31: UBS DRAM supply/demand summary

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Revenues (\$ mil)	26,683	31,996	39,350	52,865	150,894	97,108	156,911	186,167	210,670	650,856	232,793	258,415	289,154	308,486	1,088,847
% QoQ	-6.7%	19.9%	23.0%	34.3%		83.7%	61.6%	18.6%	13.2%		10.5%	11.0%	11.9%	6.7%	
% YoY	49.9%	41.1%	55.3%	84.9%	59.8%	263.9%	390.4%	373.1%	298.5%	331.3%	139.7%	64.7%	55.3%	46.4%	67.3%
Supply (Shipments Based) (M 1Gb)	64,968	76,461	85,829	87,246	314,505	88,812	93,489	100,732	105,801	388,834	106,695	112,460	119,835	123,746	462,736
% QoQ	-1.9%	17.7%	12.3%	1.7%		1.8%	5.3%	7.7%	5.0%		0.8%	5.4%	6.6%	3.3%	
% YoY	5.9%	15.9%	29.7%	31.7%	21.1%	36.7%	22.3%	17.4%	21.3%	23.6%	20.1%	20.3%	19.0%	17.0%	19.0%
Demand (End Consumption) (M 1Gb)	70,192	74,676	87,328	92,616	324,812	88,747	92,507	99,514	108,404	389,172	106,882	114,810	125,029	137,546	484,267
% QoQ	0.6%	6.4%	16.9%	6.1%		-4.2%	4.2%	7.6%	8.9%		-1.4%	7.4%	8.9%	10.0%	
% YoY	18.0%	23.7%	35.3%	32.7%	27.8%	26.4%	23.9%	14.0%	17.0%	19.8%	20.4%	24.1%	25.6%	26.9%	24.4%
DDR Demand (M 1Gb)					307,507					361,707					438,922
% YoY					25.2%					17.6%					21.3%
Inventory adjustment	-5,800	2,000	200	600	-3,000	17,100	11,300	3,200	-900	30,700	2,000	-1,200	-4,000	-13,200	-16,400
Inventory Adj. Demand (M 1Gb)	64,392	76,676	87,528	93,216	321,812	105,847	103,807	102,714	107,504	419,872	108,882	113,610	121,029	124,346	467,867
% QoQ	-5.1%	19.1%	14.2%	6.5%		13.5%	-1.9%	-1.1%	4.7%		1.3%	4.3%	6.5%	2.7%	
% YoY	4.0%	11.9%	29.4%	37.3%	21.0%	64.4%	35.4%	17.4%	15.3%	30.5%	2.9%	9.4%	17.8%	15.7%	11.4%
Wafer out (k wpm, 12" equi.)	1,722	1,772	1,816	1,857	1,792	1,887	1,907	1,935	1,966	1,924	2,010	2,063	2,115	2,168	2,089
% QoQ	2.4%	2.9%	2.5%	2.2%		1.6%	1.0%	1.5%	1.6%		2.3%	2.6%	2.5%	2.5%	
% YoY	22.4%	17.8%	13.7%	10.4%	15.8%	9.6%	7.6%	6.6%	5.9%	7.4%	6.5%	8.2%	9.3%	10.3%	8.6%
% Sufficiency Ratio	0.9%	-0.3%	-1.9%	-6.4%	-2.3%	-16.1%	-9.9%	-1.9%	-1.6%	-7.4%	-2.0%	-1.0%	-1.0%	-0.5%	-1.1%
Blended ASP incl. HBM (\$/Gb)	0.41	0.42	0.46	0.61	0.48	1.09	1.68	1.85	1.99	1.67	2.18	2.30	2.41	2.49	2.35
% QoQ	-4.8%	1.9%	9.6%	32.2%		80.5%	53.5%	10.1%	7.7%		9.6%	5.3%	5.0%	3.3%	
% YoY	41.5%	21.8%	19.7%	40.4%	32.0%	166.2%	301.1%	303.1%	228.6%	248.9%	99.5%	36.9%	30.6%	25.2%	40.6%
DDR ASP (\$/Gb)	0.33	0.35	0.38	0.53	0.40	1.05	1.68	1.85	2.00	1.67	2.14	2.25	2.34	2.41	2.29
% QoQ	-6.2%	7.0%	7.0%	42.0%		97.0%	60.0%	10.0%	8.0%		7.0%	5.0%	4.0%	3.0%	
% YoY	20.3%	10.6%	11.8%	52.5%	26.3%	220.3%	378.9%	392.3%	274.5%	312.5%	103.4%	33.5%	26.2%	20.3%	37.3%
HBM ASP (\$/Gb)	1.42	1.55	1.56	1.53	1.52	1.57	1.61	1.80	1.90	1.74	2.50	2.66	2.91	3.01	2.80
% QoQ	2.7%	9.5%	0.6%	-2.4%		2.9%	2.5%	11.7%	5.6%		31.8%	6.3%	9.3%	3.7%	
% YoY	25.6%	28.3%	17.2%	10.4%	15.8%	10.6%	3.5%	15.0%	24.4%	14.4%	59.3%	65.3%	61.7%	58.8%	60.8%

Source: Company data, UBS estimates

Figure 32: DRAM vendors' market share in bit shipments

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Samsung	39.3%	37.3%	38.2%	38.3%	38.2%	38.0%	37.9%	37.6%	37.3%	37.7%	37.7%	37.4%	37.9%	37.2%	37.5%
SK Hynix	28.9%	30.6%	29.5%	29.3%	29.6%	28.7%	29.3%	30.8%	31.2%	30.1%	29.5%	29.7%	29.5%	30.1%	29.7%
Micron	22.8%	23.3%	23.8%	23.6%	23.4%	24.3%	23.8%	22.9%	22.7%	23.4%	23.4%	23.3%	22.7%	22.4%	22.9%
Nanya Tech	1.0%	1.4%	1.6%	1.8%	1.5%	1.6%	1.5%	1.3%	1.1%	1.4%	1.2%	1.2%	1.3%	1.4%	1.3%
CXMT	7.7%	7.1%	6.6%	6.9%	7.0%	7.1%	7.3%	7.2%	7.5%	7.3%	8.1%	8.4%	8.4%	8.6%	8.4%
Others	0.3%	0.3%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Total Supply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Gartner, Company data, UBS estimates

Figure 33: DRAM vendors' bit shipments QoQ and YoY growth

	Q125 QoQ	Q225 QoQ	Q325 QoQ	Q425 QoQ	2025 YoY	Q126 QoQ	Q226E QoQ	Q326E QoQ	Q426E QoQ	2026E YoY	Q127E QoQ	Q226E QoQ	Q327E QoQ	Q427E QoQ	2027E YoY
Samsung	1.5%	11.5%	15.0%	2.0%	9.7%	1.0%	5.0%	6.8%	4.2%	21.8%	1.9%	4.5%	8.2%	1.3%	18.6%
SK Hynix	-7.0%	25.0%	8.0%	0.8%	24.3%	-0.3%	7.5%	13.4%	6.5%	25.7%	-4.7%	5.8%	5.9%	5.5%	17.5%
Micron	-8.0%	20.3%	15.0%	0.5%	21.8%	5.1%	3.2%	3.4%	4.0%	23.5%	4.0%	5.0%	4.0%	2.0%	16.7%
Nanya Tech	8.4%	68.0%	26.4%	11.9%	54.3%	-6.2%	-3.0%	-6.7%	-6.9%	15.3%	2.5%	5.6%	17.6%	14.9%	9.7%
CXMT	24.8%	8.3%	4.8%	5.1%	100.6%	6.0%	6.8%	7.6%	8.3%	27.8%	8.9%	9.4%	7.3%	5.8%	36.9%
Others	-4.8%	2.5%	2.4%	2.4%	3.1%	-2.3%	0.0%	2.4%	0.0%	2.4%	-2.3%	0.0%	2.4%	0.0%	0.0%
Bit supply Growth	-1.9%	17.7%	12.3%	1.7%	21.1%	1.8%	5.3%	7.7%	5.0%	23.6%	0.8%	5.4%	6.6%	3.3%	19.0%

Source: Gartner, Company data, UBS estimates

Figure 34: DRAM vendors' wafers out (k wpm, 12" equivalent)

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Samsung	663	667	668	674	668	676	678	685	689	682	695	707	719	731	713
SK Hynix	475	499	519	544	509	564	572	583	600	580	618	636	649	662	641
Micron	315	313	311	309	312	307	307	307	307	307	317	327	337	347	332
Nanya Tech	49	53	59	60	57	60	60	60	60	60	60	63	70	78	70
CXMT	170	190	210	220	198	230	240	250	260	245	270	280	290	300	285
Other	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Total	1,722	1,772	1,816	1,857	1,793	1,887	1,907	1,935	1,966	1,924	2,010	2,063	2,115	2,168	2,091
% YoY	22.4%	17.8%	13.7%	10.4%	15.8%	9.6%	7.6%	6.6%	5.9%	7.4%	6.5%	8.2%	9.3%	10.3%	8.6%

Source: Gartner, Company data, UBS estimates

Figure 35: DRAM bit demand growth by application

	Q125 QoQ	Q225 QoQ	Q325 QoQ	Q425 QoQ	2025 YoY	Q126 QoQ	Q226E QoQ	Q326E QoQ	Q426E QoQ	2026E YoY	Q127E QoQ	Q226E QoQ	Q327E QoQ	Q427E QoQ	2027E YoY
Total PC DRAM	-6.1%	13.8%	18.5%	3.0%	20.2%	-16.4%	-1.9%	1.1%	-2.6%	-6.2%	-9.8%	9.0%	17.5%	8.0%	5.1%
Desktops	0.4%	10.8%	9.3%	5.6%	22.8%	-12.9%	-5.4%	-6.1%	0.2%	-9.7%	-3.9%	8.4%	15.2%	10.7%	8.3%
Notebooks	-8.1%	14.6%	20.7%	2.2%	24.3%	-15.3%	-0.2%	2.5%	-1.1%	-2.3%	-10.3%	9.6%	18.3%	7.7%	7.9%
Upgrade Modules	-8.1%	17.3%	27.5%	1.9%	-10.9%	-35.0%	-8.3%	12.1%	-28.7%	-29.8%	-30.0%	0.0%	15.0%	-3.3%	-40.6%
Servers	-1.2%	10.9%	27.8%	6.1%	44.2%	10.3%	10.9%	9.1%	11.7%	54.0%	8.8%	13.7%	9.0%	9.8%	49.1%
Graphics	13.2%	13.4%	17.5%	-1.0%	26.8%	-9.7%	5.3%	13.4%	0.0%	10.5%	-8.4%	4.9%	13.1%	-0.2%	8.8%
Game Consoles	22.7%	4.2%	4.0%	1.9%	18.3%	0.3%	2.3%	4.2%	-8.5%	6.5%	2.3%	2.7%	4.3%	-3.4%	1.5%
HDTVs	-17.5%	1.8%	21.2%	5.8%	9.7%	-21.5%	1.3%	16.2%	14.5%	2.0%	-21.1%	3.4%	15.7%	12.2%	7.2%
Total Mobile DRAM	-5.6%	-1.0%	14.1%	10.2%	15.6%	-18.3%	-2.0%	11.2%	10.5%	-0.5%	-10.4%	-2.3%	10.8%	15.0%	8.6%
Smartphones	-4.8%	-1.4%	14.6%	10.1%	16.7%	-18.8%	-2.5%	11.8%	10.5%	-1.1%	-10.0%	-2.8%	11.0%	15.5%	9.1%
Apple	-31.8%	-5.6%	29.4%	80.5%	31.3%	-32.6%	-5.8%	4.7%	74.7%	28.6%	-32.1%	-5.8%	1.1%	87.0%	17.5%
Samsung	26.2%	-7.0%	11.5%	-2.8%	17.6%	8.3%	-1.4%	7.7%	-10.4%	9.9%	17.3%	-9.6%	14.1%	-10.3%	-16.6%
Non-Apple/Samsung	-3.0%	1.7%	11.8%	-6.1%	12.0%	-20.2%	-1.5%	16.8%	-6.6%	-15.0%	-4.5%	2.2%	14.6%	-4.3%	15.9%
Tablet PCs	-16.0%	5.0%	8.9%	10.2%	3.2%	-13.1%	4.0%	5.0%	10.4%	6.7%	-16.2%	5.3%	8.4%	8.9%	3.3%
Others	15.7%	7.0%	5.9%	3.6%	29.4%	-2.2%	1.2%	1.7%	6.6%	8.6%	-7.5%	2.4%	3.1%	7.7%	3.3%
Total Bit Demand	0.6%	6.4%	16.9%	6.1%	27.8%	-4.2%	4.2%	7.6%	8.9%	19.8%	-1.4%	7.4%	8.9%	10.0%	24.4%

Source: Gartner, Company data, UBS estimates

Figure 36: DRAM content assumptions (MB/unit) by application

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Total PC	12,038	12,569	12,982	13,302	12,766	13,364	13,598	13,799	14,066	13,699	14,088	14,294	14,779	15,275	14,652
% YoY	9%	12%	15%	16%	13%	11%	8%	6%	6%	7%	5%	5%	7%	9%	7%
Desktops	11,860	12,370	12,422	12,422	12,283	12,422	12,622	12,822	13,022	12,708	13,022	13,222	13,722	14,222	13,589
Notebooks	12,401	13,001	13,601	14,081	13,328	14,081	14,281	14,481	14,681	14,379	14,681	14,881	15,381	15,881	15,252
Upgrade Modules	9,900	10,100	10,300	10,500	10,232	10,500	10,700	10,900	11,100	10,777	11,100	11,100	11,100	11,300	11,152
Servers	671,847	718,847	788,847	854,147	763,483	914,147	984,147	1,074,147	1,185,189	1,040,766	1,268,189	1,352,189	1,492,189	1,633,239	1,438,449
% YoY	18%	22%	30%	36%	27%	36%	37%	36%	39%	36%	39%	37%	39%	38%	38%
Smartphones	7,739	7,829	8,255	8,611	8,126	8,713	8,720	8,934	9,292	8,928	9,245	9,186	9,451	10,207	9,544
% YoY	11%	11%	13%	15%	13%	13%	11%	8%	8%	10%	6%	5%	6%	10%	7%
Apple	7,600	7,700	8,940	9,590	8,652	9,690	9,690	10,400	10,800	10,227	11,000	11,000	11,400	12,800	11,711
Samsung	8,619	8,359	8,866	8,764	8,655	9,573	9,357	9,674	9,624	9,557	10,085	9,736	10,320	10,220	7,820
Non-Apple/Samsung	7,500	7,700	7,900	8,100	7,801	8,000	8,100	8,200	8,300	8,153	8,200	8,300	8,500	8,700	8,431

Source: Gartner, Company data, UBS estimates

Figure 37: UBS server DRAM bottom-up model

	2020	2021	2022	2023	2024	2025	2026E	2027E
Total Server shipments (K unit)	13,550	13,967	14,943	14,087	16,025	18,151	20,512	22,125
% YoY	7.5%	3.1%	7.0%	-5.7%	13.8%	13.3%	13.0%	7.9%
Traditional enterprise	5,403	5,147	5,028	4,217	4,283	4,112	4,194	4,278
% YoY	-5.9%	-4.7%	-2.3%	-16.1%	1.6%	-4.0%	2.0%	2.0%
% of total	39.9%	36.8%	33.6%	29.9%	26.7%	22.7%	20.4%	19.3%
Hyperscalers	8,147	8,822	9,915	9,883	11,494	14,039	16,318	17,847
% YoY	25.2%	8.3%	12.4%	-0.3%	16.3%	22.1%	16.2%	9.4%
% of total	60.1%	63.2%	66.4%	70.2%	71.7%	77.3%	79.6%	80.7%
Standard servers	7,355	7,914	8,916	8,841	9,640	12,519	15,072	16,504
% YoY	23.8%	7.6%	12.7%	-0.8%	9.0%	29.9%	20.4%	9.5%
% of total hyperscalers	90.3%	89.7%	89.9%	89.5%	83.9%	89.2%	92.4%	92.5%
% of total servers	54.3%	56.7%	59.7%	62.8%	60.2%	69.0%	73.5%	74.6%
AI Servers	520	630	730	783	1,608	1,263	980	1,069
% YoY	73.3%	21.2%	15.9%	7.3%	105.3%	-21.5%	-22.4%	9.1%
% of total hyperscalers	6.4%	7.1%	7.4%	7.9%	14.0%	9.0%	6.0%	6.0%
% of total servers	3.8%	4.5%	4.9%	5.6%	10.0%	7.0%	4.8%	4.8%
Database servers	272	278	270	259	246	258	266	274
% YoY	2.0%	2.0%	-3.0%	-4.0%	-5.0%	5.0%	3.0%	3.0%
% of total hyperscalers	3.3%	3.1%	2.7%	2.6%	2.1%	1.8%	1.6%	1.5%
% of total servers	2.0%	2.0%	1.8%	1.8%	1.5%	1.4%	1.3%	1.2%
Avg. DRAM content (GB)	392	457	461	524	586	746	1,016	1,409
% YoY	32.5%	16.7%	0.9%	13.5%	11.8%	27.3%	36.3%	38.6%
Traditional enterprise	356	417	420	464	462	490	530	555
% YoY	27.4%	17.3%	0.7%	10.3%	-0.3%	6.0%	8.2%	4.7%
Hyperscalers Blended	416	480	482	549	644	820	1,141	1,614
% YoY	27.3%	15.5%	0.4%	13.8%	17.4%	27.3%	39.1%	41.4%
Standard servers	385	430	432	459	464	485	550	580
% YoY	28.3%	11.7%	0.5%	6.3%	1.1%	4.5%	13.4%	5.5%
AI servers	600	840	860	1,348	1,639	4,051	10,183	17,629
% YoY	7.1%	40.0%	2.4%	56.8%	21.5%	147.2%	151.4%	73.1%
Database Servers	900	1,100	1,120	1,200	1,210	1,280	1,340	1,390
% YoY	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56.1%	134.7%
Total DRAM Demand (mn Gb)	42,491	51,095	55,158	59,039	75,089	108,268	166,787	249,409
% YoY	42.3%	20.2%	8.0%	7.0%	27.2%	44.2%	54.1%	49.5%
Total DDR Demand (mn Gb)	42,491	51,095	55,158	56,355	66,482	90,782	133,899	191,434
% YoY	42.3%	20.2%	8.0%	2.2%	18.0%	36.6%	47.5%	43.0%
Traditional enterprise	15,382	17,191	16,908	15,641	15,837	16,119	17,784	18,995
% YoY	19.8%	11.8%	-1.6%	-7.5%	1.3%	1.8%	10.3%	6.8%
Hyperscalers	27,110	33,904	38,250	43,398	59,252	92,148	149,003	230,413
% YoY	59.3%	25.1%	12.8%	13.5%	36.5%	55.5%	61.7%	54.6%
Standard servers	22,652	27,225	30,813	32,465	35,789	48,586	66,317	76,579
% YoY	58.9%	20.2%	13.2%	5.4%	10.2%	35.8%	36.5%	15.5%
AI servers	2,496	4,234	5,022	8,448	21,083	40,919	79,836	150,790
% YoY	85.7%	69.6%	18.6%	68.2%	149.6%	94.1%	95.1%	88.9%
HBM DRAM Demand				2,684	8,607	17,486	32,888	57,975
% YoY					220.7%	103.2%	88.1%	76.3%
DDR DRAM Demand				6,081	12,476	23,433	46,947	92,815
% YoY					105.2%	87.8%	100.3%	97.7%
LPDDR / SOCAMM Demand					468	7,613	21,998	63,693
% YoY						1527.9%	189.0%	189.0%
Database Servers	1,962	2,445	2,415	2,484	2,380	2,643	2,850	3,045
% YoY	39.1%	24.7%	-1.2%	2.9%	-4.2%	11.1%	7.8%	6.8%

Source: Dell'Oro Group, Gartner, Company data, UBS estimates

Figure 38: UBS bottom-up server procurement model (k units)

(K Units)	2022	2023	2024	2025	1Q26	2Q26E	3Q26E	4Q26E	2026E	1Q27E	2Q27E	3Q27E	4Q27E	2027E
Quarterly														
Alphabet	1,039	1,085	1,241	1,617	480	540	520	500	2,040	540	600	580	550	2,270
AWS	2,237	2,131	2,621	3,798	1,020	1,000	1,120	1,010	4,150	1,100	1,180	1,100	1,070	4,450
Microsoft	1,056	1,274	1,523	1,591	480	520	550	500	2,050	560	580	570	550	2,260
Meta	2,192	2,027	2,183	2,670	710	790	880	860	3,240	860	910	920	880	3,570
Baidu	71	70	47	48	13	13	13	14	53	15	15	13	15	58
Alibaba	376	188	291	389	95	107	115	110	427	110	115	120	115	460
Tencent	118	149	293	240	72	78	90	83	323	80	90	100	95	365
ByteDance	358	550	761	789	220	220	240	250	930	250	250	270	280	1,050
Total Top 8	7,448	7,473	8,960	11,141	3,090	3,268	3,528	3,327	13,213	3,515	3,740	3,673	3,555	14,483
% YoY	13.5%	0.3%	19.9%	24.3%	21.5%	32.1%	10.6%	13.3%	18.6%	13.8%	14.4%	4.1%	6.9%	9.6%
% QoQ					5.2%	5.8%	8.0%	-5.7%		5.7%	6.4%	-1.8%	-3.2%	
Others	2,468	2,410	2,534	2,898	714	772	830	789	3,105	765	816	932	851	3,364
Total hyperscale	9,915	9,883	11,494	14,039	3,804	4,040	4,358	4,116	16,318	4,280	4,556	4,605	4,406	17,847
% YoY	12.4%	-0.3%	16.3%	22.1%	18.2%	24.7%	8.1%	16.0%	16.2%	12.5%	12.8%	5.7%	7.0%	9.4%
% QoQ					7.2%	6.2%	7.9%	-5.6%		4.0%	6.4%	1.1%	-4.3%	
YoY (%)														
Alphabet	24.0%	4.4%	14.4%	30.3%	51.0%	18.5%	32.3%	11.1%	26.2%	12.5%	11.1%	11.5%	10.0%	11.3%
AWS	24.5%	-4.7%	23.0%	44.9%	26.6%	52.2%	-16.1%	1.0%	9.3%	7.8%	18.0%	-1.8%	5.9%	7.2%
Microsoft	-2.9%	20.6%	19.5%	4.5%	19.8%	38.4%	46.9%	13.6%	28.9%	16.7%	11.5%	3.6%	10.0%	10.2%
Meta	20.7%	-7.5%	7.7%	22.3%	3.3%	18.7%	26.2%	38.7%	21.3%	21.1%	15.2%	4.5%	2.3%	10.2%
Baidu	-34.0%	-1.6%	-32.5%	1.3%	40.3%	22.5%	-0.4%	-6.7%	10.6%	15.4%	15.4%	0.0%	7.1%	9.4%
Alibaba	-10.6%	-50.2%	55.2%	33.6%	55.0%	-7.0%	12.5%	0.0%	9.9%	15.8%	7.5%	4.3%	4.5%	7.7%
Tencent	-56.1%	25.9%	97.0%	-18.2%	-1.4%	42.3%	123.6%	15.3%	34.6%	11.1%	15.4%	11.1%	14.5%	13.0%
ByteDance	60.6%	53.8%	38.4%	3.7%	17.1%	59.3%	2.9%	8.7%	17.9%	13.6%	13.6%	12.5%	12.0%	12.9%

Source: Dell'Oro Group, Company data, UBS estimates

Figure 39: UBS NAND Flash supply/demand summary

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Revenues (\$ mil)	12,423	14,843	17,179	21,596	66,042	38,599	64,737	75,506	82,898	261,740	87,598	95,464	105,756	109,813	398,631
% QoQ	-20.1%	19.5%	15.7%	25.7%		78.7%	67.7%	16.6%	9.8%		5.7%	9.0%	10.8%	3.8%	
% YoY	-0.8%	-1.2%	5.2%	38.8%	11.1%	210.7%	336.2%	339.5%	283.9%	296.3%	126.9%	47.5%	40.1%	32.5%	52.3%
Supply (Shipments Based) (M 1GB)	203,952	249,919	275,486	277,051	1,006,407	275,096	288,366	305,757	313,732	1,182,951	315,733	334,060	366,414	380,469	1,396,676
% QoQ	-6.1%	22.5%	10.2%	0.6%		-0.7%	4.8%	6.0%	2.6%		0.6%	5.8%	9.7%	3.8%	
% YoY	-6.2%	15.0%	25.9%	27.6%	15.6%	34.9%	15.4%	11.0%	13.2%	17.5%	14.8%	15.8%	19.8%	21.3%	18.1%
Demand (End Consumption) (M 1GB)	239,221	249,022	282,324	310,944	1,081,512	282,969	293,634	311,731	350,397	1,238,731	330,188	346,682	369,659	412,333	1,458,862
% QoQ	-6.6%	4.1%	13.4%	10.1%		-9.0%	3.8%	6.2%	12.4%		-5.8%	5.0%	6.6%	11.5%	
% YoY	13.1%	15.9%	20.7%	21.3%	18.0%	18.3%	17.9%	10.4%	12.7%	14.5%	16.7%	18.1%	18.6%	17.7%	17.8%
Inventory adjustment	-41,200	-300	-4,000	-19,200	-64,700	44,500	34,000	200	-33,000	45,700	-11,200	-10,000	-3,000	-31,800	-56,000
Inventory Adj. Demand (M 1GB)	198,021	248,722	278,324	291,744	1,016,812	327,469	327,634	311,931	317,397	1,284,431	318,988	336,682	366,659	380,533	1,402,862
% QoQ	-8.1%	25.6%	11.9%	4.8%		12.2%	0.1%	-4.8%	1.8%		0.5%	5.5%	8.9%	3.8%	
% YoY	-14.2%	9.8%	24.9%	35.4%	13.6%	65.4%	31.7%	12.1%	8.8%	26.3%	-2.6%	2.8%	17.5%	19.9%	9.2%
Wafer out (k wpm, 12" equi.)	1,203	1,099	1,083	1,127	1,128	1,182	1,165	1,155	1,150	1,163	1,153	1,153	1,153	1,153	1,153
% QoQ	1.5%	-8.6%	-1.4%	4.0%		4.8%	-1.4%	-0.9%	-0.4%		0.2%	0.0%	0.0%	0.0%	
% YoY	22.6%	2.3%	-3.9%	-4.9%	3.3%	-1.7%	6.0%	6.6%	2.0%	3.1%	-2.5%	-1.1%	-0.2%	0.2%	-0.9%
% Sufficiency Ratio	3.0%	0.5%	-1.0%	-5.0%	-1.0%	-16.0%	-12.0%	-2.0%	-1.2%	-7.9%	-1.0%	-0.8%	-0.1%	0.0%	-0.4%
NAND ASP (\$/1GB)	0.06	0.06	0.06	0.08	0.07	0.14	0.22	0.25	0.26	0.22	0.28	0.29	0.29	0.29	0.29
% QoQ	-15.0%	-2.5%	5.0%	25.0%		80.0%	60.0%	10.0%	7.0%		5.0%	3.0%	1.0%	0.0%	
% YoY	5.8%	-14.1%	-16.5%	8.8%	-3.9%	130.3%	278.0%	296.0%	239.0%	237.2%	97.7%	27.3%	16.9%	9.2%	29.0%

Source: Company data, UBS estimates

Figure 40: NAND Flash vendors' market share in bit shipments

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Samsung	30.6%	31.5%	31.4%	28.1%	30.4%	30.5%	29.6%	28.4%	27.9%	29.1%	27.7%	28.9%	27.2%	27.0%	27.7%
Kioxia	16.2%	13.2%	16.6%	17.3%	15.9%	16.2%	15.4%	16.3%	15.9%	16.0%	15.0%	14.2%	16.8%	17.0%	15.8%
SanDisk	13.1%	11.1%	11.6%	11.9%	11.8%	11.4%	11.4%	12.3%	12.0%	11.8%	11.3%	11.3%	11.8%	12.2%	11.7%
SK Hynix	12.7%	18.0%	15.5%	16.9%	16.0%	15.3%	16.7%	16.2%	16.7%	16.3%	16.7%	16.8%	16.2%	15.7%	16.3%
Micron	13.9%	14.1%	12.4%	13.0%	13.3%	13.5%	13.5%	13.5%	14.0%	13.6%	14.3%	13.9%	13.3%	13.3%	13.7%
YMTC	12.4%	11.2%	11.7%	12.1%	11.8%	12.4%	12.5%	12.4%	12.7%	12.5%	14.2%	14.2%	14.0%	14.2%	14.1%
Total Bit Supply	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Gartner, Company data, UBS estimates

Figure 41: NAND Flash bit shipments QoQ and YoY growth

	Q125 QoQ	Q225 QoQ	Q325 QoQ	Q425 QoQ	2025 YoY	Q126E QoQ	Q226E QoQ	Q326E QoQ	Q426E QoQ	2026E YoY	Q127E QoQ	Q227E QoQ	Q327E QoQ	Q427E QoQ	2027E YoY
Samsung	-10.0%	25.9%	10.0%	-10.0%	3.0%	7.5%	2.0%	1.8%	0.7%	12.5%	-0.1%	10.2%	3.4%	3.2%	12.5%
Kioxia	-10.0%	0.0%	38.0%	5.0%	14.8%	-7.0%	0.0%	12.0%	0.0%	18.3%	-5.0%	0.0%	30.0%	5.0%	17.1%
SanDisk	-6.0%	4.0%	15.0%	3.0%	17.7%	-5.0%	5.0%	15.0%	0.0%	17.0%	-5.0%	5.0%	15.0%	7.0%	16.9%
SK Hynix	-16.9%	73.6%	-5.0%	9.6%	11.8%	-10.4%	15.0%	2.7%	5.8%	19.8%	0.5%	6.4%	5.8%	0.5%	18.6%
Micron	3.5%	24.3%	-3.3%	5.0%	25.6%	3.4%	5.0%	6.0%	6.0%	20.4%	3.0%	3.0%	5.0%	3.4%	18.4%
YMTC	15.7%	10.6%	15.5%	3.5%	57.3%	2.3%	5.5%	5.3%	5.2%	24.5%	12.0%	6.2%	7.6%	5.5%	33.1%
Total Bit Supply	-6.1%	22.5%	10.2%	0.6%	15.6%	-0.7%	4.8%	6.0%	2.6%	17.5%	0.6%	5.8%	9.7%	3.8%	18.1%

Source: Gartner, Company data, UBS estimates

Figure 42: NAND Flash vendors wafers out (k wpm, 12" equivalent)

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Samsung	471	449	423	409	438	412	405	400	400	404	398	393	388	383	390
Kioxia / SanDisk	470	400	400	441	428	480	470	460	450	465	450	450	450	450	450
SK Hynix	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Micron	132	111	111	117	118	130	130	130	130	130	130	130	130	130	130
YMTC	130	140	150	160	145	160	160	165	170	164	175	180	185	190	183
Total	1,203	1,099	1,083	1,127	1,128	1,182	1,165	1,155	1,150	1,163	1,153	1,153	1,153	1,153	1,153
% YoY	22.6%	2.3%	-3.9%	-4.9%	3.3%	-1.7%	6.0%	6.6%	2.0%	3.1%	-2.5%	-1.1%	-0.2%	0.2%	-0.9%

Source: Gartner, Company data, UBS estimates

Figure 43: NAND Flash bit demand growth by application

	Q125 QoQ	Q225 QoQ	Q325 QoQ	Q425 QoQ	2025 YoY	Q126 QoQ	Q226E QoQ	Q326E QoQ	Q426E QoQ	2026E YoY	Q127E QoQ	Q227E QoQ	Q327E QoQ	Q427E QoQ	2027E YoY
Total Embedded	-6.5%	4.2%	13.6%	10.4%	18.9%	-8.3%	3.9%	6.2%	12.7%	15.9%	-5.8%	5.1%	6.7%	11.7%	18.2%
Smartphones	-11.3%	-6.3%	17.3%	26.6%	16.9%	-24.5%	-3.7%	6.6%	28.6%	2.2%	-18.3%	-4.7%	7.5%	31.3%	8.2%
iPhones	-29.0%	-7.7%	24.8%	69.7%	28.1%	-33.6%	-5.0%	-1.6%	70.4%	15.5%	-32.8%	-5.0%	1.3%	73.4%	9.5%
Samsung	42.2%	-13.4%	10.1%	-8.2%	15.0%	16.2%	-7.4%	7.5%	-12.7%	4.2%	32.6%	-15.9%	10.4%	-12.3%	8.9%
Non- iPhone/Samsung	-5.6%	-0.9%	13.2%	-5.0%	5.5%	-25.0%	1.1%	19.7%	-4.4%	-16.3%	-10.0%	4.7%	15.9%	-3.3%	5.5%
Tablet PCs	-21.6%	10.0%	9.5%	17.2%	6.4%	-20.2%	12.0%	3.9%	17.5%	11.0%	-24.4%	13.1%	10.6%	14.3%	6.9%
SSD-Total	-2.9%	9.2%	14.4%	3.9%	23.4%	-0.6%	5.6%	6.2%	7.2%	21.9%	0.8%	8.6%	6.7%	6.5%	24.0%
SSD (notebooks)	-12.0%	9.9%	16.0%	-0.7%	12.3%	-14.3%	-0.4%	2.3%	-0.1%	-5.6%	-10.2%	9.4%	15.7%	6.6%	6.7%
SSD (servers)	-4.9%	14.0%	25.1%	7.1%	35.4%	10.9%	8.2%	4.9%	6.1%	47.0%	6.5%	11.5%	3.2%	4.7%	29.6%
SSD (storage)	7.6%	7.9%	5.8%	5.7%	40.8%	6.2%	12.4%	11.7%	16.6%	40.1%	2.6%	7.4%	7.1%	6.9%	38.1%
SSD (others)	4.3%	2.2%	0.9%	1.9%	8.2%	-13.9%	-0.7%	8.6%	8.6%	-6.5%	-5.7%	0.0%	9.2%	12.0%	12.4%
Total Flash cards	-11.3%	0.6%	4.7%	-1.6%	-10.4%	-44.0%	-3.3%	2.3%	-16.4%	-46.4%	-5.8%	-3.5%	3.2%	-13.1%	-21.2%
Mobile Phones - Flash cards	-6.3%	-1.5%	5.3%	-1.6%	-0.8%	-11.4%	-1.1%	10.9%	-9.2%	-8.8%	1.7%	-0.4%	9.3%	-7.7%	1.5%
Total Bit Demand	-6.6%	4.1%	13.4%	10.1%	18.0%	-9.0%	3.8%	6.2%	12.4%	14.5%	-5.8%	5.0%	6.6%	11.5%	17.8%

Source: Gartner, Company data, UBS estimates

Figure 44: NAND Flash content assumptions (GB/unit) by application

	Q125	Q225	Q325	Q425	2025	Q126	Q226E	Q326E	Q426E	2026E	Q127E	Q227E	Q327E	Q427E	2027E
Smartphones - Blended	198	193	216	251	216	229	225	222	272	238	243	235	237	293	253
% YoY	14%	14%	11%	22%	15%	16%	17%	3%	8%	10%	6%	5%	7%	8%	6%
iPhones	517	512	573	579	538	576	581	586	594	572	599	604	627	653	610
Samsung	225	203	213	198	210	232	213	220	213	220	253	227	233	226	235
Non- iPhone/Samsung	127	127	132	137	131	127	132	137	142	134	132	137	142	146	139
SSD - Notebook PCs	649	650	688	694	672	688	682	711	731	703	720	705	735	759	731
% YoY	3%	5%	4%	3%	4%	6%	5%	3%	5%	5%	5%	3%	3%	4%	4%
SSD - Servers	3,433	3,775	4,117	4,463	3,973	4,561	4,658	4,756	4,854	4,712	4,951	5,049	5,147	5,244	5,103
% YoY	12%	23%	34%	44%	29%	33%	23%	16%	9%	19%	9%	8%	8%	8%	8%
SSD - Storage	12,383	13,359	14,141	14,941	13,706	15,917	16,894	17,871	18,847	17,467	19,335	19,824	20,312	20,800	20,095
% YoY	57%	47%	38%	31%	42%	29%	26%	26%	26%	27%	21%	17%	14%	10%	15%

Source: Gartner, Company data, UBS estimates

Valuation Method and Risk Statement

Investing in the technology sector involves a high degree of risk. Rapid technological changes, increasing competition and exposure to macroeconomic cycles are among the many risks faced by investors in technology stocks. Moreover, it is extremely difficult to project the financial results of tech companies since their operating models are highly volatile and unpredictable. Finally, valuing technology stocks can prove challenging, as neither traditional nor non-traditional valuation measures have provided much insight into how these stocks trade.