SWTEST 2026 CONFERENCE

35th ANNIVERSARY

Semiconductor Market Outlook – Challenges and Opportunities

Boris Metodiev
Director, Manufacturing Analysis
TechInsights

TechInsights

Agenda

- Market Update
- End-Market Demand
- Chip Pricing
- Semiconductor Forecast
- Fab Capacity and Production
- Equipment, WFE
- Summary
- Q & A

TechInsights' Forecast **Summary**

TechInsights' Current Forecast										
Forecast as of June 2026:	**Q1 2025**	**Q2 2025**	**Q3 2025**	**Q4 2025**	**2025**	**Q1 2026**	**Q2 2026**	**Q3 2026**	**Q4 2026**	**2026**
Semi Equipment ($B):	$ 40.1	$ 41.8	$ 42.3	$ 45.4	**$ 169.5**	$ 47.3	$ 51.4	$ 56.3	$ 60.4	**$ 215.4**
Sequential Change	-4.0%	4.4%	1.0%	7.3%	**14.2%**	4.3%	8.7%	9.4%	7.4%	**27.1%**
Capacity Utilization:	95.4%	96.4%	95.1%	89.8%	**82.5%**	76.6%	71.3%	70.3%	71.2%	**89.3%**
ICs ($B):	$ 156.4	$ 170.7	$ 199.4	$ 232.4	**$ 759.0**	$ 297.5	$ 388.7	$ 437.3	$ 469.0	**$ 1,592.5**
Sequential Change	-4.4%	9.2%	16.8%	16.5%	**29.4%**	28.0%	30.6%	12.5%	7.2%	**109.8%**
IC Units (BU):	88.8	94.1	101.8	100.3	**385.1**	105.2	107.4	110.2	105.0	**427.8**
Sequential Change	-7.6%	6.1%	8.2%	-1.5%	**6.3%**	4.9%	2.1%	2.6%	-4.8%	**11.1%**
Electronics ($B) :	$ 655.4	$ 646.2	$ 703.7	$ 818.1	**$ 2,823**	$ 719.7	$ 749.9	$ 818.0	$ 968.4	**$ 3,256**
Sequential Change	-8.3%	-1.4%	8.9%	16.2%	**11.6%**	-12.0%	4.2%	9.1%	18.4%	**15.3%**

	Q2 2026	2025	2026
Equipment	No Changes	No Changes	**Upgraded**: from 24% to 27%
IC Sales	**Upgraded**: from 14% to 31%	No Changes	**Upgraded**: from 75% to 110%
IC Units	**Upgraded**: from 1% to 2%	No Changes	**Upgraded**: from 8% to 11%
Electronics	**Upgraded**: from -4% to 4%	No Changes	No Changes

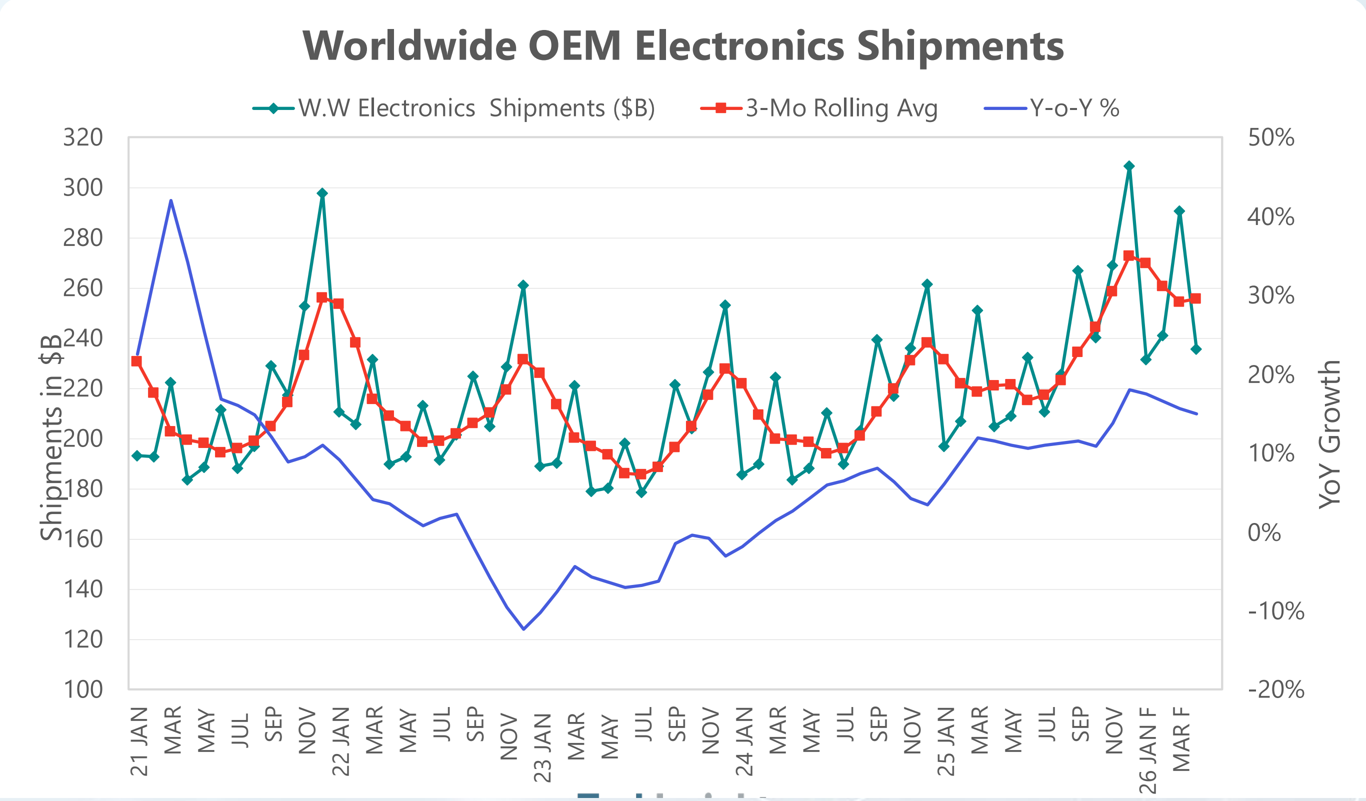
TechInsights’ Forecast **Summary**

TechInsights' Current Forecast (excluding China)									
Forecast as of June 2026:	**Q1 2025**	**Q2 2025**	**Q3 2025**	**Q4 2025**	**2025**	**Q1 2026**	**Q2 2026**	**Q3 2026**	**Q4 2026**	**2026**
Semi Equipment ($B):	$ 27.7	$ 27.9	$ 26.2	$ 29.7	**$ 111.5**	$ 32.1	$ 36.5	$ 42.1	$ 45.1	**$ 155.9**
Sequential Change	13.9%	0.9%	-6.3%	13.3%	**30.2%**	8.2%	13.8%	15.3%	7.0%	**39.8%**
ICs ($B):	$ 114.7	$ 124.4	$ 147.5	$ 171.4	**$ 558.0**	$ 219.0	$ 286.1	$ 322.0	$ 345.3	**$ 1,172.4**
Sequential Change	-4.7%	8.4%	18.6%	16.2%	**33.3%**	27.8%	30.6%	12.5%	7.2%	**110.1%**
IC Units (BU):	53.9	54.7	58.5	60.1	**227.2**	60.4	61.6	63.3	60.2	**245.5**
Sequential Change	-2.1%	1.4%	7.0%	2.7%	**5.8%**	0.5%	2.1%	2.6%	-4.8%	**8.1%**
Electronics ($B) :	$ 462.8	$ 456.3	$ 496.9	$ 577.6	**$ 1,993.5**	$ 507.3	$ 528.5	$ 576.5	$ 682.5	**$ 2,294.8**
Sequential Change	-10.2%	-1.4%	8.9%	16.2%	**9.3%**	-12.2%	4.2%	9.1%	18.4%	**15.1%**

TechInsights' Current Forecast (China)										
Forecast as of June 2026:	**Q1 2025**	**Q2 2025**	**Q3 2025**	**Q4 2025**	**2025**	**Q1 2026**	**Q2 2026**	**Q3 2026**	**Q4 2026**	**2026**
Semi Equipment ($B):	$ 12.4	$ 13.9	$ 16.1	$ 15.7	**$ 58.0**	$ 15.2	$ 14.9	$ 14.1	$ 15.3	**$ 59.5**
Sequential Change	-28.9%	12.0%	15.7%	-2.4%	**-7.7%**	-3.1%	-2.2%	-5.1%	8.4%	**2.5%**
ICs ($B):	$ 41.7	$ 46.3	$ 51.9	$ 61.1	**$ 201.0**	$ 78.5	$ 102.5	$ 115.4	$ 123.7	**$ 420.2**
Sequential Change	-3.7%	11.2%	12.0%	17.6%	**19.9%**	28.6%	30.6%	12.5%	7.2%	**109.0%**
IC Units (BU):	34.9	39.5	43.3	40.2	**157.9**	44.8	45.8	47.0	44.7	**182.3**
Sequential Change	-15.0%	13.2%	9.8%	-7.2%	**7.2%**	11.5%	2.1%	2.6%	-4.8%	**15.5%**
Electronics ($B) :	$ 192.6	$ 189.9	$ 206.8	$ 240.4	**$ 829.8**	$ 212.5	$ 221.4	$ 241.5	$ 285.9	**$ 961.2**
Sequential Change	-3.5%	-1.4%	8.9%	16.2%	**17.5%**	-11.6%	4.2%	9.1%	18.4%	**15.8%**

- Equipment rebound is much stronger outside China.
- Lower ASP mix in China - mature nodes (≥28nm), power, analog, discretes
- Higher ASP mix RoW - leading-edge logic, data-center/AI, HBM memory
- Capex–revenue timing lag in China – building capacity for self-reliance

Electronics Demand is Improving

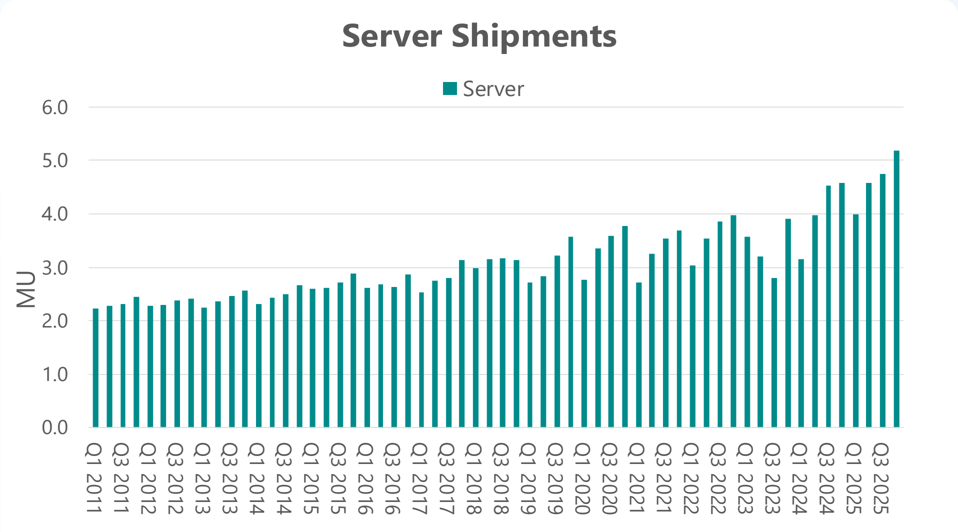


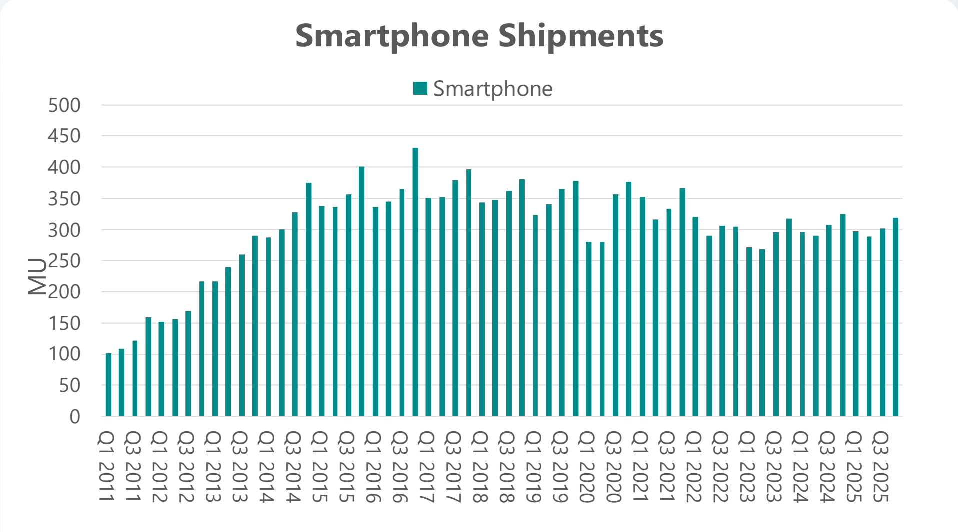
OEM Electronic Sales

Increased

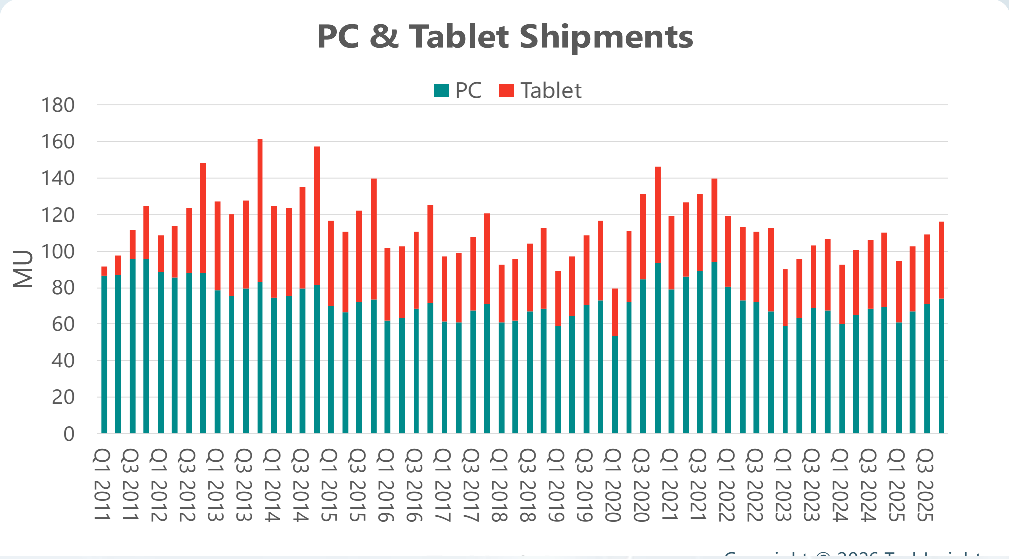
12% In 2025

Key Semiconductor Drivers are Improving

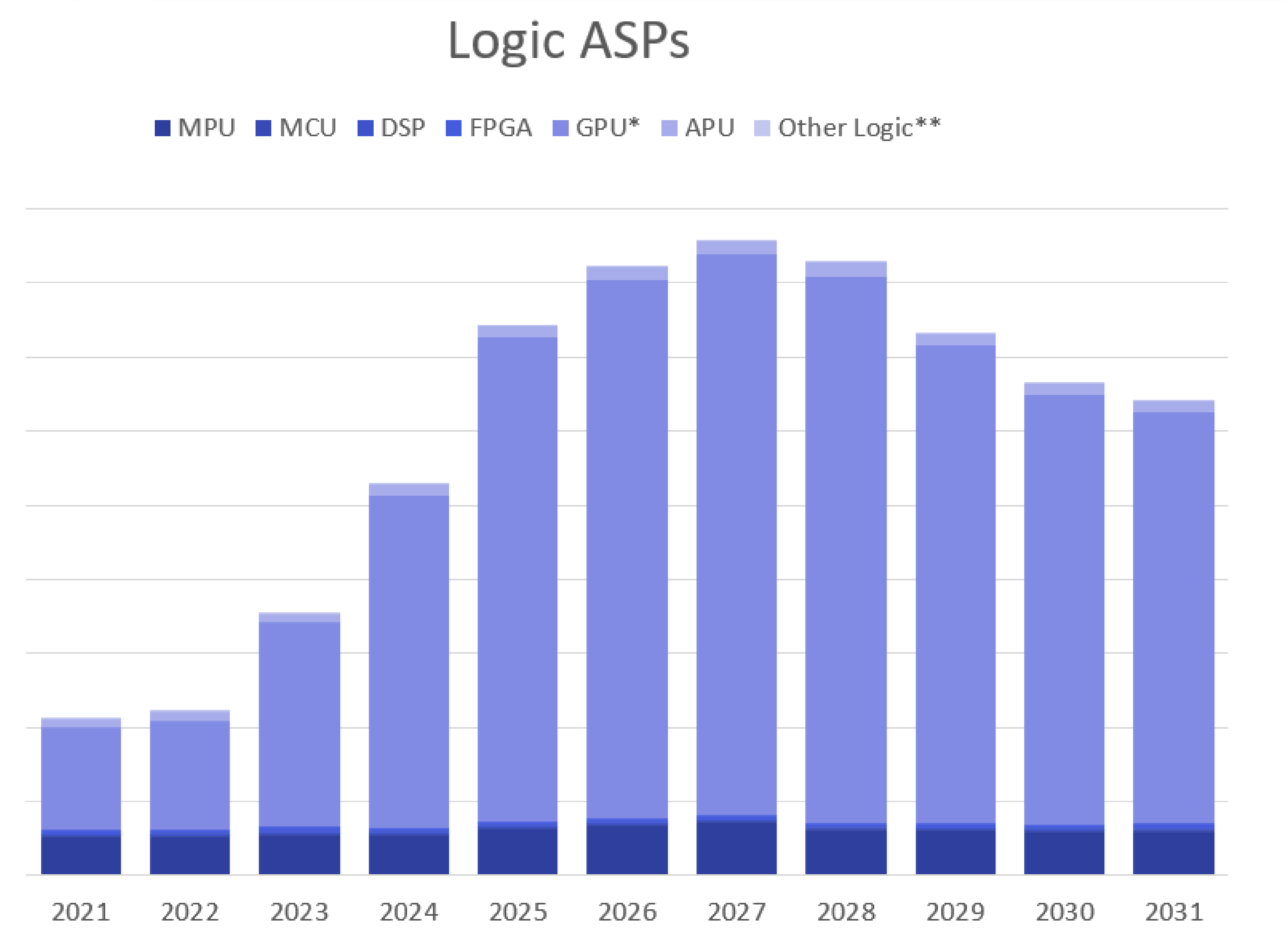


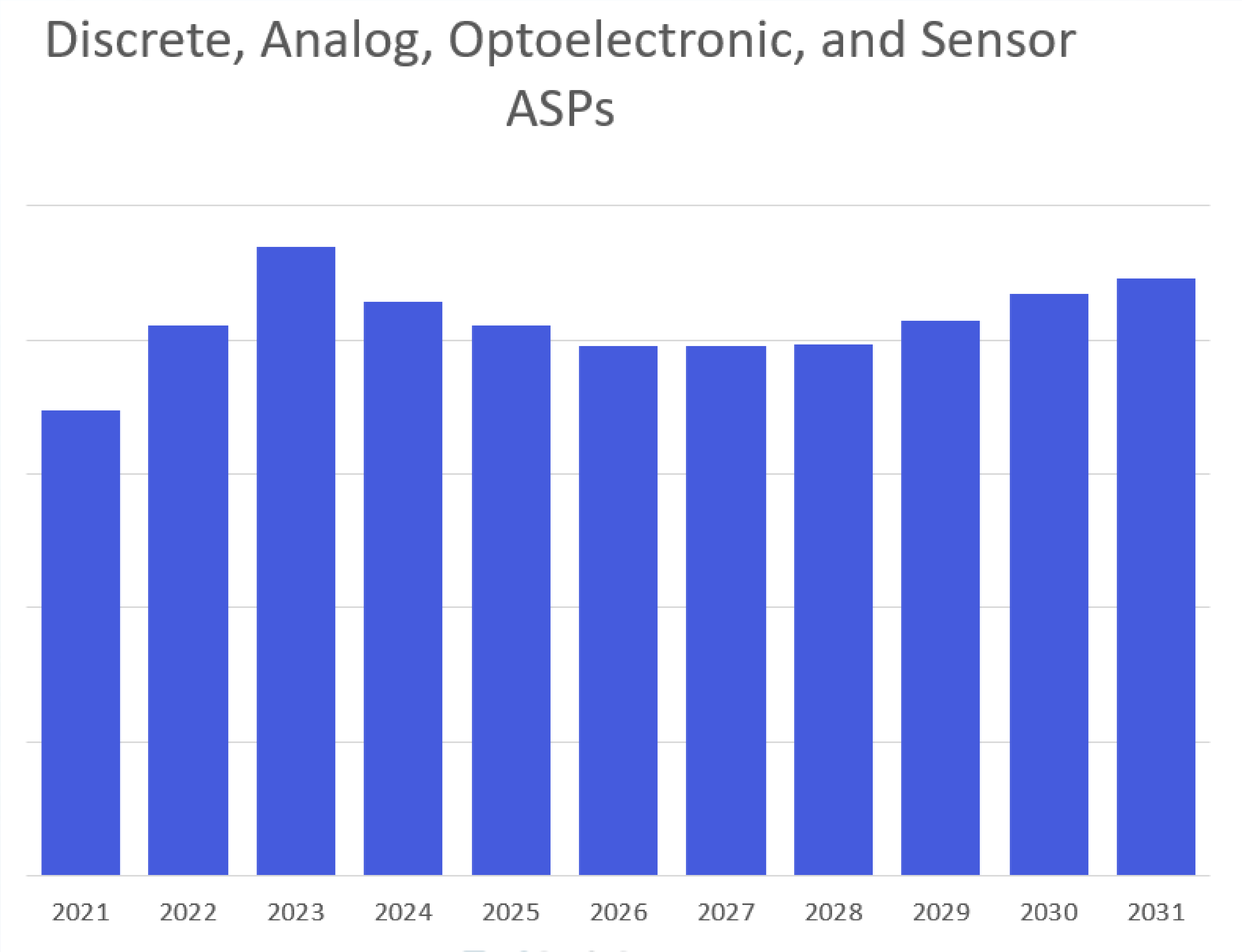


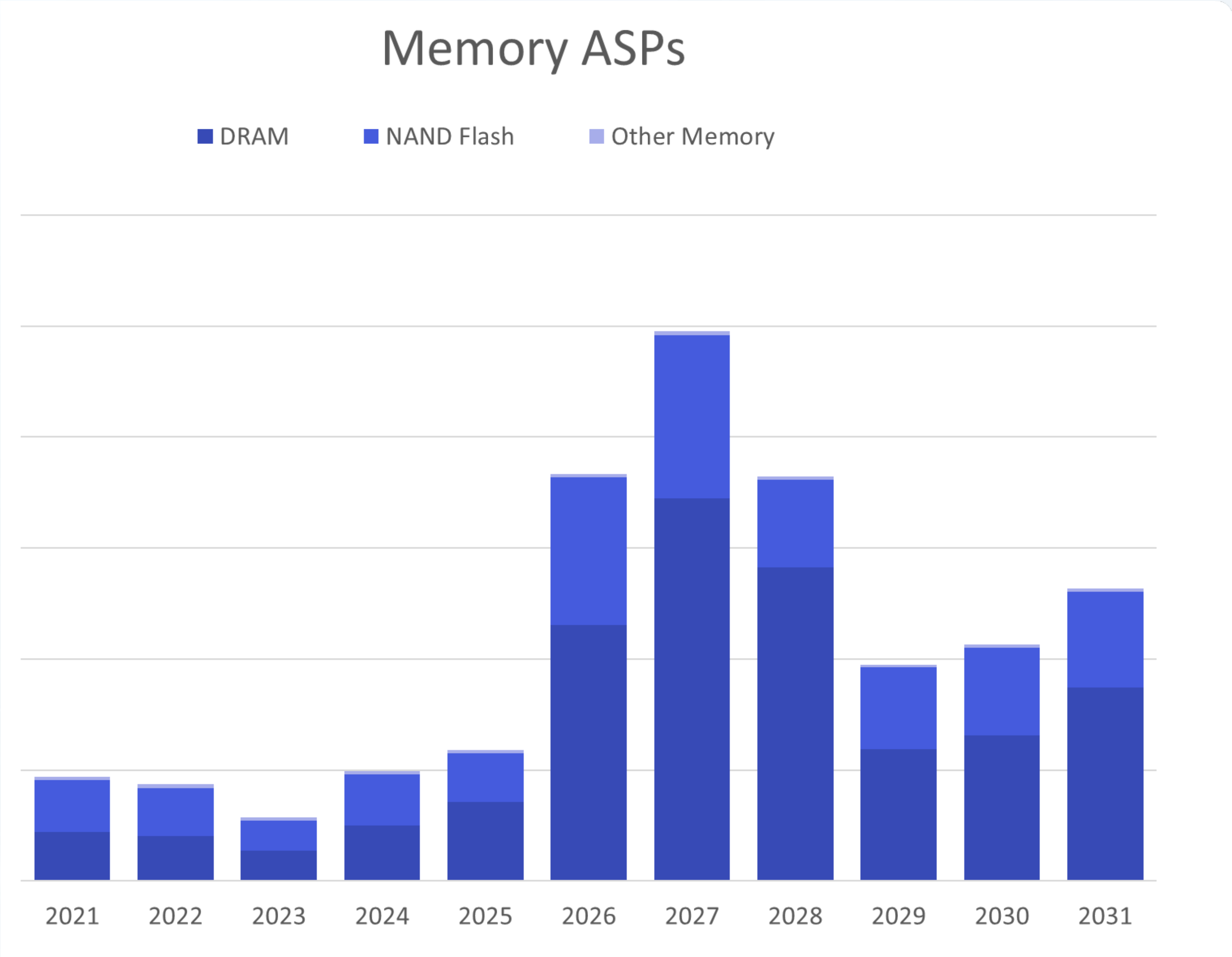
- Servers ▲14% in 2025, ▲8% in 2026
  - Strong demand for AI servers
- SP Shipments ▼1% in 2025, ▲1% in 2026
  - Headwinds from potential geopolitical tensions



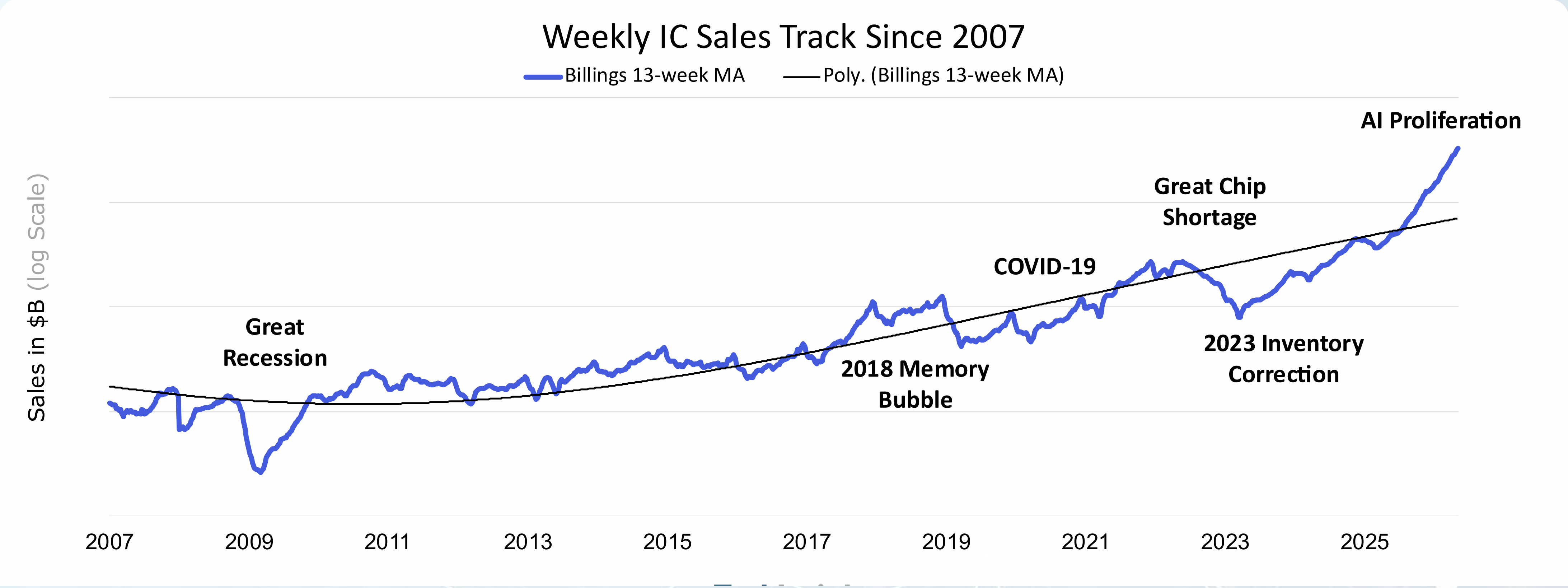
- PCs ▲4% in 2025, ▲1% in 2026
  - Headwinds from potential geopolitical tensions
  - AI-enabled PC Adoption
  - EOL for Windows 10


Logic ASPs
MPU
MCU
DSP
FPGA
GPU*
APU
Other Logic**
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031


Discrete, Analog, Optoelectronic, and Sensor ASPs
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031


Memory ASPs
DRAM
NAND Flash
Other Memory
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031

IC Sales Growth/IC Sales Track



Semiconductor Sales and Shipments

Memory ASPs Accelerating Growth Rapidly

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SEMICONDUCTOR SALES
(worldwide sales, $B, calendar year)

	2026	2027	2028	2029	2030	2031
Analog	99	107	116	120	127	139
y-o-y growth	*10%*	*9%*	*8%*	*3%*	*6%*	*10%*
DRAM	591	919	983	914	896	885
y-o-y growth	*288%*	*55%*	*7%*	*-7%*	*-2%*	*-1%*
NAND	317	460	394	268	239	244
y-o-y growth	*336%*	*45%*	*-14%*	*-32%*	*-11%*	*2%*
MPU	93	117	126	144	171	186
y-o-y growth	*29%*	*26%*	*8%*	*14%*	*19%*	*9%*
GPU	221	259	283	354	404	442
y-o-y growth	*31%*	*17%*	*10%*	*25%*	*14%*	*9%*
APU	47	50	47	55	62	66
y-o-y growth	*4%*	*6%*	*-4%*	*15%*	*14%*	*7%*
Other Logic	217	237	226	275	315	361
y-o-y growth	*41%*	*9%*	*-4%*	*21%*	*14%*	*15%*
Discrete, Opto & Other	112	124	135	150	163	171
y-o-y growth	*10%*	*11%*	*9%*	*11%*	*9%*	*5%*
Total Semiconductor	**1697**	**2273**	**2311**	**2278**	**2377**	**2495**
y-o-y growth	*98%*	*34%*	*2%*	*-1%*	*4%*	*5%*

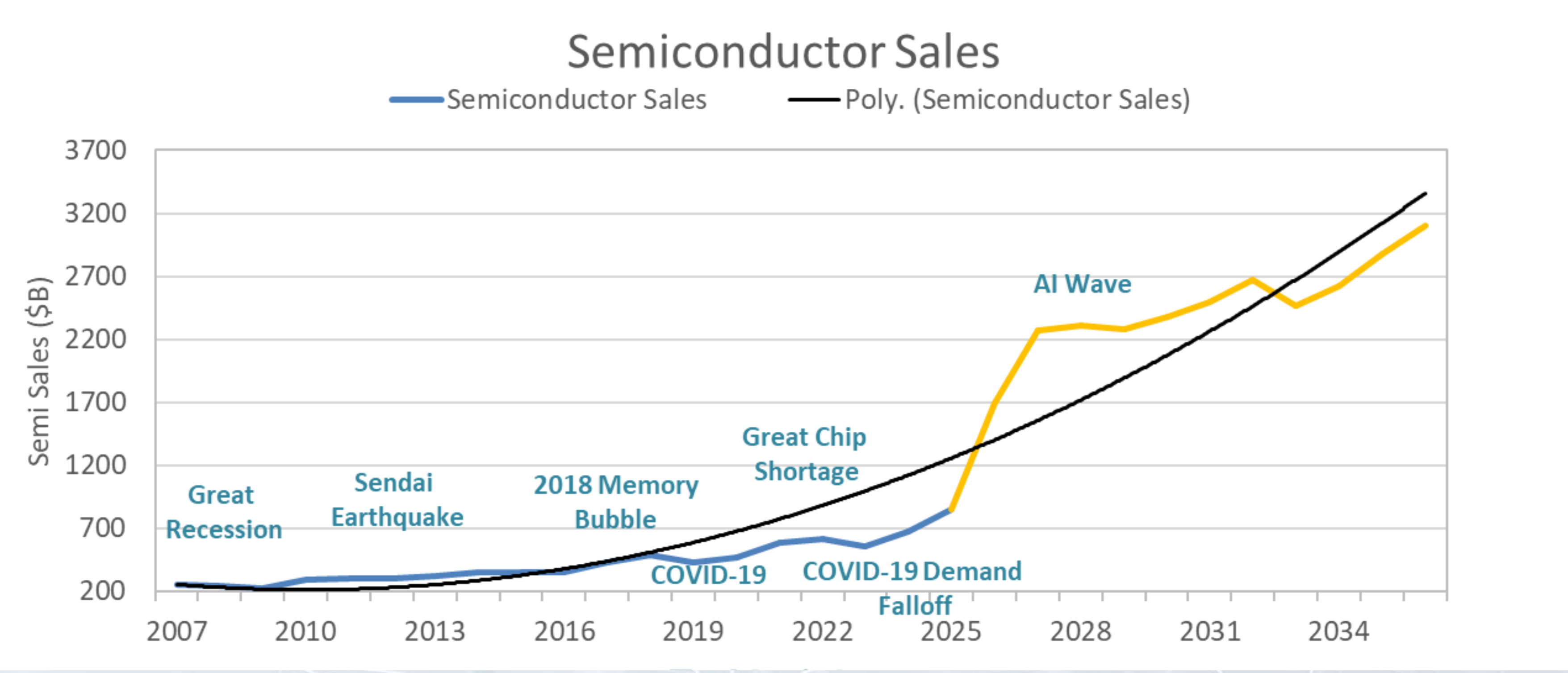
SEMICONDUCTOR SHIPMENTS
(worldwide sales, B units, calendar year)

	2026	2027	2028	2029	2030	2031
Analog	244	260	271	296	333	355
y-o-y growth	*8%*	*6%*	*4%*	*9%*	*13%*	*7%*
DRAM	21.8	22.3	25.5	28.5	32.3	34.9
y-o-y growth	*2%*	*2%*	*14%*	*12%*	*13%*	*8%*
bit growth	*19%*	*17%*	*26%*	*25%*	*27%*	*19%*
NAND	16.5	15.7	16.1	16.1	16.4	16.2
y-o-y growth	*0%*	*-5%*	*2%*	*0%*	*2%*	*-1%*
bit growth	*15%*	*19%*	*26%*	*22%*	*23%*	*19%*
MPU	0.58	0.59	0.59	0.63	0.69	0.71
y-o-y growth	*6%*	*2%*	*-1%*	*7%*	*9%*	*3%*
GPU	0.15	0.16	0.17	0.21	0.23	0.25
y-o-y growth	*11%*	*7%*	*9%*	*21%*	*11%*	*7%*
APU	1.48	1.37	1.29	1.43	1.56	1.64
y-o-y growth	*2%*	*-7%*	*-6%*	*10%*	*9%*	*5%*
Other Logic	120	130	119	128	141	144
y-o-y growth	*21%*	*8%*	*-8%*	*7%*	*10%*	*2%*
Discrete, Opto & Other	756	807	824	877	960	1005
y-o-y growth	*8%*	*7%*	*2%*	*6%*	*9%*	*5%*
Total Semiconductor	**1161**	**1237**	**1258**	**1348**	**1485**	**1558**
y-o-y growth	*9%*	*7%*	*2%*	*7%*	*10%*	*5%*

Semiconductor Sales Long-Term Forecast

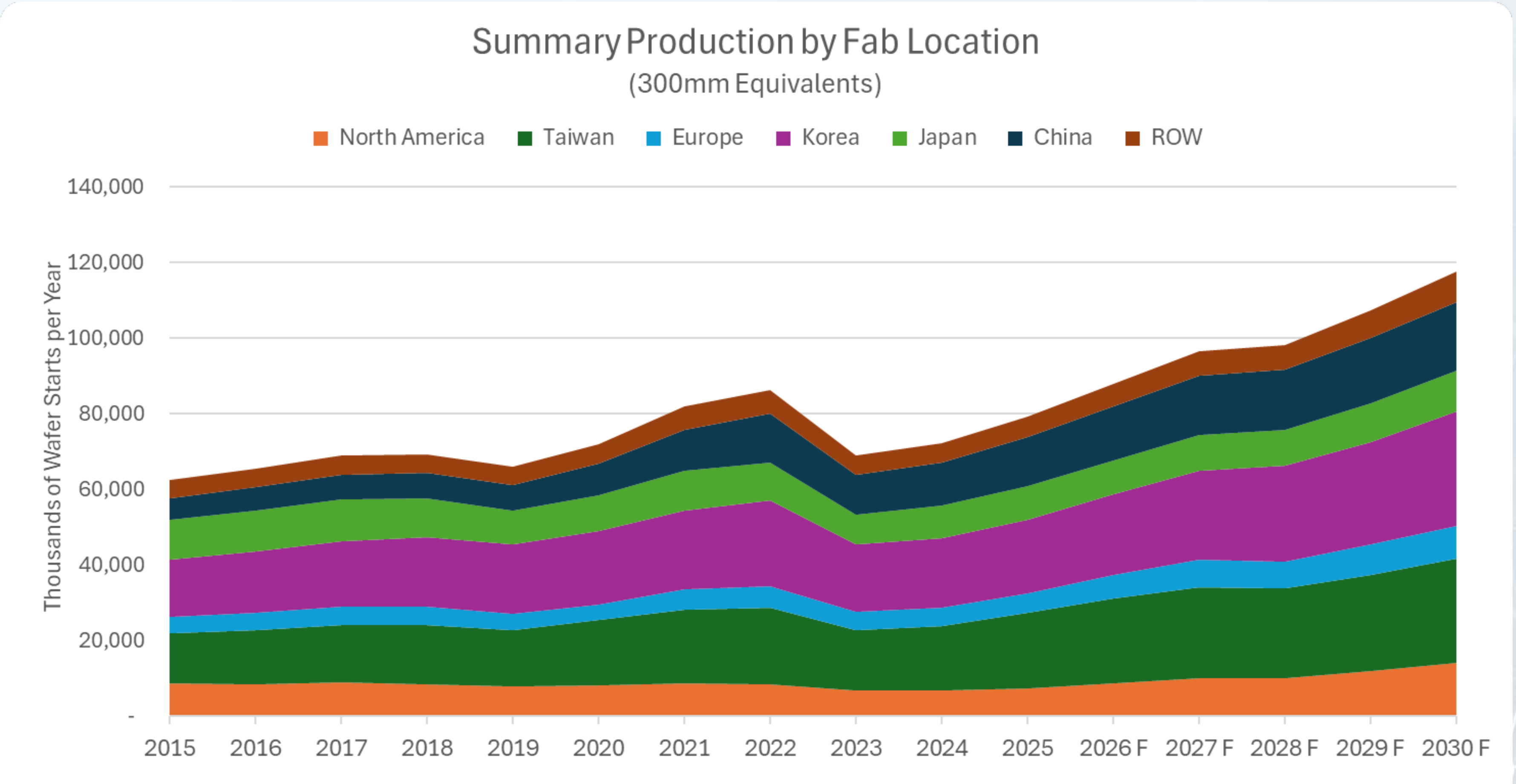
The rapid proliferation of AI technology is propelling the Semiconductor Industry past the $1 trillion benchmark

- Surpassing it in 2026
    - Primarily ASP driven
    - Memory sales up 298%
    - DRAM $591B
- 10-year CAGR of 8.1% (2026-2036)



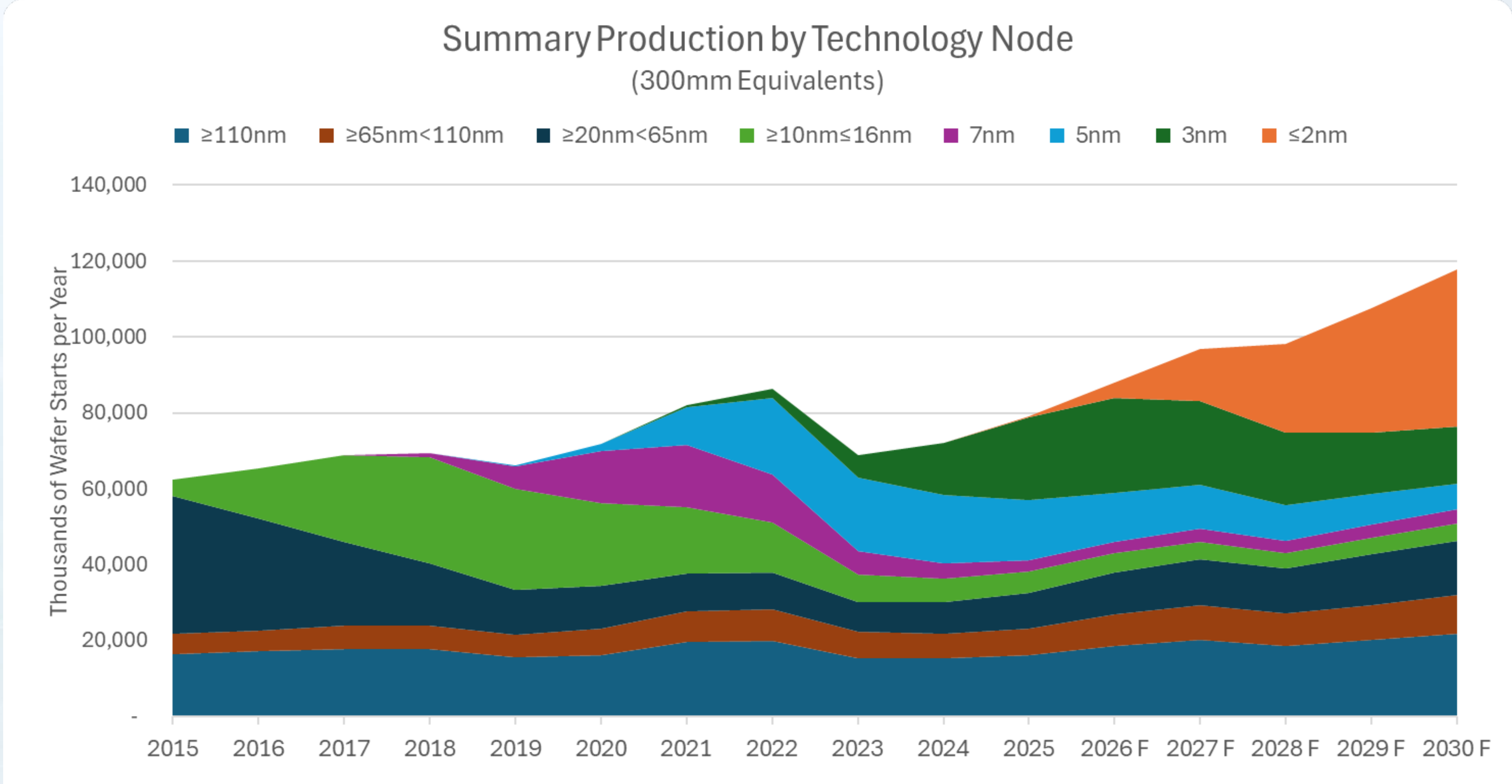
[Long-Term Semiconductor, Silicon, and Equipment Forecast]

Market Summary by Geography



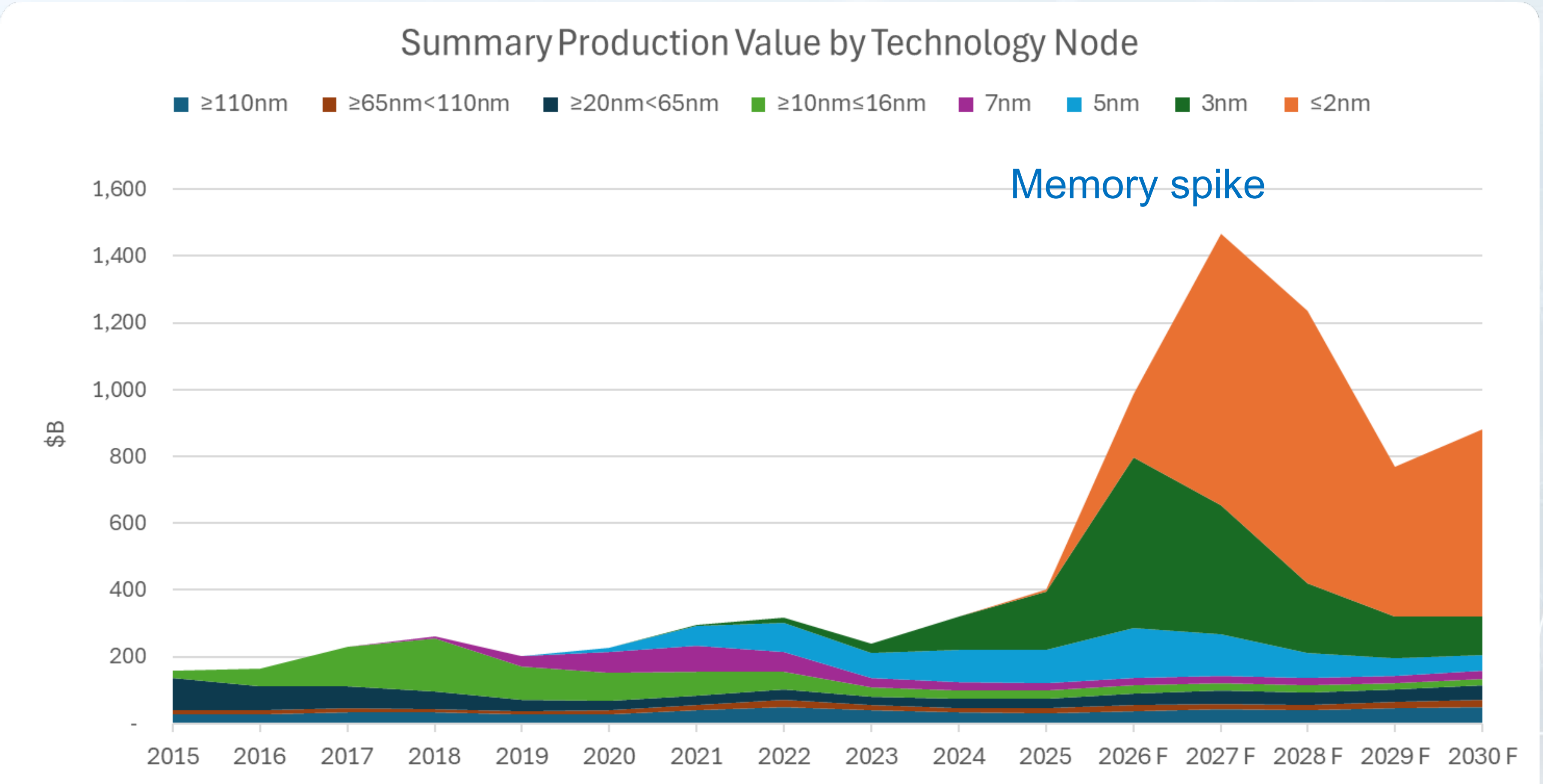
- **Decoupling/Re-shoring: localized supply chains driving CapEx and capacity expansion,**
- **Rising Utilization: Utilization will rise everywhere**
- **Cutting-Edge Chip Competition: ≤2nm capacity added or planned in Taiwan, Korea, and North America**

Wafer Starts by Technology Node



- **Shift to smaller nodes: ≤2nm chips are expected to account for most new growth, driven by AI**
- **Decline in mid-sized nodes: some ≤2nm growth will come at the expense of nodes in the 3nm to 10nm**

Production Value by Technology Node

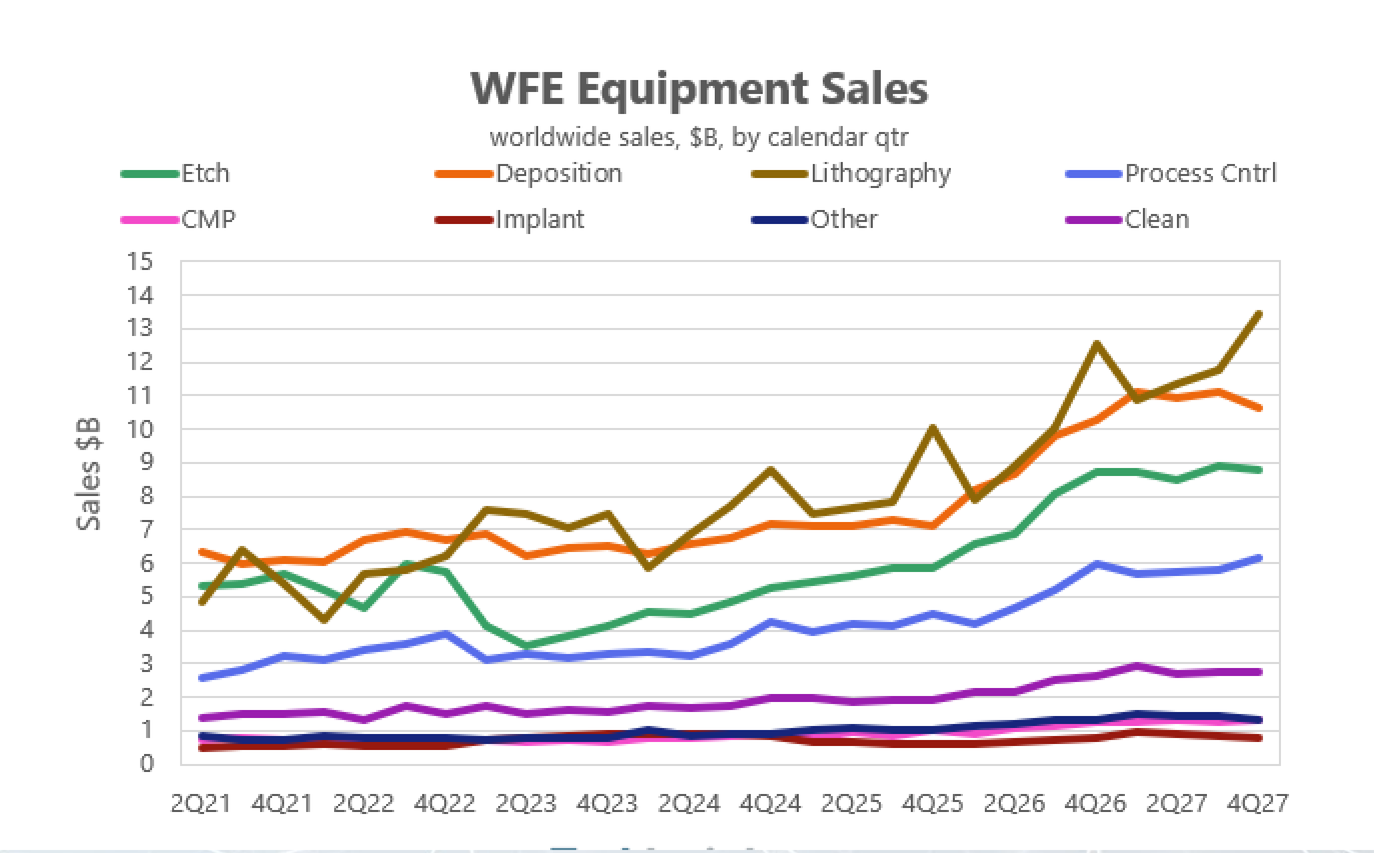


- **Shift to smaller nodes: ≤2nm chips are expected to account for most new growth, driven by AI**
- **Decline in mid-sized nodes: some ≤2nm growth will come at the expense of nodes in the 3nm to 10nm**

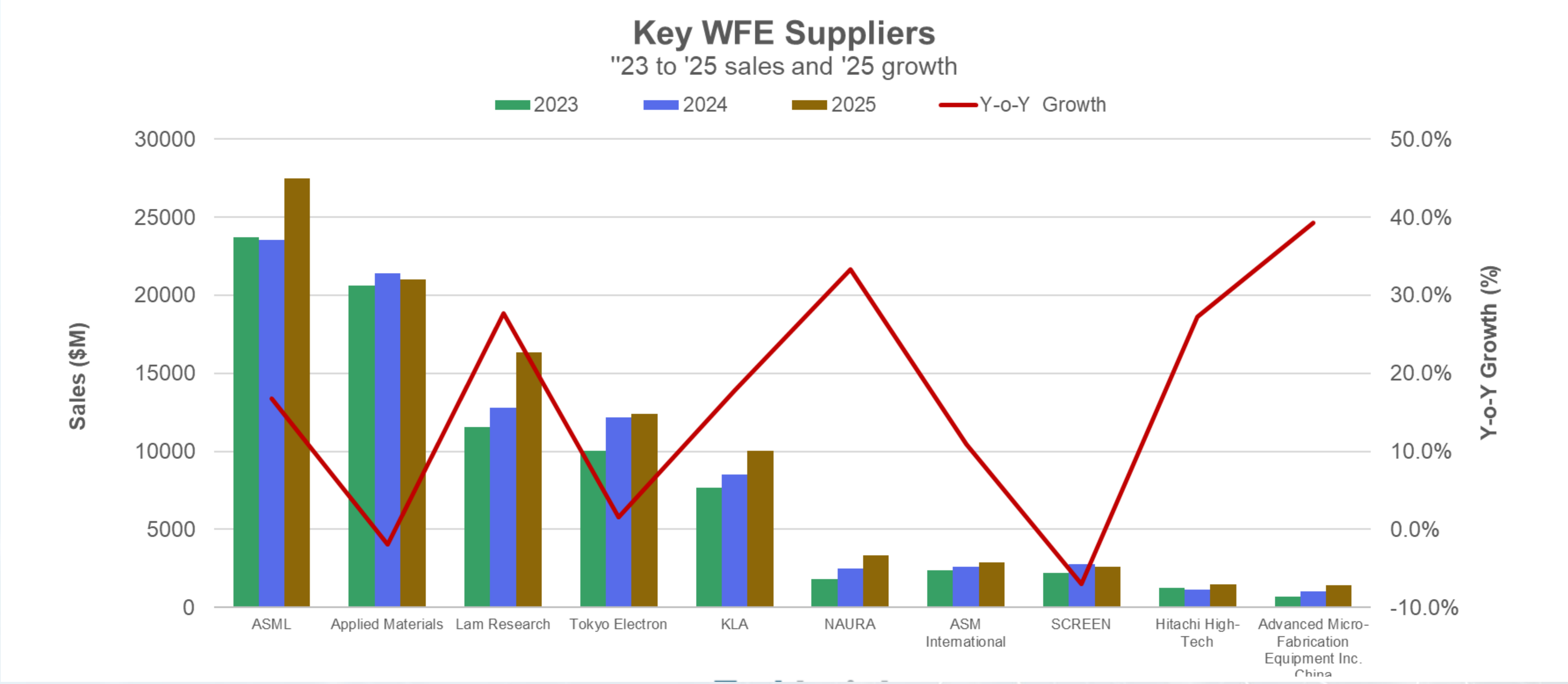
Wafer Fab Equipment Trends

WFE Equipment Sales
(worldwide sales, $B, CY 2025 - 2027)

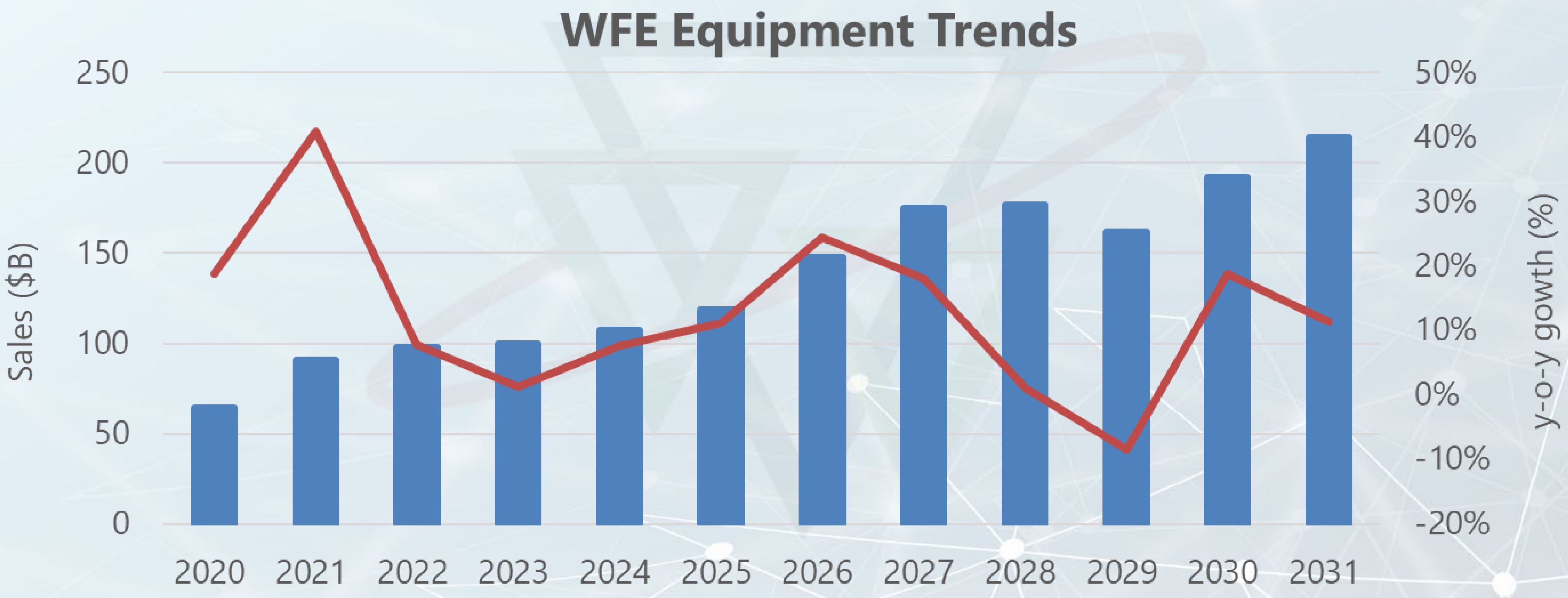
	2025	2026	2027
Lithography	33.0	39.3	47.4
y-o-y growth	13%	19%	20%
CMP	3.5	4.4	5.2
y-o-y growth	8%	23%	19%
Ion Implant	2.5	2.8	3.5
y-o-y growth	-28%	10%	26%
Deposition	28.6	36.9	43.8
y-o-y growth	7%	29%	19%
Etch	22.7	30.2	34.9
y-o-y growth	19%	33%	15%
Clean	7.6	9.5	11.1
y-o-y growth	8%	25%	18%
Process Control	16.8	20.0	23.3
y-o-y growth	17%	19%	17%
Other WFE	4.2	5.0	5.7
y-o-y growth	13%	20%	15%
Total WFE	**118.9**	**148.1**	**174.9**
y-o-y growth	11.2%	24.5%	18.1%



Strong Performance Across Top WFE OEMs

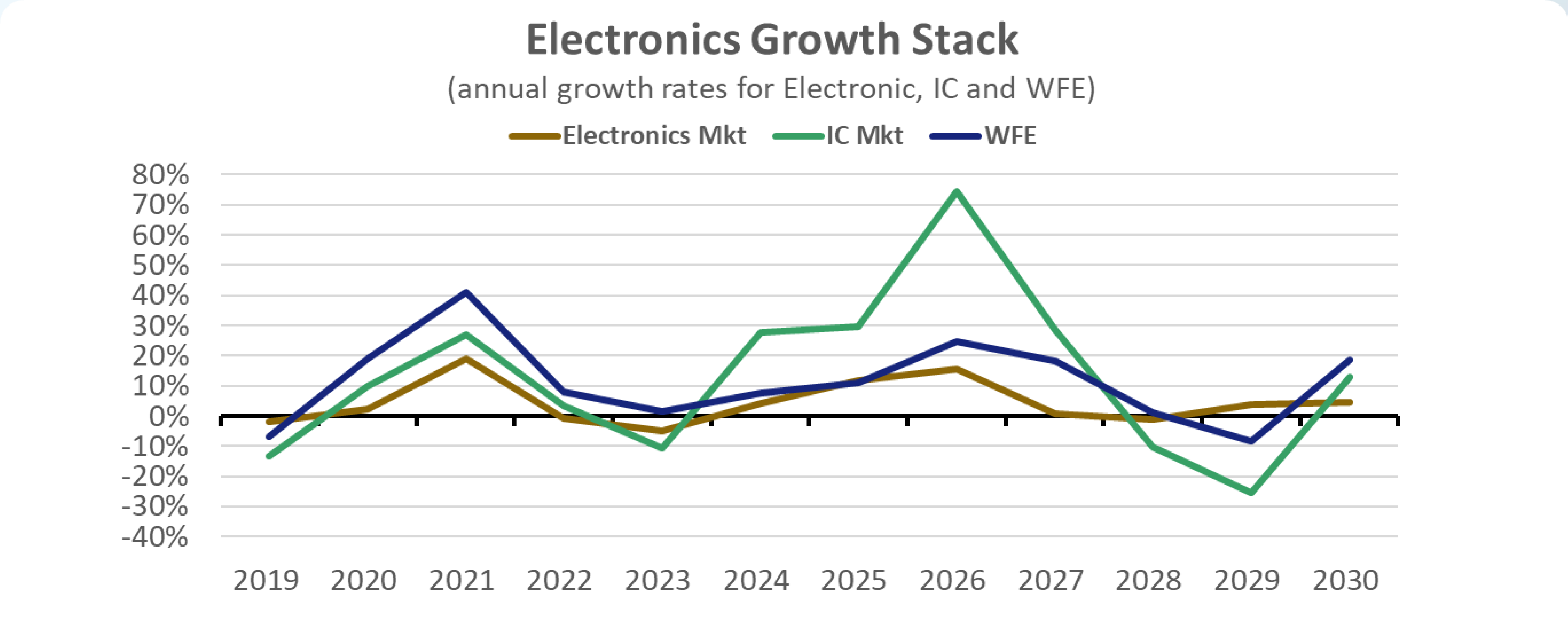


Wafer Fab Equipment Growth



- WFE sales ▲11% in '25
- WFE sales ▲24% in '26
- WFE sales ▲18% in '27

Summary


Electronics Growth Stack
(annual growth rates for Electronic, IC and WFE)
Electronics Mkt
IC Mkt
WFE
80%
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030

Key Takeaways

Demand & Revenue

- **Demand recovery is underway:** electronics demand is improving, with PCs stabilizing and AI servers leading growth.
- **Sales growth is increasingly ASP-driven:** the semiconductor market is forecast to pass the $1T mark in 2026.
- **Memory is the swing factor:** DRAM/HBM pricing and mix expansion drive a large share of the revenue upside.

Capacity & Equipment

- **Supply chains are localizing:** re-shoring and decoupling continue to drive CapEx and regional capacity plans.
- **Leading edge is the growth engine:** ≤2nm capacity ramps in Taiwan, Korea, and North America as AI pulls demand forward.
- **WFE cycle strengthens:** sales grow +11% in 2025, +24% in 2026, and +18% in 2027, with a stronger rebound outside China.

Bottom line: AI-led demand, memory ASP recovery, advanced-node expansion, and localized capacity buildouts point to a stronger semiconductor and WFE cycle through 2027.

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For more information, visit www.techinsights.com

1891 Robertson Road
Suite 500
Ottawa, Ontario K2H 5B7
Canada

T 1-613-599-6500
F 1-613-599-6501
Web site: www.techinsights.com
Email: support@techinsights.com