Market Forecast Report
Semiconductor and FPD Manufacturing Equipment
Released in July 2026
(Fiscal years 2026 to 2028)

July 2, 2026

SEAJ

Semiconductor Equipment Association of Japan

Overview

This report provides trend forecasts for semiconductor and FPD manufacturing equipment. The comprehensive results included in this forecast report are based on demand forecasts by the Semiconductor Research and Statistics Subcommittee and the FPD Research and Statistics Subcommittee of the Semiconductor Equipment Association of Japan (hereinafter called SEAJ, Chairman: Mr. Toshiki Kawai), as well as market trend research by the 20 companies represented on the Board of Directors and auditors.

We forecast sales of semiconductor manufacturing equipment made in Japan for fiscal year 2026 to be 6.55 trillion yen, an increase of 26% from the previous year, due to strong investment in advanced logic for AI servers and a significant increase in DRAM investment, particularly High Bandwidth Memory (HBM). For fiscal year 2027, demand for semiconductors for AI servers is expected to remain strong. As new fab buildings are completed one after another and the infrastructure for installing equipment is put in place, we forecast sales of 7.40 trillion yen, an increase of 13%. We expect investment to remain at a high level in fiscal year 2028 as well, and forecast sales of 7.77 trillion yen, an increase of 5%.

As for FPD manufacturing equipment, the sharp rise in semiconductor memory prices since last autumn has increased component procurement costs for PC manufacturers, who are buyers of panels. Due to the deterioration in cost structures and a decline in unit sales caused by product price increases, the timing for panels for IT products to shift to OLED is expected to be delayed slightly. After carefully reviewing the latest G8.6 substrate OLED investment plans, we forecast sales of FPD manufacturing equipment made in Japan for fiscal year 2026 to be 342 billion yen, a decrease of 5%, and 331 billion yen for fiscal year 2027, a decrease of 3%. For fiscal year 2028, we forecast sales of 421 billion yen, an increase of 27%, as investment in G8.6 substrate OLEDs is expected to accelerate again in earnest.

(1) Forecast period　Three years from fiscal year 2026 to 2028 (FY2026: From April 2026 to March 2027)

(2) Forecast items　Sales of Japanese-made semiconductor manufacturing equipment and sales for the Japanese market

Sales of Japanese-made FPD manufacturing equipment

(3) Forecast background

(Semiconductor Manufacturing Equipment)

According to WSTS (World Semiconductor Trade Statistics) in June 2026, the global semiconductor market sales in 2026 are projected to reach 1.51 trillion US dollars, an increase of 89.9% from the previous year. Memory is projected to grow sharply by 249.5%, while logic is also expected to increase significantly by 37.3%. The global semiconductor market, previously expected to exceed the US$1 trillion mark around 2030, is now projected to reach that level four years earlier.

The performance of memory companies has continued to rise since bottoming out in the first quarter of 2023 (January to March), with operating profit margins currently remaining at extremely high levels.

Concerning DRAM, demand for general-purpose DRAM for AI servers, in addition to HBM, has surged since the second half of 2025, and prices have continued to rise sharply due to supply constraints. For HBM, the required number of stacked DRAM dies is increasing from 12 layers to 16 layers, and eventually to 20 layers, in line with generational advances. As a result, tight supply conditions are expected to continue for the time being. To meet strong market demand for increased production, the three major U.S. and Korean companies are prioritizing the expantion of DRAM production capacity. As for NAND flash, demand for SSDs for AI servers is also rapidly increasing, and prices have risen sharply since the beginning of 2026, similar to DRAM.

The continued surge in memory prices caused by supply constraints is becoming a factor behind higher component costs for smartphones and PCs, as well as related product price increases, and is increasingly weighing on overall unit demand, particularly for entry-level models.

In China as well, moves are emerging to expand memory supply capacity in meet to domestic demand for AI servers.

In logic as well, demand for advanced nodes is extremely strong, particularly for GPUs and accelerators used in AI servers. Advanced packaging, including 2.5D/3D integration, which is essential for mass production of these devices, continues to face demand far exceeding production capacity. The structural tightness in supply, centered on advanced nodes, is expected to continue for the time being.

Investment in AI data centers by major U.S. IT companies is expanding rapidly, and capital expenditures by leading companies are believed to be growing at a high annual rate of around 70%. Although power supply constraints remain a potential risk, investment appetite is extremely strong.

For semiconductors used in AI data centers, in addition to the current configuration centered on GPUs and HBM for training and inference of LLMs (large language models), support for “Agentic AI,” which plans, makes decisions, and acts on behalf of humans, is becoming necessary. Agentic AI must execute a series of tasks while coordinating and controlling multiple processes and models, and therefore demand is expected to expand significantly for CPUs responsible for such control and for the DRAM (DDR) that supports them. In addition, demand for SSDs is also expected to grow for applications such as offloading KV cache to accelerate inference functions and serving as long-term memory for Agentic AI.

In “Physical AI,” attention is currently focused on the autonomy of individual robots. In the future, it may bring revolutionary changes to manufacturing by identifying issues and proposing solutions through simulations in virtual spaces using digital twins, and by building integrated control platforms that operate in coordination with existing factory systems.

All of these advances are directly linked to requirements for higher semiconductor performance, lower power consumption, and larger capacity. Investment in cutting-edge technologies is expected to expand across fields, including further evolution of GAA architectures and adoption of BSPDN (Back Side Power Delivery Network) in logic, miniaturization of DRAM, and higher stacking of NAND flash. In

addition, the evolution of cutting-edge technologies is accelerating in both front-end and back-end processes, including hybrid bonding that directly bonds wafers together and heterogeneous integration that houses multiple different semiconductor chips (dies) in a single package. Against this background of technological evolution, semiconductor manufacturing equipment is expected to show high growth over the medium term.

(FPD Manufacturing Equipment)

Regarding the environment surrounding FPD manufacturing equipment, the performance of display manufacturers has been on an improving trend since around the second quarter of 2023 (April to June), and profit levels have remained stable. Shipments of LCD panels for TVs have continued at an annual pace of 250 to 260 million units. In terms of area, however, growth is expected to continue as screen sizes become larger, and both shipment value and area are expected to increase.

The trend toward larger average screen sizes for large TVs is becoming particularly pronounced in China, and in the medium term, a shift from the current mainstream 65-inch models to 75-inch and 85-inch models is expected to progress. In fiscal 2025, some LCD investments using G8.6 substrates, which are suitable for two-up production of 85-inch panels, were brought forward.

Some panel manufacturers in South Korea and China have already launched factories for OLED panels for IT products using G8.6 substrates and entered full-scale mass production this spring. However, the most recent situation shows that the overall adoption of OLED panels in IT products has been slightly delayed compared to initial plans, as continued price increases across memory products due to supply constraints have made it urgent to respond to rising PC component costs.

Sales of FPD manufacturing equipment made in Japan are expected to remain subdued in fiscal years 2026 and 2027, followed by a full-scale recovery in fiscal year 2028. Compared with smartphone panels (6.1 to 6.9 inches), IT panels are significantly larger, with each unit covering an area more than 6 to 7 times greater. The outlook that demand for equipment will grow significantly once OLED adoption progresses remains unchanged.

(4) Forecast results

【Sales forecasts for semiconductor/FPD manufacturing equipment made in Japan】

For fiscal year 2026, we forecast overall sales of 6.89 trillion yen, an overall increase of 24.0%, assuming that semiconductor manufacturing equipment will increase by 26% and sales of FPD manufacturing equipment will decrease by 5%.

For fiscal year 2027, semiconductor manufacturing equipment sales are projected to increase by 13%, while FPD manufacturing equipment sales are expected to decrease by 3%. Overall, sales are forecast to increase by 12.2% to 7.73 trillion yen. For fiscal year 2028, semiconductor manufacturing equipment sales are projected to increase by 5%, while FPD manufacturing equipment sales are expected to show a significant recovery of 27%, as we forecast overall sales of 8.19 trillion yen, an

increase of 5.9%.

【Sales forecasts for semiconductor manufacturing equipment made in Japan】

For fiscal year 2026, sales are forecast to increase 26% year-on-year to 6.55 trillion yen due to strong investment in advanced logic for AI servers and a substantial increase in DRAM investment, mainly HBM. For fiscal year 2027, demand for semiconductors used in AI servers is expected to remain extremely strong, and buildings for new fabs, which had been a bottleneck for capacity expansion, will be completed in sequence, creating an environment in which equipment can be installed according to desired delivery schedules. We forecast sales of 7.40 trillion yen, an increase of 13%. For fiscal year 2028, we forecast sales of 7.77 trillion yen, an increase of 5%, as investment is expected to remain at a high level.

The projections for all fiscal years 2026, 2027, and 2028 have been revised substantially upward from the forecast amounts announced in January this year.

【Sales forecasts for semiconductor manufacturing equipment in the Japanese market】

For fiscal year 2026, although investment in automotive and power semiconductors is expected to remain sluggish, sales are forecast to increase by 10% to 1.58 trillion yen due to preparations for mass production of 2 nm logic and increased advanced DRAM investment.

For fiscal year 2027, advanced DRAM investment and increased NAND investment driven by rising AI demand are expected, and sales are forecast to increase by 15% to 1.82 trillion yen.

For fiscal year 2028, second-phase investment by major foundries, the establishment of mass production systems for 2 nm logic, and expanded memory investment are expected to overlap, resulting in a forecast increase of 25% to 2.28 trillion yen. This would mark the first time that the Japanese market exceeds 2 trillion yen.

【Sales forecasts for FPD manufacturing equipment made in Japan】

The sharp rise in semiconductor memory prices since last autumn has significantly increased component procurement costs for PC manufacturers, who are buyers of panels. Due to the deterioration in cost structures and a decline in unit sales caused by product price increases, the timing for panels for IT products to shift to OLED is expected to be delayed slightly.

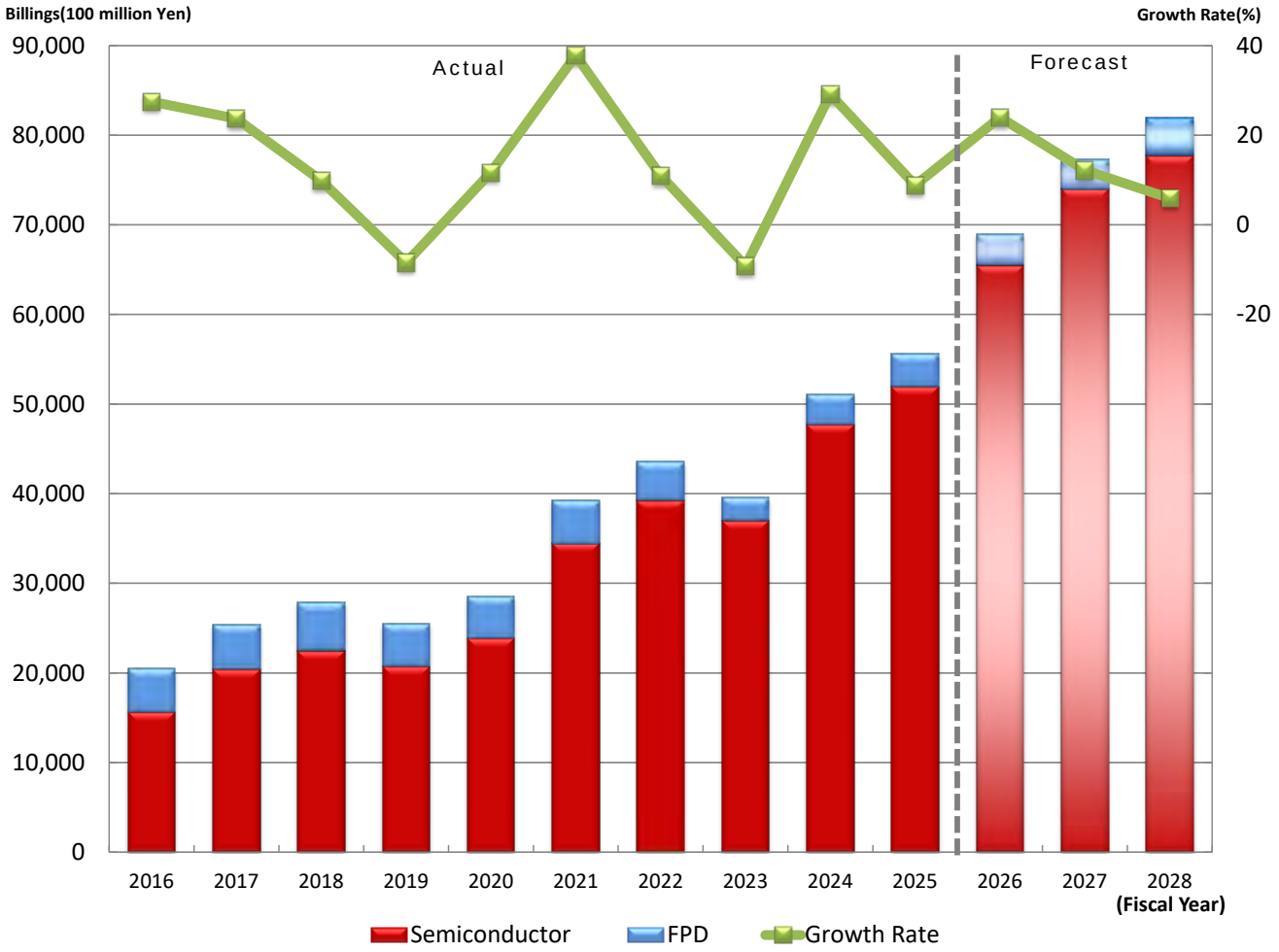
After carefully reviewing the latest investment plans for G8.6 substrate OLEDs, we forecast sales of FPD manufacturing equipment made in Japan to decline by 5% to 342 billion yen in fiscal year 2026 and by 3% to 331 billion yen in fiscal year 2027. For fiscal year 2028, we forecast sales of 421 billion yen, an increase of 27%, as postponed investment in G8.6 substrate OLEDs is expected to accelerate again in earnest.

July 2026 Forecast for Semiconductor and FPD Manufacturing Equipment

■1. Semiconductor and FPD Manufacturing Equipment

【Forecast for Japanese Equipment Billing】

* "Japanese Equipment Billing " = Japanese manufacturers Domestic and Oversea Billing.



(CAGR : 2025-2028)

	Actual										Forecast			
Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	CAGR
Semiconductor	15,642	20,436	22,479	20,730	23,835	34,430	39,275	36,976	47,681	51,986	65,502	74,017	77,718	
FPD	4,857	4,916	5,364	4,758	4,638	4,809	4,282	2,577	3,388	3,596	3,416	3,314	4,209	
Total (100 million yen)	20,499	25,352	27,843	25,488	28,473	39,239	43,556	39,553	51,069	55,582	68,918	77,331	81,927	
Growth Rate (%)	27.5	23.7	9.8	-8.5	11.7	37.8	11.0	-9.2	29.1	8.8	24.0	12.2	5.9	13.8%

* FPD statistics participating companies have changed since FY2019.

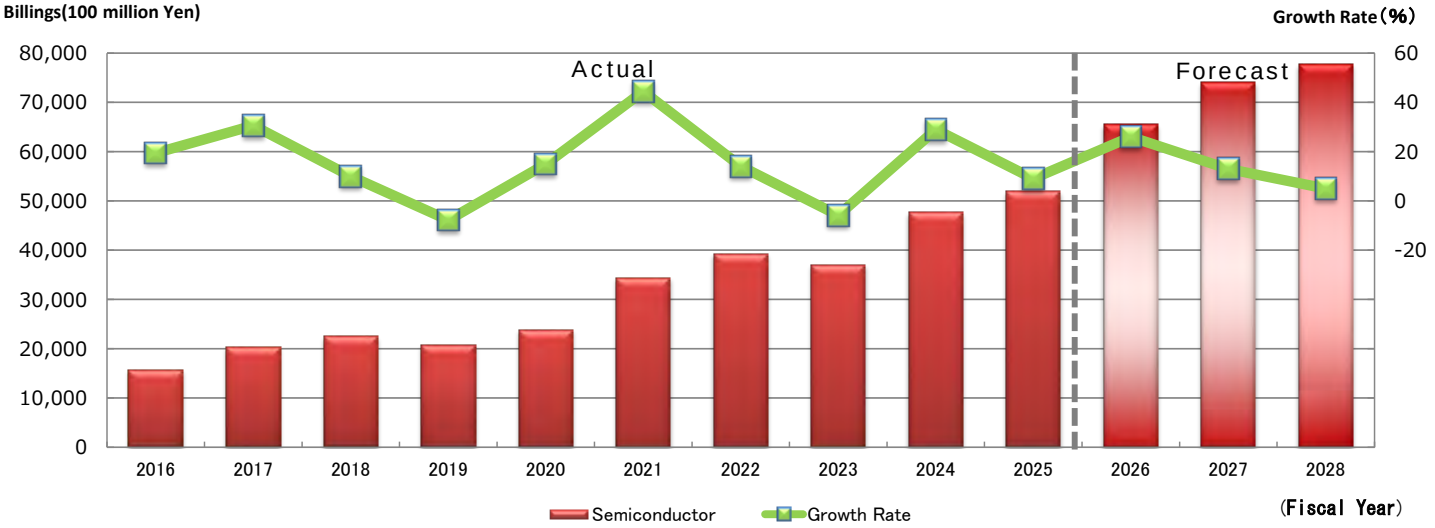
* The names and amounts of the companies participating in the statistics are not disclosed.

July 2026 Forecast for Semiconductor and FPD Manufacturing Equipment

■２． Semiconductor Manufacturing Equipment

【Forecast for Japanese Equipment Billing】

* "Japanese Equipment Billing " = Japanese manufacturers Domestic and Oversea Billing.

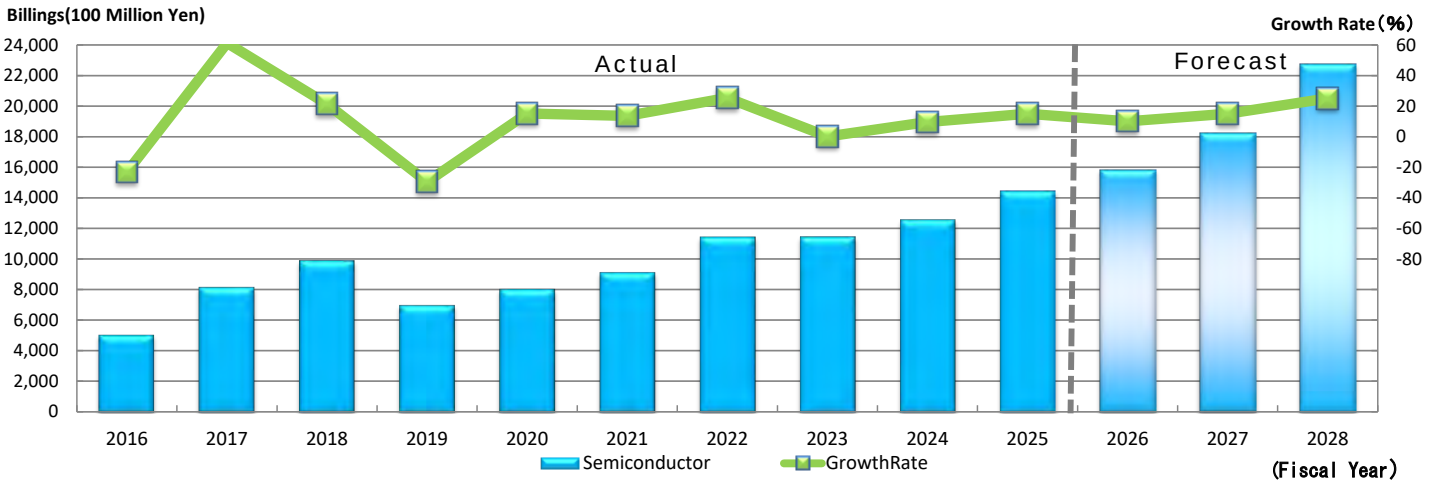


(CAGR : 2025-2028)

	Actual										Forecast			
Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	CAGR
Total (100 million yen)	15,642	20,436	22,479	20,730	23,835	34,430	39,275	36,976	47,681	51,986	65,502	74,017	77,718	
Growth Rate (%)	19.5	30.6	10.0	-7.8	15.0	44.4	14.1	-5.9	29.0	9.0	26.0	13.0	5.0	14.3%

【Forecast for Japanese Market Billing】

* "Japanese Market Billing" = Domestic Billing of Japanese and Foreign manufacturers.



(CAGR : 2025-2028)

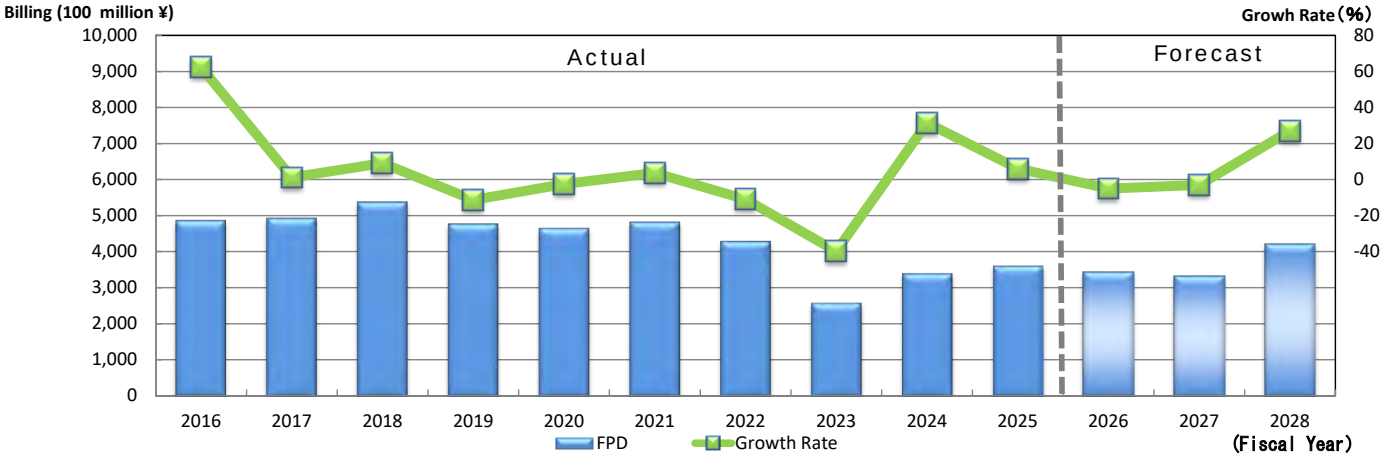
	Actual										Forecast			
Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	CAGR
Total (100 million yen)	5,047	8,138	9,878	6,961	8,009	9,103	11,412	11,432	12,521	14,395	15,835	18,210	22,763	
Growth Rate (%)	-23.1	61.3	21.4	-29.5	15.1	13.7	25.4	0.2	9.5	15.0	10.0	15.0	25.0	16.5%

July 2026 Forecast for Semiconductor and FPD Manufacturing Equipment

■3. FPD Manufacturing Equipment

【Forecast for Japanese Equipment Billing】

* "Japanese Equipment Billing " = Japanese manufacturers Domestic and Oversea Billing.



(CAGR : 2025-2028)

	Actual										Forecast			
Fiscal Year	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**CAGR**
Total (100 million yen)	4,857	4,916	5,364	4,758	4,638	4,809	4,282	2,577	3,388	3,596	3,416	3,314	4,209	
Growth Rate (%)	62.3	1.2	9.1	-11.3	-2.5	3.7	-11.0	-39.8	31.4	6.1	-5.0	-3.0	27.0	5.4%

* FPD statistics participating companies have changed since FY2019.
* The names and amounts of the companies participating in the statistics are not disclosed.