### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### FORM 6-K

## REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of July 2024 No.3

Commission File Number 000-24790

### TOWER SEMICONDUCTOR LTD.

(Translation of registrant's name into English)

Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek, Israel 2310502
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

On July 29, 2024, the Registrant issued unaudited condensed interim consolidated financial statements as of June 30, 2024, and for the six- and three-month periods then ended. Attached hereto are the following exhibits.

Exhibit 99.1 Registrant's unaudited condensed interim consolidated financial statements as of June 30, 2024.

Exhibit 99.2 Management's Discussion and Analysis of Financial Condition and Results of Operations.

This Form 6-K, including all exhibits hereto, is hereby incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: July 29, 2024

#### TOWER SEMICONDUCTOR LTD.

By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary

<u>Exhibit 99.1</u>

### TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES

### UNAUDITED CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS AS OF JUNE 30, 2024

### TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES

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# TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES CONDENSED INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED) (dollars in thousands)

	As of			
	June 30,	De	cember 31,	
	2024		2023	
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents	\$ 265,313	\$	260,664	
Short-term deposits	903,401		790,823	
Marketable securities (*)	65,331		184,960	
Trade accounts receivable	165,161		154,067	
Inventories	276,082		282,688	
Other current assets	35,414		35,956	
Total current assets	1,710,702		1,709,158	
LONG-TERM INVESTMENTS	8,452		8,452	
PROPERTY AND EQUIPMENT, NET	1,199,191		1,155,929	
GOODWILL AND OTHER INTANGIBLE ASSETS, NET	11,218		12,115	
DEFERRED TAX AND OTHER LONG-TERM ASSETS, NET	32,604		32,863	
TOTAL ASSETS	\$ 2,962,167	\$	2,918,517	
LIABILITIES AND SHAREHOLDERS' EQUITY				
CURRENT LIABILITIES				
Current maturities of long-term debt	\$ 61,365	\$	58,952	
Trade accounts payable	123,782		139,128	
Deferred revenue and customers' advances	23,988		18,418	
Employee related liabilities	57,121		51,054	
Other current liabilities	 23,919		9,286	
Total current liabilities	290,175		276,838	
LONG-TERM DEBT	126,715		172,611	
LONG-TERM CUSTOMERS' ADVANCES	16,118		25,710	
EMPLOYEE RELATED LIABILITIES	6,123		6,098	
DEFERRED TAX AND OTHER LONG-TERM LIABILITIES	10,323		10,221	
TOTAL LIABILITIES	449,454		491,478	
TOTAL SHAREHOLDERS' EQUITY	2,512,713		2,427,039	
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 2,962,167	\$	2,918,517	

(\*) Marketable securities are available-for-sale securities; the amortized cost of such marketable securities of \$66,934 and \$188,826 as of June 30, 2024 and December 31, 2023, respectively, is net of an immaterial allowance for credit losses.

## TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES CONDENSED INTERIM CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

(dollars and shares in thousands, except per share data)

		Six months ended June 30,				Three months ended June 30,			
		2024		2023		2024		2023	
REVENUES	\$	678,419	\$	712,802	\$	351,181	\$	357,191	
COST OF REVENUES		518,891		530,568		264,259		270,674	
GROSS PROFIT		159,528		182,234		86,922		86,517	
OPERATING COSTS AND EXPENSES:									
Research and development		38,945		38,783		18,994		19,452	
Marketing, general and administrative		37,720		36,016		19,050		17,387	
Restructuring gain from sale of machinery and equipment, net		-		(50,282)		-		(1,952)	
Restructuring expense (income), net		(6,270)		17,776		(6,270)		1,101	
		70,395		42,293		31,774		35,988	
	<u>===</u>								
OPERATING PROFIT		89,133		139,941		55,148		50,529	
FINANCING AND OTHER INCOME, NET		11,694		10,921		7,710		3,924	
PROFIT BEFORE INCOME TAX	<u> </u>	100,827		150,862		62,858		54,453	
INCOME TAX EXPENSE, NET		(1,030)		(20,788)		(6,108)		(5,747)	
NET PROFIT	<u> </u>	99,797		130,074		56,750		48,706	
Net loss (income) attributable to non-controlling interest		(1,718)		(7,482)		(3,305)		2,484	
NET PROFIT ATTRIBUTABLE TO THE COMPANY	\$	98,079	\$	122,592	\$	53,445	\$	51,190	
BASIC EARNINGS PER SHARE:									
Earnings per share	\$	0.88	\$	1.11	\$	0.48	\$	0.46	
Weighted average number of shares		110,938		110,025		111,037		110,088	
DILUTED EARNINGS PER SHARE:									
Earnings per share	\$	0.88	\$	1.10	\$	0.48	\$	0.46	
Net profit used for diluted earnings per share	\$	98,079	\$	122,592	\$	53,445	\$	51,190	
Weighted average number of shares									
used for diluted earnings per share		111,964		111,153		111,979		111,234	
<del></del>					_		_		

# TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES CONDENSED INTERIM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED) (dollars in thousands)

	Six months ended June 30,				Three months ended June 30,				
		2024		2023		2024		2023	
Net profit	\$	99,797	\$	130,074	\$	56,750	\$	48,706	
Other comprehensive income, net of tax:									
Foreign currency translation adjustment		(16,056)		(12,818)		(7,483)		(11,904)	
Unrealized loss on derivatives		(3,740)		(2,727)		(2,668)		(1,964)	
Change in employees plan assets and benefit obligations		(55)		185		(28)		93	
Comprehensive income		79,946		114,714		46,571		34,931	
Comprehensive loss (income) attributable to non-controlling interest		(1,718)		(7,482)		(3,305)		2,484	
Comprehensive income attributable to the Company	\$	78,228	\$	107,232	\$	43,266	\$	37,415	

# TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES CONDENSED INTERIM CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (UNAUDITED) (dollars and share data in thousands)

THE COMPANY'S SHAREHOLDERS' EQUITY

			THE	OMIANTSSI	IAKEHOLDEK	S EQUII I					
	Ordinary shares issued	Ordinary shares amount	Additional paid-in capital	Unearned compensation	Accumulated other comprehensive income (loss)	Foreign currency translation adjustments	Accumulated profit	Treasury stock	Total comprehensive income	Non controlling interest	Total
BALANCE AS											_
OF JANUARY 1,											
2024	110,912	\$ 443,631	\$1,380,917	\$ 202,343	\$ 2,507	\$ (55,442)	\$ 467,615	\$ (9,072)		\$ (5,460)	\$2,427,039
Changes during											
the period:											
Exercise of RSUs	245	1,007	(1,007)								-
Employee stock-											
based											
compensation				14,711							14,711
Other											
comprehensive											
income:											
Net profit							98,079		\$ 98,079	1,718	99,797
Foreign											
currency											
translation											
adjustments						(16,056)	)		(16,056)	(8,983)	(25,039)
Unrealized loss									,		
on derivatives					(3,740)				(3,740)	J	(3,740)
Change in											
employees plan											
assets and											
benefit											
obligations					(55)				(55)	)	(55)
Comprehensive											, ,
income									\$ 78,228		
BALANCE											
AS OF JUNE											
30, 2024	111,157	\$ 444,638	\$1,379,910	\$ 217,054	<b>\$</b> (1,288)	\$ (71,498)	\$ 565,694	\$ (9,072)		\$ (12,725)	\$2,512,713
OUTSTANDING			4 - , ,		(-,)	<del>* (12,12</del>		<del>+ (*,***=)</del>		<u>+ (,</u> )	-,,
SHARES, NET OF TREASURY											
STOCK											
AS OF JUNE 30,											
AS OF JUNE 30, 2024	111,070										
4U4 <b>4</b>	111,070										

# TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED) (dollars in thousands)

	Six months e	nded June 30,
	2024	2023
CASH FLOWS - OPERATING ACTIVITIES		
Net profit for the period	\$ 99,797	\$ 130,074
Adjustments to reconcile net profit for the period		
to net cash provided by operating activities:		
Income and expense items not involving cash flows:		
Depreciation and amortization	125,111	125,966
Effect of exchange rate differences and fair value adjustment	852	2,176
Other expense, net	5,993	666
Changes in assets and liabilities:		
Trade accounts receivable	(13,943)	(13,828)
Other current assets	(10,313)	976
Inventories	(5,959)	( , ,
Trade accounts payable	12,818	19,830
Deferred revenue and customers' advances	(4,022)	(26,193)
Employee related liabilities and other current liabilities	17,142	(50,533)
Long-term employee related liabilities	25	638
Deferred tax, net and other long-term liabilities	(4,378)	(446)
Net cash provided by operating activities	223,123	148,221
CASH FLOWS - INVESTING ACTIVITIES		
Investments in property and equipment, net	(210,633)	(194,678)
Deposits and marketable securities, net	16,330	66,809
Net cash used in investing activities	(194,303)	(127,869)
CASH FLOWS - FINANCING ACTIVITIES		
Principal payments on account of capital lease obligation	(18,848)	(20,396)
Debentures repayment	-	(18,493)
Proceeds from an investment in a subsidiary	-	1,932
Net cash used in financing activities	(18,848)	(36,957)
EFFECT OF FOREIGN CURRENCY EXCHANGE RATE CHANGE	(5,323)	(5,959)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	4,649	(22,564)
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	260,664	340,759
CASH AND CASH EQUIVALENTS - END OF PERIOD	\$ 265,313	\$ 318,195

# TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED) (dollars in thousands)

	S	Six months ended June 30,			
	2024			2023	
NON-CASH ACTIVITIES:					
Investments in property and equipment	\$	68,901	\$	67,967	
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:					
Cash received during the period from interest, net of interest paid	\$	14,166	\$	10,785	
Cash paid for income tax, net during the period	\$	4,801	\$	6,916	

#### TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES NOTES TO UNAUDITED CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS AS OF JUNE 30, 2024

(dollars in thousands, except per share data)

#### NOTE 1 - GENERAL

#### **Basis for Presentation**

The unaudited condensed interim consolidated financial statements of Tower Semiconductor Ltd. ("Tower") as of June 30, 2024 include the financial statements of Tower and (i) its wholly-owned subsidiary Tower US Holdings Inc., the sole owner of: (1) Tower Semiconductor NPB Holdings, Inc. and its wholly-owned subsidiary, Tower Semiconductor Newport Beach, Inc. (collectively referred to herein as "TSNB"), (2) Tower Semiconductor San Antonio, Inc. ("TSSA"), (ii) its 51% owned subsidiary, Tower Partners Semiconductor Co., Ltd. ("TPSCo") and (iii) its wholly-owned subsidiary, Tower Semiconductor Italy S.r.l. ("TSIT").

The Company's unaudited condensed interim consolidated financial statements are presented after elimination of inter-company transactions and balances and are presented in accordance with U.S. generally accepted accounting principles ("US GAAP").

The unaudited condensed interim consolidated financial statements of the Company should be read in conjunction with the audited consolidated financial statements of the Company as of December 31, 2023 and for the year then ended, including the notes thereto.

In the opinion of the Company's management, the unaudited condensed interim consolidated financial statements include all adjustments necessary for a fair presentation of the Company's financial position as of the dates presented and results of operations for the interim periods presented. The results of operations for the interim periods are not necessarily indicative of the results to be expected on a full-year basis.

# TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The information contained in this section should be read in conjunction with (1) our unaudited condensed interim consolidated financial statements as of June 30, 2024 and for the six months then ended and related notes included in this report and (2) our audited consolidated financial statements and related notes included in our Annual Report on Form 20-F for the year ended December 31, 2023 and the other information contained in such annual report, particularly the information in Item 5 - "Operating and Financial Review and Prospects". Our financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("US GAAP").

#### **Results of Operations**

The following table sets forth certain statement of operations data as a percentage of total revenues for the six months ended June 30, 2024 and 2023:

<u>Details</u>	<u>2024</u>	<u>2023</u>
Revenues	100%	100%
Cost of revenues	76.5	74.4
Gross profit	23.5	25.6
Research and development	5.7	5.4
Marketing, general and administrative	5.6	5.1
Restructuring gain from sale of machinery and equipment, net		(7.1)
Restructuring expense (income), net	(0.9)	2.6
Operating profit	13.1	19.6
Financing and other income, net	1.8	1.6
Profit before income tax	14.9	21.2
Income tax expense, net	(0.2)	(3.0)
Net profit	14.7	18.2
Net income attributable to non-controlling interest	(0.2)	(1.0)
Net profit attributable to the company	14.5%	17.2%

The following table sets forth certain statement of operations data for the six months ended June 30, 2024 and 2023 (dollars in thousands):

<u>Details</u>	<u>2024</u>	<u>2023</u>
Revenues	\$ 678,419	\$ 712,802
Cost of revenues	518,891	530,568
Gross profit	159,528	182,234
Research and development	38,945	38,783
Marketing, general and administrative	37,720	36,016
Restructuring gain from sale of machinery and equipment, net		(50,282)
Restructuring expense (income), net	(6,270)	 17,776
Operating profit	89,133	139,941
Financing and other income, net	11,694	10,921
Profit before income tax	100,827	150,862
Income tax expense, net	(1,030)	(20,788)
Net profit	99,797	130,074
Net income attributable to non-controlling interest	(1,718)	(7,482)
Net profit attributable to the company	\$ 98,079	\$ 122,592

#### Six months ended June 30, 2024 compared to six months ended June 30, 2023

#### Revenues

Revenues for the six months ended June 30, 2024 amounted to \$678.4 million, as compared to \$712.8 million for the six months ended June 30, 2023. The \$34.4 million revenues decrease is attributed mainly to a decrease in the quantity of silicon wafers shipped to our foundry customers from our facilities during the six months ended June 30, 2024 as compared to the six months ended June 30, 2023.

#### **Cost of Revenues**

Cost of revenues for the six months ended June 30, 2024 amounted to \$518.9 million as compared to \$530.6 million for the six months ended June 30, 2023. The \$11.7 million decrease in cost of revenues is mainly due to the decreased quantity of wafers shipped to our foundry customers from our facilities as described above, resulting in lower variable and other costs.

#### **Gross Profit**

Gross profit for the six months ended June 30, 2024 amounted to \$159.5 million as compared to \$182.2 million for the six months ended June 30, 2023. The \$22.7 million decrease in gross profit resulted from the \$34.4 million revenues decrease, net of the \$11.7 million decrease in cost of revenues, as described above.

#### Research and Development

Research and development expense for the six months ended June 30, 2024, amounted to \$38.9 million, as compared to \$38.8 million in the six months ended June 30, 2023.

#### Marketing, General and Administrative

Marketing, general and administrative expense for the six months ended June 30, 2024 amounted to \$37.7 million, as compared to \$36.0 million in the six months ended June 30, 2023.

#### Restructuring Gain from Sale of Machinery and Equipment, net

Restructuring gain from sale of machinery and equipment, net, for the six months ended June 30, 2023 amounted to \$50.3 million and resulted from the gain on sale of machinery and equipment, net to third parties following the reorganization and restructuring of our Japan operations executed during 2022 as described in Note 14B(2) to our financial statements for the year ended December 31, 2023.

#### Restructuring Expense (Income), net

Restructuring income, net, for the six months ended June 30, 2024 amounted to \$6.3 million as compared to \$17.8 million restructuring expense, net, for the six months ended June 30, 2023, and resulted from the reorganization and restructuring of our Japan operations executed during 2022, as described in Note 14B(2) to our financial statements for the year ended December 31, 2023.

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#### **Operating Profit**

Operating profit for the six months ended June 30, 2024 amounted to \$89.1 million as compared to \$139.9 million for the six months ended June 30, 2023. The \$50.8 million decrease in operating profit resulted mainly from the \$50.3 million restructuring gain from the sale of machinery and equipment, net during the six months ended June 30, 2023 and the \$22.7 million decrease in gross profit described above, offset by the \$24.1 million increase in restructuring income, net, as described above.

#### Financing and Other Income, net

Financing and other income, net, for the six months ended June 30, 2024 amounted to \$11.7 million as compared to \$10.9 million for the six months ended June 30, 2023. The \$0.8 million increase in financing and other income, net, is mainly due to higher interest income on higher amount of bank deposits.

#### Income Tax Expense, net

Income tax expense, net, for the six months ended June 30, 2024 amounted to \$1.0 million as compared to \$20.8 million for the six months ended June 30, 2023. The \$19.8 million decrease in income tax expense, net, is mainly a result of \$50.0 million decrease in profit before income tax for the six months ended June 30, 2024 as compared to the six months ended June 30, 2023, resulting mainly from the decrease in operating profit, as described above.

#### **Net Profit**

Net profit for the six months ended June 30, 2024 amounted to \$99.8 million as compared to \$130.1 million for the six months ended June 30, 2023. The \$30.3 million decrease in net profit is mainly due to the decrease in operating profit described above, offset by the decrease in income tax expense, net, described above.

#### Net Income Attributable to Non-Controlling Interest

Net income attributable to non-controlling interest for the six months ended June 30, 2024 amounted to \$1.7 million as compared to \$7.5 million for the six months ended June 30, 2023. The \$5.8 million decrease resulted from the decrease of \$11.8 million in TPSCo's net profit (in which we hold 51%), which reduction is mainly due to the restructuring gain recorded in 2023 from the sale of machinery and equipment in relation with the reorganization and restructuring of our Japan operations executed during 2022, as described in Note 14B(2) to our financial statements for the year ended December 31, 2023.

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#### Net Profit Attributable to the Company

Net profit attributable to the company for the six months ended June 30, 2024 amounted to \$98.1 million as compared to \$122.6 million for the six months ended June 30, 2023. The \$24.5 million decrease in net profit attributable to the company is mainly due to the decrease in net profit of \$30.3 million as described above, offset by the decrease in net income attributable to non-controlling interest of \$5.8 million, as described above.

#### **Impact of Currency Fluctuations**

The Company currently operates in three different regions: the United States, Japan and Israel. In addition, the Company has activities in Italy related to the ST facility in Agrate, Italy. The functional currency of the Company's entities in the United States, Israel and Italy is the US dollar ("USD"). The functional currency of the Company's operations in Japan is the Japanese Yen ("JPY"). The Company's expenses and costs are denominated mainly in USD, JPY and New Israeli Shekels ("NIS"), revenues are denominated mainly in USD and JPY, and the cash from operations, investing and financing activities is denominated mainly in USD, JPY and NIS. Therefore, the Company is exposed to the risk of currency exchange rate fluctuations in Israel and Japan. Once the facility in Italy will reach its production phase, the Company's results would also be exposed to the Euro exchange rate fluctuations in relation to the USD regarding any costs denominated in Euro, and this exposure would be partially mitigated and contained within a pre-defined fixed range through foreign currency cylinder and forward transactions which the Company is engaging with.

The USD cost of the Company's operations in Israel is influenced by changes in the USD-to-NIS exchange rate, with respect to costs that are denominated in NIS. During the six months ended June 30, 2024, the USD appreciated against the NIS by 3.6%, as compared to 4.9% appreciation during the six months ended June 30, 2023.

The fluctuation of the USD against the NIS may affect the Company's results of operations as it relates to the entity in Israel. Appreciation of the NIS may increase cost, in USD terms, of some of the Israeli facilities, as well as utilities and labor costs that are denominated in NIS, which may lead to erosion of profit margins. The Company uses foreign currency cylinder and forward transactions to hedge a portion of this currency exposure to be contained within a pre-defined fixed range.

The majority of TPSCo's revenues are denominated in JPY and the majority of TPSCo's expenses are in JPY, which limits the exposure to fluctuations of the USD/JPY exchange rate on TPSCo's results of operations. In order to mitigate a portion of the net exposure to the USD/JPY exchange rate, the Company has engaged in cylinder hedging transactions to contain the currency's fluctuation within a pre-defined, fixed range.

During the six months ended June 30, 2024, the USD appreciated against the JPY by 13.7%, as compared to 9.3% appreciation during the six months ended June 30, 2023. The net effect of USD appreciation against the JPY on TPSCo's assets and liabilities denominated in JPY is presented in the Cumulative Translation Adjustment ("CTA") as part of Other Comprehensive Income ("OCI") on the balance sheet.

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#### **Liquidity and Capital Resources**

As of June 30, 2024, the Company had an aggregate amount of \$265.3 million in cash and cash equivalents, as compared to \$260.7 million as of December 31, 2023. The main cash items during the six months ended June 30, 2024 were as follows: \$223.1 million net cash provided by operating activities; \$210.6 million invested in property and equipment, net; \$16.3 million received from proceeds from sales of short-term deposits and marketable securities, net; and \$18.8 million debt repaid.

Short-term and long-term debt presented in the balance sheet as of June 30, 2024 amounted to \$61.4 million and \$126.7 million, respectively, and included loans, operating leases and capital leases.

#### **Recent Developments**

The hostilities described in Item 1D "Risk Factors" of our annual report on Form 20-F under the caption "Risks Affecting Our Operations in Israel" continue. As of the date of this report, these hostilities have not had a material effect on the Company's business and operations.

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