

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of November 2007

TOWER SEMICONDUCTOR LTD.

(Translation of registrant's name into English)

RAMAT GAVRIEL INDUSTRIAL PARK

P.O. BOX 619, MIGDAL HAEMEK, ISRAEL 23105

(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

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No

On November 6, 2007, the Registrant announced its financial results for the nine and three months ended September 30, 2007. Attached hereto is a copy of the press release.

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.

TOWER SEMICONDUCTOR LTD.

Date: November 6, 2007

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa

Corporate Secretary

TOWER SEMICONDUCTOR REPORTS 28 PERCENT REVENUE
GROWTH FOR FIRST NINE MONTHS OF 2007

THIRD QUARTER REPRESENTS 10 PERCENT REVENUE GROWTH YEAR-OVER-YEAR;
MIDRANGE REVENUE GUIDANCE OF 12 PERCENT SEQUENTIAL GROWTH
FOR FOURTH QUARTER OF 2007

MIGDAL HAEMEK, Israel - November 6, 2007 - Tower Semiconductor Ltd. (Nasdaq: TSEM, TASE: TSEM), an independent specialty foundry, today announced financial results for the third quarter ended September 30, 2007.

THIRD QUARTER HIGHLIGHTS

- o Achieved record nine month revenue of \$169.2 million representing year-over-year growth of approximately 28 percent
- o Achieved positive cash flow from operations for the fourth consecutive quarter and positive EBITDA for the eighth consecutive quarter
- o Won high-volume Fab 2 manufacturing deal with first-tier U.S. IDM
- o Secured funding and announced plan to further increase Fab 2 capacity to beyond 30,000 wafers-per-month.

Revenue for the third quarter was \$56.6 million, representing an increase of 10 percent when compared to revenue of \$51.5 million reported in the third quarter of 2006. For the nine months ended September 30, 2007, total revenue was \$169.2 million, representing an increase of 28 percent when compared to revenue of \$131.9 million reported in the same period one year ago.

Non-GAAP gross profit and operating profit (as described and reconciled below) for the nine months ended September 30, 2007, totaled to \$60.5 million and \$34.9 million, respectively; and non-GAAP gross profit and operating profit (as described and reconciled below) for the third quarter of 2007 totaled \$20.5 million and \$11.6 million, respectively. Calculated in accordance with Generally Accepted Accounting Principles (GAAP), net loss for the third quarter of 2007 was \$33.4 million, or \$0.27 per share, as compared to net income of \$39.5 million, or \$0.46 per share, in the same period one year ago, which included a one-time restructuring gain of \$80.1 million. Excluding the restructuring gain, third quarter 2007 net loss improved by \$7.2 million from \$40.6 million in the third quarter of 2006.

"During the third quarter we continued to achieve positive EBITDA and positive cash flow from operations," said Russell Ellwanger, Chief Executive Officer of Tower. "The recent win of a high-volume bid for Fab 2 from a first tier US IDM should be the most significant manufacturing contract that has been secured during my time with the company. With the new tools that we recently purchased, originating at companies such as AMD and Intel, we will be able to fully satisfy our current customers' demand which currently exceeds our capacity as well as begin to satisfy this new high-volume contract. Our fourth quarter customer demand is strong and we look forward to achieving the financial milestone of a quarter of a billion dollars revenue on an annual basis while implementing our plans to improve bottom line performance."

BUSINESS OUTLOOK:

Tower forecasts revenue in the fourth quarter 2007 to range between \$61 and \$65 million, representing midrange sequential revenue growth of 12 percent. As a result, Tower expects its fiscal 2007 revenues to be between \$230 and \$234 million, representing midrange annual revenue growth of 24 percent over 2006 revenues.

THIRD QUARTER 2007 FINANCIAL RESULTS CONFERENCE CALL AND WEB CAST

Tower will host a conference call to discuss these results on Tuesday, November 6, 2007, at 10 a.m. Eastern Standard Time / 5 p.m. Israel time. To participate, please call: 1-888-668-9141 (U.S. toll-free number) or 972-3-918-0688 (international) and mention ID code: TOWER. Callers in Israel are invited to call locally by dialing 03-918-0688. The conference call will also be Web cast live at <http://www.earnings.com> and at www.towersemi.com and will be available thereafter on both Web sites for replay for 90 days, starting at approximately 2 p.m. Eastern Standard Time on the day of the call.

As used in this release, the term EBITDA consists of loss, according to GAAP (Generally Accepted Accounting Principles), excluding interest and financing expenses (net), tax and depreciation and amortization expenses. EBITDA is not a required GAAP financial measure and may not be comparable to a similarly titled measure employed by other companies. EBITDA should not be considered in isolation or as a substitute for operating income, net income or loss, cash flows provided by operating, investing and financing activities, or other income or cash flow statement data prepared in accordance with GAAP.

This release, including the financial tables below, presents other financial information that may be considered "non-GAAP financial measures" under Regulation G and related reporting requirements promulgated by the Securities and Exchange Commission as they apply to our company. These non-GAAP financial measures exclude (1) depreciation and amortization expenses and (2) compensation expenses in respect of options granted to directors, officers and employees. Non-GAAP financial measures should be evaluated in conjunction with, and are not a substitute for, GAAP financial measures. The tables also present the GAAP financial measures which are most comparable to the non-GAAP financial measures, as well as a reconciliation between the non-GAAP financial measures and the most comparable GAAP financial measures. The non-GAAP financial information presented herein should not be considered in isolation from or as a substitute for operating income, net income or loss, cash flows provided by operating, investing and financing activities, or other income or cash flow statement data prepared in accordance with GAAP.

ABOUT TOWER SEMICONDUCTOR LTD.

Tower Semiconductor Ltd. (Nasdaq: TSEM, TASE: TSEM) is an independent specialty foundry that delivers customized solutions in a variety of advanced CMOS technologies, including digital CMOS, mixed-signal and RF (radio frequency) CMOS, CMOS image sensors, power management devices, and embedded non-volatile memory solutions. Tower's customer orientation is complemented by its uncompromising attention to quality and service. Its specialized processes and engineering expertise provides highly flexible, customized manufacturing solutions to fulfill the increasing variety of customer needs worldwide. Offering two world-class manufacturing facilities with standard and specialized process technologies ranging from 1.0- to 0.13-micron, Tower Semiconductor provides exceptional design support and technical services to help customers sustain long-term, reliable product performance, while delivering on-time and on-budget results. More information can be found at <http://www.towersemi.com>.

SAFE HARBOR

This press release includes forward-looking statements, which are subject to risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. Potential risks and uncertainties include, without limitation, risks and uncertainties associated with: (i) the completion of the equipment installation, technology transfer and ramp-up of production in Fab 2 and raising the funds therefor, (ii) the cyclical nature of the semiconductor industry and the resulting periodic overcapacity, fluctuations in operating results, future average selling price erosion that may be more severe than our expectations, (iii) having sufficient funds to operate the company in the short-term and the funding needs for its ramp-up plan, (iv) operating our facilities at satisfactory utilization rates which is critical in order to defray the high level of fixed costs associated with operating a foundry and reduce our losses, (v) our ability to satisfy the covenants stipulated in our amended credit facility agreement, (vi) our ability to capitalize on increases in demand for foundry services, (vii) meeting the conditions to receive Israeli government grants and tax benefits approved for Fab 2 and obtaining the approval of the Israeli Investment Center for a new expansion program, (viii) attracting additional customers, (ix) not receiving orders from our wafer partners and customers, (x) failing to maintain and develop our technology processes and services, (xi) competing effectively, (xii) our large amount of debt and our ability to repay our short-term and long-term debt on a timely basis, (xiii) achieving acceptable device yields, product performance and delivery times, (xiv) the timely development, internal qualification and customer acceptance of new processes and products, (xv) the entering into and the consummation of agreements to purchase the equipment to increase Fab2 capacity beyond 24,000 wafers per month and timely installation thereof, and (xvi) business interruption due to terror attacks, earthquakes, other acts of God and the security situation in Israel.

A more complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect our business is included under the heading "Risk Factors" in our most recent filings on Forms 20-F, F-3 and 6-K, as were filed with the Securities and Exchange Commission and the Israel Securities Authority. Future results may differ materially from those previously reported. The Company does not intend to update, and expressly disclaims any obligation to update, the information contained in this release.

CONTACT:

Tower Semiconductor
Noit Levi, +972 4 604 7066
noitle@towersemi.com

or:

Shelton Group
Ryan Bright, (214) 315-7601
rbright@sheltongroup.com

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS (UNAUDITED)
(DOLLARS IN THOUSANDS)

	SEPTEMBER 30,	JUNE 30,
	2007	2007
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A S S E T S		
CURRENT ASSETS		
CASH, CASH EQUIVALENTS AND DEPOSITS	\$ 42,600	\$ 20,723
PROCEEDS RECEIVABLES RELATING PUBLIC OFFERING	13,932	--
TRADE ACCOUNTS RECEIVABLE	40,298	45,476
OTHER RECEIVABLES	1,260	2,769
INVENTORIES	35,431	37,691
OTHER CURRENT ASSETS	1,040	1,465
	-----	-----
TOTAL CURRENT ASSETS	134,561	108,124
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PROPERTY AND EQUIPMENT, NET	494,361	507,414
	-----	-----
INTANGIBLE ASSETS, NET	36,386	39,482
	-----	-----
OTHER ASSETS, NET	1,286	1,303
	=====	=====
TOTAL ASSETS	\$666,594	\$656,323
	=====	=====
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
CURRENT MATURITIES OF CONVERTIBLE DEBENTURES	\$ 7,340	\$ 6,611
TRADE ACCOUNTS PAYABLE	39,480	55,922
OTHER CURRENT LIABILITIES	20,041	20,907
	-----	-----
TOTAL CURRENT LIABILITIES	66,861	83,440
LONG-TERM DEBT FROM BANKS	362,162	360,689
DEBENTURES	116,865	58,609
LONG-TERM CUSTOMERS' ADVANCES	36,072	42,070
OTHER LONG-TERM LIABILITIES	15,397	19,441
	-----	-----
TOTAL LIABILITIES	597,357	564,249
	-----	-----
SHAREHOLDERS' EQUITY	69,237	92,074
	=====	=====
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$666,594	\$656,323
	=====	=====

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)
(DOLLARS IN THOUSANDS, EXCEPT SHARE DATA AND PER SHARE DATA)

	NINE MONTHS ENDED SEPTEMBER 30,			THREE MONTHS ENDED SEPTEMBER 30,		
	2007	2006	2005	2007	2006	2005
	GAAP	GAAP	GAAP	GAAP	GAAP	GAAP
REVENUES	\$ 169,235	\$ 131,933	\$ 70,928	\$ 56,569	\$ 51,503	\$ 20,553
COST OF SALES	211,130	194,666	179,598	68,252	68,244	57,130
GROSS PROFIT (LOSS)	(41,895)	(62,733)	(108,670)	(11,683)	(16,741)	(36,577)
OPERATING COSTS AND EXPENSES						
RESEARCH AND DEVELOPMENT	10,253	11,107	12,849	3,301	4,179	4,200
MARKETING, GENERAL AND ADMINISTRATIVE	22,929	18,106	13,481	7,753	7,308	4,715
	33,182	29,213	26,330	11,054	11,487	8,915
OPERATING PROFIT (LOSS)	(75,077)	(91,946)	(135,000)	(22,737)	(28,228)	(45,492)
FINANCING EXPENSE, NET	(30,249)	(37,957)	(25,428)	(10,695)	(12,382)	(9,900)
GAIN ON DEBT RESTRUCTURING	--	80,071	--	--	80,071	--
OTHER INCOME, NET	73	597	2,518	--	6	42
NET PROFIT (LOSS) FOR THE PERIOD	\$ (105,253)	\$ (49,235)	\$ (157,910)	\$ (33,432)	\$ 39,467	\$ (55,350)
BASIC EARNING (LOSS) PER ORDINARY SHARE						
(*) EARNING (LOSS) PER SHARE	\$ (0.90)	(0.63)	(2.39)	\$ (0.27)	\$ 0.46	\$ (0.83)
INCOME (LOSS) USED TO COMPUTE BASIC EARNING (LOSS) PER SHARE	(105,253)	(49,235)	(157,910)	(33,432)	39,467	(55,350)
WEIGHTED AVERAGE NUMBER OF ORDINARY SHARES OUTSTANDING - IN THOUSANDS	117,084	78,607	66,190	123,970	85,087	66,671
DILUTED EARNING (LOSS) PER ORDINARY SHARE						
(*) EARNING (LOSS) PER SHARE	\$ (0.90)	(0.63)	(2.39)	\$ (0.27)	\$ 0.30	\$ (0.83)
INCOME (LOSS) USED TO COMPUTE DILUTED EARNING (LOSS) PER SHARE	(105,253)	(49,235)	(157,910)	(33,432)	41,433	(55,350)
WEIGHTED AVERAGE NUMBER OF ORDINARY SHARES OUTSTANDING - IN THOUSANDS	117,084	78,607	66,190	123,970	139,214	66,671

(*) Basic and diluted loss per share in accordance with U.S. GAAP for the nine and three months periods ended September 30, 2007 is \$0.93 and \$0.28, respectively, for the nine and three months periods ended September 30, 2006 is \$1.67 and \$0.52, respectively, and is the same as the Isr. GAAP data for the nine and three months periods ended September 30, 2005.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
RECONCILIATION OF REPORTED GAAP TO NON-GAAP
CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)
(DOLLARS IN THOUSANDS)

	NINE MONTHS ENDED SEPTEMBER 30, 2007			THREE MONTHS ENDED SEPTEMBER 30, 2007		
	NON-GAAP	DEPRECIATION, AMORTIZATION AND STOCK BASED COMPENSATION EXPENSES (SEE A, B, C BELOW)	GAAP	NON-GAAP	DEPRECIATION, AMORTIZATION AND STOCK BASED COMPENSATION EXPENSES (SEE A, B, C BELOW)	GAAP
REVENUES	\$ 169,235	\$ --	\$ 169,235	\$ 56,569	\$ --	\$ 56,569
COST OF SALES	108,715	102,415	(a) 211,130	36,108	32,144	(a) 68,252
GROSS PROFIT (LOSS)	60,520	(102,415)	(41,895)	20,461	(32,144)	(11,683)
OPERATING COSTS AND EXPENSES						
RESEARCH AND DEVELOPMENT	7,721	2,532	(b) 10,253	2,494	807	(b) 3,301
MARKETING, GENERAL&ADMINISTRATIVE	17,877	5,052	(c) 22,929	6,409	1,344	(c) 7,753
	25,598	7,584	33,182	8,903	2,151	11,054
OPERATING PROFIT (LOSS)	\$ 34,922	\$(109,999)	\$ (75,077)	\$ 11,558	\$ (34,295)	\$ (22,737)

(a) Includes depreciation and amortization expenses in the amounts of \$101,883 and \$31,967 for the nine and three months ended September 30, 2007, respectively and stock based compensation expenses in the amounts of \$532 and \$177 for the nine and three months ended September 30, 2007, respectively.

(b) Includes depreciation and amortization expenses in the amounts of \$2,105 and \$678 for the nine and three months ended September 30, 2007, respectively and stock based compensation expenses in the amounts of \$427 and \$129 for the nine and three months ended September 30, 2007, respectively.

(c) Includes depreciation and amortization expenses in the amounts of \$34 and \$14 for the nine and three months ended September 30, 2007, respectively and stock based compensation expenses in the amounts of \$5,018 and \$1,330 for the nine and three months ended September 30, 2007, respectively.